Software Requirements Specification (SRS)

for

Project Refit Blue Skies Mobile Application

Version: 1.0

Author: Dhruv Sachdeva

Developers: Daniel Gildenbrand

Eric Hegnes

Merlin Cherian

Josh Romley

Advisor: Professor Jeff Salvage

Stakeholder: Project Refit --

James Corbett

Table of Contents

l.		CUM	1ENT INFORMATION	15
	1.	Refer	rences / Resources	16
		S	Software Requirements Specification (SRS)	16
		A	Acceptance Test Plan (ATP)	16
			Design Documentation (DD)	16
		1:	Issue Tracking	16
	2.	Vebs	site Links	1
	3.	oints	rs-of-Contact	1
	4.	ocur	ment History	2
II.		ROD	DUCTION AND BACKGROUND	5
	1.	urpo	ose	6
	2.	verv	view	6
	3.	nten	nded Audience	7
	4.	nten	ided Use	7
	5.	Jser I	Needs	7
	6.	ssun	mptions and Dependencies	8
	7.	cope	e	8
	8.	egal	Notices and Disclaimers	9
		[Depiction of Content	9
		A	Accuracy of Images	9
		N	Naming Conventions, Spelling, and Formatting	9
		L	Longevity and Lifecycle of Features/Functionalities	9
		L	Liabilities	9
	9.	efini	nitions	11
	10	Red	quirements Apportioning	16
III.		R IN	NTERFACE AND FUNCTIONAL REQUIREMENTS	17
	1.	8S – E	Blue Skies App Hosting and Access	18
		A	App Icon	19
		.1.1	[P1] App icon title	20
		.1.2	[P1] App icon appearance	20

	1.2	Арр	Store Hosting	21
	1	1.2.1	[P1] App Hosting on the Google Play Android App Store	23
	1	1.2.2	[P1] App Hosting on the Apple iOS App Store	23
	1	1.2.3	[P1] App listing details on App Stores	23
	1	1.2.4	[P1] App listing updates on App Stores	23
	1	1.2.5	[P1] App Official Details on App Stores	23
	1.3	Inst	allation	24
	1	1.3.1	[P1] Installation of app	25
	1.4	Ope	ning App	26
	1	1.4.1	[P1] Opening app after installation	28
2.	E	BS – Acco	ount and Onboarding	29
	2.1	Intro	oduction and Background	30
	2	2.1.1	[P1] Introduction and background of Blue Skies (Intro Screen 1)	31
	2	2.1.2	[P1] Introductory and background video of Blue Skies (Intro Screen 2)	31
	2.2	Terr	ns of Service (ToS)	32
	2	2.2.1	[P1] Terms of Service (ToS) screen information	33
	2	2.2.2	[P1] Terms of Service (ToS) acceptance or declination	33
	2	2.2.3	[P1] Terms of Service (ToS) acceptance	33
	2	2.2.4	[P1] Terms of Service (ToS) declination	33
	2.3	Acc	ount Login/Registration	34
	2	2.3.1	[P1] Login/Registration Screen (LRS) graphical elements	35
	2	2.3.2	[P1] Login/Registration Screen (LRS) interactive elements	35
	2	2.3.3	[P1] E-mail address validation	35
	2	2.3.4	[P1] E-mail address verification	35
	2	2.3.5	[P1] Robust State Management	35
	2	2.3.6	[P1] Recovery of user account passwords	35
	2	2.3.7	[P2] Invitation Code entry	35
	2	2.3.8	[P2] Invitation Codes generation and tracking	35
	2.4	Acc	ount Verification	37
	2	2.4.1	[P1] Onboarding screens graphical elements	39
	2	2.4.2	[P1] Onboarding screens interactive elements	39
	2	2.4.3	[P1] Verification e-mail delivery	39
	2	2.4.4	[P1] Verification e-mail confirmation	39

	2.4.5	[P1] Verification e-mail functions	39
2	.5 Acco	ount Setup	40
	2.5.1	[P1] Onboarding screens graphical elements	41
	2.5.2	[P1] Onboarding screens interactive elements	41
	2.5.3	[P1] Account information	41
	2.5.4	[P2] Account preferences	41
3.	BS – Dasl	hboard (DB)	42
3	.1 Hon	ne	43
	3.1.1	[P1] Dashboard (DB) graphical elements	44
	3.1.2	[P1] Dashboard (DB) interactive elements	44
	3.1.3	[P1] Dashboard (DB) access	44
	3.1.4	[P1] Emergency Button Banner (EBB) on Dashboard screen	44
	3.1.5	[P1] Presentation of cards on Dashboard screen	44
	3.1.6	[P1] Access of Dashboard cards	44
3	.2 Card	ds	46
	3.2.1	[P1] Card screen graphical elements	47
	3.2.2	[P1] Card screen interactive elements	47
	3.2.3	[P1] Viewing Dashboard cards	47
	3.2.4	[P2] Sharing Dashboard cards	47
3	.3 Cate	egories	48
	3.3.1	[P1] Categories screen graphical elements	49
	3.3.2	[P1] Categories screen interactive elements	49
	3.3.3	[P1] Viewing card categories	49
4.	BS – Eme	ergency Button	50
4	.1 Eme	ergency Button Banner (EBB)	51
	4.1.1	Banner characteristics	52
4	.2 Eme	ergency Button Screen (EBS)	53
	4.2.1	[P1] Emergency Button Screen (EBS) graphical elements	54
	4.2.2	[P1] "Yes" Emergency Button (EMB)	54
	4.2.3	[P1] "No" Emergency Button (OKB)	54
	4.2.4	[P2] Blue Emergency Button Screen appearance	54
4	.3 Eme	ergency Contacts Screen (ECS)	55
	431	[P1] Emergency Contacts Screen (ECS) graphical elements	56

	4.3.2	[P1] Emergency Contacts Screen (ECS) interactive elements	56
	4.3.3	[P1] Emergency Contacts list	56
	4.3.4	[P1] Emergency Contacts direct-calling	56
	4.3.5	[P2] Blue Emergency Contacts Screen appearance	56
5.	BS – My	User Profile (MUP)	57
5	.1 My	Profile (MUP)	58
	5.1.1	[P1] My Profile graphical elements	59
	5.1.2	[P1] My Profile interactive elements	59
	5.1.3	[P1] Profile icon	59
	5.1.4	[P2] Profile picture	59
	5.1.5	[P1] My Profile basic information	59
	5.1.6	[P1] Biography section core aspects	59
	5.1.7	[P2] Accolades section	60
	5.1.8	[P1] Fireteam section core aspects	60
	5.1.9	[P2] Fireteam section display ordering	60
	5.1.10	[P1] Friends section core aspects	60
	5.1.11	[P2] Friends section display ordering	60
	5.1.12	[P2] Radio Check Availability button	60
5	.2 Acco	olades	62
	5.2.1	[P2] Accolades screen graphical elements	63
	5.2.2	[P2] Accolades screen interactive elements	63
	5.2.3	[P2] Accolades screen layout	63
	5.2.4	[P2] Accolades management features	63
5	.3 Fire	team	64
	5.3.1	[P1] Fireteam screen graphical elements	65
	5.3.2	[P1] Fireteam screen interactive elements	65
	5.3.3	[P1] Fireteam screen layout	65
	5.3.4	[P1] Fireteam basic management features	65
	5.3.5	[P2] Fireteam extended management features	65
	5.3.6	[P2] Fireteam expansion suite	65
5	.4 Frie	nds List	66
	5.4.1	[P1] Friends List screen graphical elements	67
	5.4.2	[P1] Friends List screen interactive elements	67

	5.4.3	[P1] Friends List view	67
	5.4.4	[P1] Friend info	67
	5.4.5	[P1] Friend quick functionality	67
5	5.5 Frie	nds Management	68
	5.5.1	[P1] Friends Management screens graphical elements	71
	5.5.2	[P1] Friends Management screens interactive elements	71
	5.5.3	[P1] Friend requests	71
	5.5.4	[P1] Searching for other users to add as friends	71
	5.5.5	[P2] Pending friend requests	71
6.	BS – Oth	er User Profile (OUP)	72
6	5.1 Oth	er User Profile (OUP) Viewing	73
	6.1.1	[P1] Other User Profile (OUP) graphical elements	74
	6.1.2	[P1] Other User Profile (OUP) interactive elements	74
	6.1.3	[P1] Other User Profile (OUP) information	74
	6.1.4	[P1] Profile icon	74
	6.1.5	[P2] Profile picture	74
	6.1.6	[P1] Biography	74
	6.1.7	[P2] Accolades section	74
	6.1.8	[P2] Fireteam	74
	6.1.9	[P2] Fireteam section display ordering	75
	6.1.10	[P2] Friends	75
	6.1.11	[P2] Friends section display ordering.	75
6	5.2 Oth	er User Profile (OUP) Functions	76
	6.2.1	[P1] Request as friend	77
	6.2.2	[P1] Send chat message	77
	6.2.3	[P1] Report profile to admins	77
7.	BS – Sett	ings	78
7	.1 Sett	ings Screen	79
	7.1.1	[P1] Settings screen graphical elements	80
	7.1.2	[P1] Settings screen interactive elements	80
	7.1.3	[P1] Theme buttons	80
	7.1.4	[P1] Notifications button	80
	7.1.5	[P1] Tips and Tricks button	80

7.1	.6	[P1] Privacy Settings button	80
7.1	.7	[P1] Contact Us button	80
7.1	.8	[P1] About button	80
7.1	.9	[P2] Accessibility button	80
7.1	.10	[P1] Logout button	80
7.1	.11	[P2] Radio Check Availability button	81
7.2	Color	Themes	82
7.2	.1	[P1] Access of Color Theming options	84
7.2	.2	[P1] Application of Color Theming options without app relaunch	84
7.2	.3	[P1] Light Theme (default)	84
7.2	.4	[P1] Dark Theme	84
7.2	.5	[P2] Medium-Contrast Theme	84
7.2	.6	[P2] AMOLED-Black Theme	84
7.3	Notif	ication Options	85
7.3	.1	[P1] Notification Options screen	86
7.3	.2	[P1] In-App notification options (IAN)	86
7.3	.3	[P1] Push App Notification options (PAN)	86
7.4	Tips a	and Tricks	87
7.4	.1	[P1] Tips and Tricks screen	88
7.4	.2	[P1] Tips and Tricks primary sections	88
7.4	.3	[P2] Tips and Tricks secondary sections	88
7.5	Priva	cy Settings	89
7.5	.1	[P1] Privacy Settings screen	90
7.5	.2	[P1] Privacy Settings primary functionality	90
7.5	.3	[P2] Privacy Settings secondary functionality	90
7.5	.4	[P3] Privacy Settings tertiary functionality	90
7.6	Cont	act Us	91
7.6	.1	[P1] Contact Us screen	92
7.6	.2	[P1] Contact Us Portal (CUP) basic information	92
7.6	.3	[P2] Contact Us Portal (CUP) division of information	92
7.6	.4	[P2] Contact Us Portal (CUP) interactive interface	92
7.7	Abou	it Screen for App and Blue Skies Information	93
7.7	.1	[P1] About screen	94

	7.7	.2	[P1] General app-related information section	94
	7.7	.3	[P1] Officially-registered app information section	94
	7.7	.4	[P1] Terms of Service section	94
	7.7	.5	[P1] Privacy Policy section	94
	7.7	.6	[P1] Legal Notices section	94
	7.7	.7	[P2] Other information section	94
	7.8	Acce	essibility Features	95
	7.8	.1	[P2] Accessibility screen	96
	7.8	.2	[P2] Accessibility Features	96
	7.9	Logo	out of User Account	97
	7.9	.1	[P1] Logout process	98
8.	BS -	– Cha	t	99
	8.1	Cha	t Screen	. 100
	8.1	.1	[P1] Chat screen graphical elements	. 101
	8.1	.2	[P1] Chat screen interactive elements	. 101
	8.1	.3	[P1] Chat access	. 101
	8.1	.4	[P1] List of conversations (both 1-on-1 and group)	. 101
	8.1	.5	[P1] List of 1-on-1 conversations	. 101
	8.1	.6	[P1] List of group conversations	. 101
	8.1	.7	[P1] Refreshing of conversation messages	. 102
	8.1	.8	[P1] Opening a conversation	. 102
	8.1	.9	[P2] Conversation creation button	. 102
	8.1	.10	[P2] Message drafts	. 102
	8.2	Con	versation Creation from Chat	. 103
	8.2	.1	[P2] 1-on-1 conversation creation using button	. 104
	8.2	.2	[P2] Group conversation creation using button	. 104
	8.3	1-or	n-1 Chat	. 105
	8.3	.1	[P1] 1-on-1 conversation screen graphical elements	. 107
	8.3	.2	[P1] 1-on-1 chat conversations backend protocols	. 107
	8.3	.3	[P1] 1-on-1 conversation screen messages	. 107
	8.3	.4	[P1] Refreshing of conversation messages	. 107
	8.3	.5	[P1] Sending messages	. 107
	8.3	.6	[P2] Message drafts	. 108

8.3.7	[P1] Other participant's information	108
8.3.8	[P1] 3-dot menu button	108
8.3.9	[P2] Calling feature	109
8.4 Gro	oup Chat	110
8.4.1	[P2] Message drafts	111
8.4.2	[P2] Group chat conversation naming	111
8.4.3	[P2] Group chat conversation member addition	111
8.4.4	[P2] Group chat conversation muting / do-not-disturb	111
9. BS – Rad	dio Check (Talk/Listen)	112
9.1 Rad	dio Check (Talk/Listen) Screen (RCS)	113
9.1.1	[P1] Radio Check screen (RCS) graphical elements	114
9.1.2	[P1] Radio Check screen (RCS) interactive elements	114
9.1.3	[P1] Radio Check access	114
9.1.4	[P1] Emergency Button Banner (EBB) on Radio Check screen	114
9.1.5	[P1] Listen button	114
9.1.6	[P1] Talk button	114
9.2 Tal	k Mode Search	115
9.2.1	[P1] Talking Search screen graphical elements	116
9.2.2	[P1] Talking Search screen interactive elements	116
9.2.3	[P1] Talking Search status	116
9.2.4	[P1] Talking Search complete	116
9.2.5	[P2] Talking Search based on category of users	116
9.3 List	ten Mode Search	117
9.3.1	[P1] Listening Search screen graphical elements	118
9.3.2	[P1] Listening Search screen interactive elements	118
9.3.3	[P1] Listening Search status	118
9.3.4	[P1] Listening Search complete	118
9.3.5	[P2] Listening Search based on category of users	118
10. BS – F	Forum	119
10.1 For	rum Screen	120
10.1.1	[P1] Forum screen graphical elements	121
10.1.2	[P1] Forum screen interactive elements	121
10.1.3	[P1] Forum access	121

10.1.4	[P1] List of Forum posts	121
10.1.5	[P1] Like button for Forum posts	121
10.1.6	[P1] Post Favorite button on Forum screen	121
10.1.7	[P1] Searching of Forum posts	122
10.1.8	[P1] Forum post creation button	122
10.1.9	[P1] Refreshing of Forum posts	122
10.2 Pos	st and Comments Viewing	123
10.2.1	[P1] Post screen graphical elements	124
10.2.2	[P1] Post screen interactive elements	124
10.2.3	[P1] Post screen access	124
10.2.4	[P1] Forum post and comments viewing	124
10.2.5	[P2] Nesting of replies to comments	124
10.2.6	[P1] Post Favorite button on Post screen	125
10.2.7	[P1] Like button for comments	125
10.2.8	[P1] Commenting on a Forum post	125
10.2.9	[P1] Refreshing of Forum post comments	125
10.2.10	[P1] Reporting posts	125
10.2.11	[P1] Reporting comments	126
10.2.12	[P2] Post creator's user profile access	126
10.2.13	[P2] Comment creator's user profile access	126
10.3 Pos	st Search	127
10.3.1	[P1] Forum post search box input	128
10.3.2	[P1] Querying and processing of forum search	128
10.3.3	[P1] Output of forum search	128
10.4 Pos	st Creation	129
10.4.1	[P1] Forum post creation button	130
10.4.2	[P1] Forum post creation	130
10.4.3	[P2] Post drafts	130
10.5 Cor	nment Creation	131
10.5.1	[P1] Comment creation button	132
10.5.2	[P1] Comment post creation	132
10.5.3	[P2] Comment drafts	132
11. BS – (Future BS req provisioning – DO NOT REMOVE)	133

12. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
13. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
14. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
15. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
16. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
17. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
18. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
19. BS	– (Future BS req provisioning – DO NOT REMOVE)	133
20. AI	- Administrator Interface (AI) Hosting and Access	134
20.1 I	Hosting Platform	135
20.1.	1 [P1] Google Cloud Services hosting platform	136
20.2	Access via Website	137
20.2.	1 [P1] Admin Interface internet website link	138
20.3 I	Login	139
20.3.	1 [P1] Login screen graphical elements	140
20.3.	2 [P1] Login screen interactive elements	140
20.4 I	Logout	141
20.4.	1 [P1] Logging-out of Admin Interface	142
21. AI	– Home Screen	143
21.1	Home Screen	144
21.1.	1 [P1] Home screen graphical elements	145
21.1.	2 [P1] Home screen interactive elements	145
22. AI	– Dashboard Content	146
22.1	Dashboard Content Screen	147
22.1.	1 [P1] Dashboard Content screen graphical elements	148
22.1.	2 [P1] Dashboard Content screen interactive elements	148
22.1.	3 [P1] Dashboard Content tiles	148
22.1.4	4 [P1] Dashboard Content functions	148
22.2	New Dashboard Content	149
22.2.	1 [P1] New Dashboard Content overlay graphical elements	150
22.2.	2 [P1] New Dashboard Content screen interactive elements	150
22.2.	3 [P1] Creating new Dashboard Content	150
22.3	Existing Dashboard Content	151

22.3.1	[P1] Existing Dashboard Content overlay graphical elements	152
22.3.2	[P1] Existing Dashboard Content screen interactive elements	152
22.3.3	[P1] Managing existing Dashboard Content	152
22.4 Se	arching Dashboard Content	153
22.4.1	[P1] Searching for Dashboard Content screen graphical elements	154
22.4.2	[P1] Searching for Dashboard Content screen interactive elements	154
22.4.3	[P1] Searching for Dashboard Content	154
23. Al – 0	Chat Monitoring	155
23.1 Ch	at Monitoring Screen	156
23.1.1	[P1] Chat Monitoring screen graphical elements	157
23.1.2	[P1] Chat Monitoring screen interactive elements	157
23.1.3	[P1] Chat Monitoring home	157
23.2 Ch	at Monitoring Functions	158
23.2.1	[P1] Chat Monitoring functions	159
24. AI – I	Jser Management	160
24.1 Us	er Management Screen	161
24.1.1	[P1] User Management screen graphical elements	162
24.1.2	[P1] User Management screen interactive elements	162
24.1.3	[P1] List of users	162
24.2 Ac	d Users	163
24.2.1	[P1] Add users overlay graphical elements	164
24.2.2	[P1] Add users overlay interactive elements	164
24.2.3	[P1] Add users	164
24.3 M	odify Users	165
24.3.1	[P1] Modify users overlay graphical elements	166
24.3.2	[P1] Modify users overlay interactive elements	166
24.3.3	[P1] Modify users	166
25. AI – I	nviting Administrators	167
25.1 Inv	vite Admins Screen	168
25.1.1	[P1] Invite admins screen graphical elements	169
25.1.2	[P1] Invite admins screen interactive elements	169
25.1.3	[P1] Invite admins	169
26 11-9	Sattings	170

	26.1	Settings Screen	171
	26.	.1.1 [P1] Settings screen graphical elements	172
	26.	.1.2 [P1] Settings screen interactive elements	172
	26.	.1.3 [P1] Changing settings	172
2	.7. A	AI – Auxiliary Functions	173
	27.1	Side Panel Collapsing	174
	27.	.1.1 [P2] Side panel collapsing	175
	27.2	Color Theming	176
	27.	.2.1 [P2] Switch color theme option of Admin Interface	177
2	18. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
2	.9. A	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	30. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	31. A	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	32. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	3. <i>i</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	34. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	35. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3		AI – (Future AI req provisioning – DO NOT REMOVE)	
3	37. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	178
3	88. <i>A</i>	AI – (Future AI req provisioning – DO NOT REMOVE)	179
3	89. A	AI – (Future AI req provisioning – DO NOT REMOVE)	179
IV.	NON-	FUNCTIONAL REQUIREMENTS	180
1	Hu	man Factors	181
	1.1	Types of Users	181
	1.1	.1 Technical Users	181
	1.1	2 Non-technical Users	181
2	. Hai	rdware	181
	2.1	Client-side	181
	2.2	Server-side	181
3	s. Sof	ftware	182
	3.1	Client-side	182
	3.2	Server-side	182
1	Dai	rformance	192

	4.1	1 Response Time	182
5.	. 1	Error Handling and Reliability	182
	5.1	1 System Downtime	182
	5.2	2 Input Errors	183
6.		Security	183
	6.1	1 Virtual Security	183
	6.2	2 Physical Security	183
	(6.2.1 Client-side	183
	(6.2.2 Server-side	184
7.	. 1	Exported Code	184
	7.1	1 Usability of Exported Code	184
	7.2	2 Readability of Exported Code	184
V.	SYS	STEM EVOLUTION	185
1.	. 1	Permissions	186
2.	. 1	Features	186
3.	. 1	Data Handling and Safeguards	186
4.	. 1	Long-Term Outlook	186
VI.	ΑP	PPENDIX – ADDITIONAL IMAGES	187
0.	. 1	BS – App Release Phase Screenshots Pack	188
1.	. 1	BS – Blue Skies App Hosting and Access	189
2.	. 1	BS – Account and Onboarding	190
3.	. 1	BS – Dashboard	191
4.	. 1	BS – Emergency Button	193
5.	. 1	BS – My User Profile (MUP)	194
6.	. 1	BS – Other User Profile (OUP)	198
7.	. 1	BS – Settings	199
8.	. 1	BS – Chat	200
9.	. 1	BS – Radio Check	202
10	٥.	BS – Forum	203
20	٥.	AI – Administrator Interface (AI) Hosting and Access	206
2:	1.	AI – Home Screen	207
22	2.	AI – Dashboard Content	208
23	3.	AI – Chat Monitoring	210

24.	AI – User Management	211
25.	AI – Invite Admins	212
26.	AI – Settings	213
27.	AI – Auxiliary Functions	214
20	AL TRD	215

I. DOCUMENT INFORMATION

1. References / Resources

1.1 Software Requirements Specification (SRS)

This document references the requirements set forth in the *Software Requirements Specification (SRS) for Blue Skies Mobile Application* document. Requirement numbers from the ATP reflect those listed in the SRS and corresponds to their respective tests in ATP and DD.

SRS document file location: [or visit Documents Repository]:

http://projectrefit.us/blue-skies-srs http://projectrefit.us/blue-skies-documents

(Please refer to the Points-of-Contact section for access information or issues)

1.2 Acceptance Test Plan (ATP)

This document is further used in the *Acceptance Test Plan (ATP) for Blue Skies Mobile Application* document. Requirement numbers from the SRS reflect those listed in the ATP. Each requirement corresponds to its respective test between the SRS and ATP.

ATP document file location: [or visit Documents Repository]:

http://projectrefit.us/blue-skies-atp http://projectrefit.us/blue-skies-documents

(Please refer to the Points-of-Contact section for access information or issues)

1.3 Design Documentation (DD)

This document references the design elements and structure set forth in the *Design Documentation (DD) for Blue Skies Mobile Application* document. Requirement numbers from the DD reflect those listed in the SRS and ATP.

DD document file location: [or visit Documents Repository]:

http://projectrefit.us/blue-skies-dd http://projectrefit.us/blue-skies-documents

(Please refer to the Points-of-Contact section for access information or issues)

1.4 **Issue Tracking**

Issues are logged and tracked within a system, which consists of test failures, bugs, concerns, incomplete and/or temporary features, and backlogged items.

Issue tracking system access:

https://sentry.io/organizations/eric-hegnes/issues/?project=5215887 (Please refer to the <u>Points-of-Contact</u> section for access information or issues)

2. Website Links

- Project Refit
- Blue Skies App Documents Repository (access all associated documentation here)
- <u>Drexel University College of Computing & Informatics (CCI)</u>
- Senior Design Project Website

3. Points-of-Contact

Name: Dhruv Sachdeva

Organization: Drexel University (alumni) & Project Refit (volunteer)

Role: Business-Technology Integration Consultant & Document Author

E-mail: <u>dhruv.sachdeva@dragons.drexel.edu</u>

Name: Jeff Salvage

Organization: Drexel University (faculty)

Role: CCI Senior Design Projects Advising Professor

E-mail: jsalvage@cs.drexel.edu

Name: James Corbett
Organization: Project Refit

Role: Co-Founder & Stakeholder

E-mail: j@projectrefit.us

4. Document History

BLUE SKIES Software Requirements Specification Document History				
Version	<u>Date</u>	<u>Reason</u>	<u>Name</u>	Approval Signature
1.0	May 21, 2020	Initial draft	Dhruv Sachdeva Daniel Gildenbrand Eric Hegnes Merlin Cherian Josh Romley James Corbett	Dhruy Sachdeva AUTHOR X AMM Daniel Gildenbrand DEVELOPER X Eric Hegnes DEVELOPER Merlin Cherian DEVELOPER Josh Romley DEVELOPER James Corbett STAKEHOLDER

BLUE SKIES Software Requirements Specification Document History				
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BLUE SKIES Software Requirements Specification Document History				
			Document History	

II. INTRODUCTION AND BACKGROUND

1. Purpose

This document, the Software Requirements Specifications for Blue Skies (BS-SRS), provides the software requirements specification attributes for the Blue Skies mobile phone application (app). BS-SRS documents the following of the app: background information, scope, intentions, user needs, assumptions, functional and non-functional requirements, interface characteristics, priorities of elements and functionality, and future outlooks.

2. Overview

The Blue Skies smartphone mobile application is one of the core components of its parent organization, Project Refit. Project Refit's primary goal is to combat isolation among American military members, veterans, and first responders (primarily law enforcement). This goal extrapolates to decreased depression and suicide rates among the veterans and first responders (the userbase). Blue Skies is the direct technological adaptation of an exclusive community for the userbase, which is a complement to the other two components of Project Refit, Mobile Base and Night Out.

Blue Skies is a mobile phone application for both the Android and Apple iOS operating systems. The app allows the user to create a profile based on their service background. This information further helps to connect the userbase at a more granular level. In addition, the information is used to provide the users with relevant content of resources for mental health, community events, and much more. However, at its core, Blue Skies is intended to help the users; thus, a Chat/Listen feature allows users to speak their mind or hear others' experiences. Furthermore, the users are presented with a "Fireteam" asymmetrical-grouping functionality to build closer connections, in addition to a forum for broader discussion. Finally, an "SOS"-like functionality exists, aimed to provide more immediate resources and help to the user.

A longer-term goal of Blue Skies is to provide anonymous usage information to aid researchers in their understanding of and fight against mental health problems, including depression and suicide. This hand-off of data is also intended to serve as revenue streams for the longevity of the Blue Skies app.

3. Intended Audience

The intended audience of Blue Skies is American military members (including both veterans and active-duty) and American first responders (including both working and retired). Law enforcement is the primary audience within first responders.

The preliminary intended audience of the app will include testers as part of a closed-beta program. Upon Blue Skies' evolution through the multiple deployment environments (including development, staging, and production), the intended audience will increase in size, eventually being publicly and officially released.

4. Intended Use

The intended use of Blue Skies is on a user's Android or Apple iOS mobile smartphone. The ideal usage time is at least for a few minutes per day per user. The intended use is restricted to one user per application and is not to be shared anyone else, even if part of the intended audience or otherwise.

It is not intended for the Blue Skies app and its system to share or make public any personally-identifiable information (PII), and users are informed of this policy. However, the user can elect to voluntarily disclose (at their own risk) any information, through the app's various communication channels, including Chat, Forums, and other features.

5. User Needs

The user must possess an Apple iOS iPhone or a Google Android device to use the Blue Skies app. Additionally, the user must be active/former/veteran military and/or active/former/veteran law enforcement, and/or active/former/veteran firefighter, and/or active/former/veteran emergency medical services.

6. Assumptions and Dependencies

It is assumed the app user has internet connectivity while using the app.

7. Scope

The scope of Blue Skies is restricted to core features, as defined by Project Refit (stakeholder), in co-operation with the Blue Skies design and development team. The elements in-scope pertain to core features that are feasible to be accomplished for the initial public version 1.0 app release. Items are classed under three priorities: high, medium, and low. While both high priority and medium priority items are within the scope, only the former items are required to be delivered for the initial public version 1.0 app release. Low priority items are *not* within scope; however, their scope status may change at a future date.

The Minimum Viable Product (MVP) deliverable pertains to a preliminary release of the Blue Skies app, containing most of the core features. The MVP features are generally described as those that are seen to directly work towards fulfilling the project's mission, including achieving the most apparent tangible results. However, MVP features may be semi-complete for the MVP deliverable date of Monday, April 27, 2020. As an example, the Radio Check feature is considered a high priority and core feature due to its "immediate" means of connecting users, staying in-line with the definition of a community ("a feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals"). Simply put, most MVP items are classed as high priority, but not all high priority items fall under the MVP requirements.

The use of this document, BS-SRS, is construed to be as a guide for the developers to create the Blue Skies app, in addition for other entities (e.g. testers) to adequately validate the working state and quality of the product. Additionally, BS-SRS is constructed as reference for other internal entities (e.g. Drexel University, Project Refit) and other external entities (e.g. legal, regulatory, commercial, research).

8. Legal Notices and Disclaimers

8.1 Depiction of Content

The information in this document pertains to both the Apple iOS and Google Android smartphone operating systems. However, screenshots, images, and other related details may only depict the Google Android smartphone operating system.

8.2 Accuracy of Images

Screenshots and images are not necessarily the app's final product and may not be accurate. Additionally, various functionality, including buttons, fields, and other elements, may not appear in images. Furthermore, some screens are not available yet, and thus do not have images.

8.3 Naming Conventions, Spelling, and Formatting

Names of various features and functionality is generally consistent and accurate. However, the terminology, phrasing, and spelling of certain text in the app and document may not be accurate or reflect the final product.

8.4 **Longevity and Lifecycle of Features/Functionalities**

Some features and functionality may be added, modified, and/or removed without advanced or prior notice. The changes may not reflect in this document.

8.5 <u>Liabilities</u>

Any features that contain the word "emergency" (or similar), are not to be used for actual emergencies. Project Refit, Blue Skies, Drexel University, and all persons involved in this

Project do not warrant any protection or safety from usage of the app. Project Refit, Blue Skies, Drexel University, and all persons involved in this Project are not responsible or liable for any misuse of the Blue Skies app. Project Refit, Blue Skies, Drexel University, and all persons involved in this Project are not responsible or liable for any damages by usage of the Blue Skies app. The Blue Skies app is to be used at the user's risk and responsibility.

All third-party brand depictions or materials are registered trademarks of their respective owners.

Note that legal notices, liabilities, and disclaimers are officially and formally described in the Terms of Service, Privacy Policy, and other applicable document(s).

9. Definitions

<u>Item</u>	<u>Definition</u>
(?)	Characteristic, aspect, element, functionality, feature, etc. not yet determined or finalized
1-on-1	Chat conversations that are between only two users
Accolade	Recognition-based awards or rewards signifying a mission, goal, achievement, philanthropic effort, assistance of another, etc. given to an app user (virtually)
Admin	Administrator of Blue Skies mobile app and/or web Administrator Interface
AES	Advanced Encryption Standard
Al	Web-based Administrator Interface for Blue Skies app
AiAS	Apple iOS App Store
America	United States of America
American	Of, from, or pertaining to the United States of America
Арр	Mobile smartphone application / software
App Stores	The collective title for both the Google Play Android App Store and Apple iOS App Store
АТР	Acceptance Test Plan (usually in reference to its corresponding document)
BAB	Bottom app bar at present at bottom for navigating throughout Blue Skies app
Backend	Google Firebase Cloud/Server Backend Infrastructure/Environment
Bio	Biography field of User Profile in Blue Skies app

<u>Item</u>	<u>Definition</u>
Body	Forum post's body of text
BS	Blue Skies
BS-ATP	Acceptance Test Plan for Blue Skies document identifier code
BS-DD	Design Documentation for Blue Skies document identifier code
BS-SRS	Software Requirements Specification for Blue Skies document identifier code
ССІ	Drexel University College of Computing & Informatics
Collection	Gallery of cards containing content, media, resources, etc. on the Blue Skies app Dashboard
Conversation	A chat conversation in the Chat feature of the app
Credentials	App user's login/registration e-mail address and password
CUP	Contact Us Portal or Contact Us Portal Link
DB	Blue Skies app Dashboard
DD	Design Documentation (usually in reference to its corresponding document)
Doc	Document
Drexel	Drexel University
ЕВ	Emergency Button
EBS	Emergency Button Screen
ECB	Emergency Confirmation Button

<u>Item</u>	<u>Definition</u>
E-mail	E-mail address
etc.	Et cetera ("and other similar things" or "and so forth")
FCM	Google Firebase Cloud Messaging
Firebase	Google Firebase Cloud/Server Backend Infrastructure/Environment
GPAAS	Google Play Android App Store
GUI	Graphical user interface
IAN	In-App Notifications
Identifier	Identifying icon for chat and other communication purposes
Info	Information
Intro	Introduction
iOS	Apple iOS mobile operating system
Like	Up-vote or thumbs-up of a Forum post or comment, increasing/promoting its score or "value" by 1 (one) unit
Like value / counter	Number of up-votes or thumbs-ups a Forum post or comment has received
Login/Reg	Login/Registration page/screen in Blue Skies app
LRS	Login/Registration page/screen in Blue Skies app
MVP	Minimum Viable Product
MUP	My Profile / Own User Profile

<u>Item</u>	<u>Definition</u>
ОКВ	No Emergency Button
OUP	Another User Profile / Other User Profile
P1	Priority Level 1 Item, corresponding to high priority
P2	Priority Level 2 Item, corresponding to medium priority
Р3	Priority Level 3 Item, corresponding to low priority
PAN	Push App Notifications
Password	App user account password
PII	Personally-identifiable information
PR	Project Refit
QA	Quality assurance
R_	Requirement number (e.g. R_2.4.1; or with sub-requirements, R_2.4.1-B)
Reg	Login/Registration page/screen in Blue Skies app
Score	The value of a Forum post or comment derived from the number of Likes / up-votes / thumb-ups
sos	Blue Skies app Emergency Button or Emergency-Button-related info/items
SRS	Software Requirements Specification
Subreq	Sub-requirement (e.g. R_2.4.1-B)
Sub-requirement	A child requirement that describes a part of its parent requirement; these are not requirements themselves, but are describing factors of the requirements

<u>Item</u>	<u>Definition</u>
т_	Test Case number, corresponding its respective requirement (e.g. T_2.4.1)
TBD	To be determined or to be decided
ToS	Terms of Service of Project Refit and/or Blue Skies app
UI	User interface
UML	Unified Modeling Language
UP	User account profile in app
USA	United States of America
v	Version of app (e.g. 'v1.0' corresponds to Blue Skies App Version 1.0)
vcs	Version Control System
VolP	Voice over Internet Protocol phone calling
WebRTC	Web Real-Time Communication

10. Requirements Apportioning

Priority Level	<u>Description</u>
	Item is classed as HIGH PRIORITY
	 Item that pertains to primary/core features, directly in-line with Blue Skies' and Project Refit's mission and goals
P1	Item is in-scope and directly affects usability of product
	Item must be included in initial public v1.0 app release
	Item may not be included in the Minimum Viable Product deliverable
	Item is classed as MEDIUM PRIORITY
	Item that pertains to secondary features, categorized as to enhance the user experience
P2	Item is in-scope, but is not crucial to the usability of the product
	Item may be semi-completely included in initial public v1.0 app release
	Item will not be included in the Minimum Viable Product deliverable
	Item is classed as LOW PRIORITY
	Item pertains to tertiary/side features, not necessarily used by majority of users or item's viability has yet to be determined
P3	Item is out-of-scope, but can scope status may change in the future
	Item will not be included in initial public v1.0 app release
	Item will not be included in the Minimum Viable Product Deliverable

III. USER INTERFACE AND FUNCTIONAL REQUIREMENTS

1. BS – Blue Skies App Hosting and Access

This requirements section pertains to:

- App Icon
- App Store Hosting
- Installation
- Opening App

1.1 App Icon

The Blue Skies app icon shall be identical across both the Android and iOS platforms / operating systems. The icon shall represent the app's title (Blue Skies) and/or organization (Project Refit).



1.1.1 [P1] App icon title

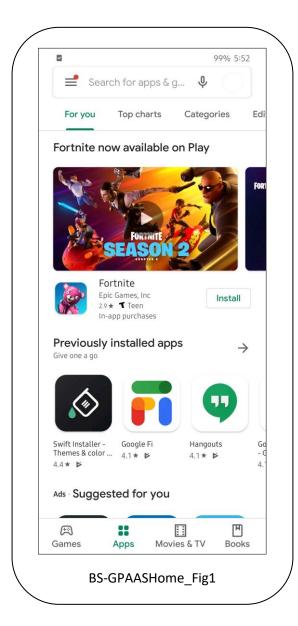
1.1.1-A The Blue Skies app icon shall be titled "Blue Skies".

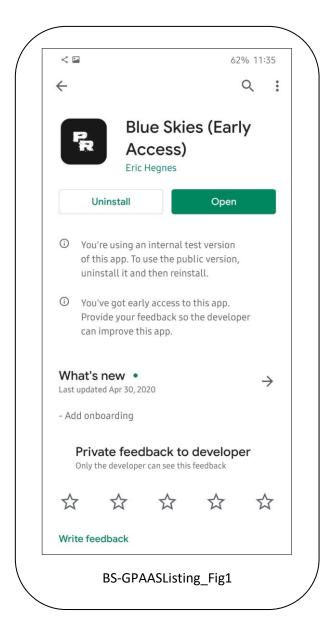
1.1.2 [P1] App icon appearance

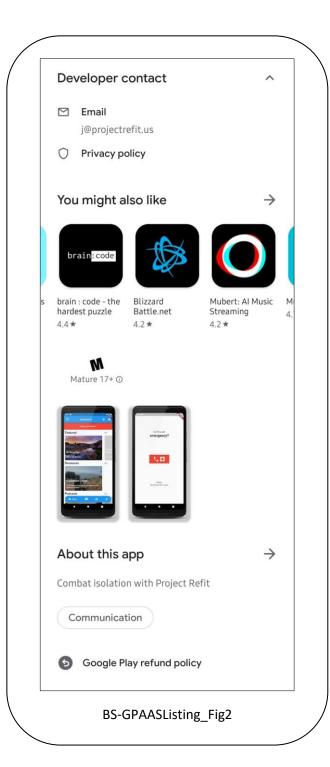
1.1.2-A The Blue Skies app icon's appearance shall reflect the Blue Skies project and/or Project Refit organization, such as being inscribed as "PR" stylized with as the Project Refit logo.

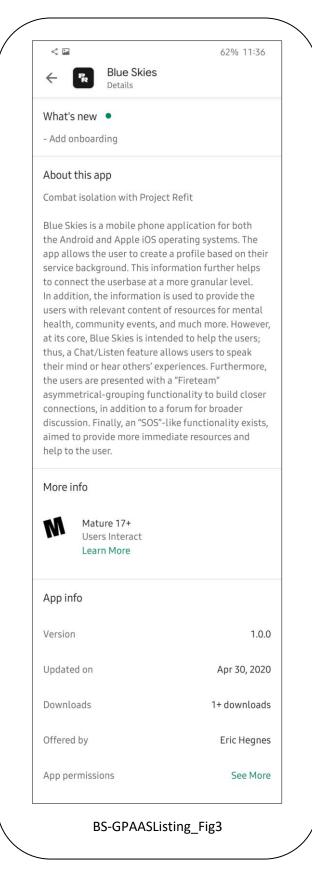
1.2 App Store Hosting

The Blue Skies app shall be hosted on and accessible by downloading and installing it from the Google Play Android App Store (GPAAS) and Apple iOS App Store (AiAS), both collectively as "App Stores" and tapping it from the smartphone interface.









1.2.1 [P1] App Hosting on the Google Play Android App Store

1.2.1-A The Blue Skies app shall be publicly-hosted on the official Google Play Android App Store (GPAAS) for users to download and install.

1.2.2 [P1] App Hosting on the Apple iOS App Store

1.2.2-A The Blue Skies app shall be publicly-hosted on the official Apple iOS App Store (AiAS) for users to download and install.

1.2.3 [P1] App listing details on App Stores

- 1.2.3-A The Blue Skies app shall be officially listed as and titled as "**Blue Skies**" within both GPAAS and AiAS.
- 1.2.3-B The Blue Skies app's listing shall contain a description of the app, background, mission, intended audience (in simplified terms), intended use (in simplified terms), Terms of Service (in simplified terms), and privacy-related notices (in simplified terms).

1.2.4 [P1] App listing updates on App Stores

1.2.4-A The Blue Skies app's listing on the App Stores shall contain a brief description of all updates made to the app.

1.2.5 [P1] App Official Details on App Stores

1.2.5-A The Blue Skies app shall contain official app information in the appropriate areas (as per App Stores' terms), including organization, release date, app size (e.g. megabytes or MB), Project Refit and/or Blue Skies website link(s), contact e-mail address, organization's physical address of registration, privacy policy, and/or any other items or details as required by the App Stores.

1.3 <u>Installation</u>

The user must install the Blue Skies app from the respective App Store.



1.3.1 [P1] Installation of app

- 1.3.1-A The user shall go to the official App Store listing of the Blue Skies app on either GPAAS or AiAS.
- 1.3.1-B The user shall select the installation option for the app.

1.4 Opening App

To open the Blue Skies app, the user shall tap its app icon.







BS-Loading_Fig1

1.4.1 [P1] Opening app after installation

1.4.1-A Once the app is installed, the user shall find and tap on the Blue Skies app icon to open it.

2. BS – Account and Onboarding

This requirements section pertains to:

- Introduction and Background
- Terms of Service (ToS)
- Account Login/Registration
- Account Verification
- Account Setup

2.1 Introduction and Background

Blue Skies shall first present the user with an introductory video of the app' mission and vision, in addition to its background and inspiration.

SCREEN(S) TBD

BS-**TBD**_Fig**TBD**

2.1.1 [P1] Introduction and background of Blue Skies (Intro Screen 1)

- 2.1.1-A The Introduction screens shall contain proper identifying characteristics of its intended purpose.
- 2.1.1-B Upon the first opening of the app after installation, introductory and background information of Blue Skies shall be displayed.
- 2.1.1-C At the end of the Intro Screen 1, there shall be a **NEXT** (or similar type button) for the user to proceed to the next screen.

2.1.2 [P1] Introductory and background video of Blue Skies (Intro Screen 2)

- 2.1.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to Intro Screen 1.
- 2.1.2-B Intro Screen 2 shall contain an introductory and background video of the Blue Skies app.
- 2.1.2-C The video shall not automatically play and shall centrally-overlay a **Play** icon button on it, allowing the user to start it when desired.
- 2.1.2-D At the end of the video on Intro Screen 2, there shall be a **NEXT** (or similar type button to proceed to the Terms of Service Contract Screen.

2.2 Terms of Service (ToS)

The user must read the Blue Skies app Terms of Service (ToS) and decide to accept or decline them, with the latter preventing the user from advancing in the app.

SCREEN(S) TBD

BS-**TBD**_Fig**TBD**

2.2.1 [P1] Terms of Service (ToS) screen information

- 2.2.1-A The ToS screen shall contain proper identifying characteristics of its intended purpose.
- 2.2.1-B The ToS shall fully contain terms and use of Blue Skies app use, privacy information, legal disclaimers and notices, contact information, etc. for the user to read.
- 2.2.1-C The app shall log the date, time, and other evidential data that the user was, indeed, presented the Terms of Service screen and its respective information.

2.2.2 [P1] Terms of Service (ToS) acceptance or declination

- 2.2.2-A The end of the ToS shall contain ACCEPT and DECLINE buttons.
- 2.2.2-B After the user has read the ToS, he or she must decide to accept or decline the ToS, buy tapping the respective button.

2.2.3 [P1] Terms of Service (ToS) acceptance

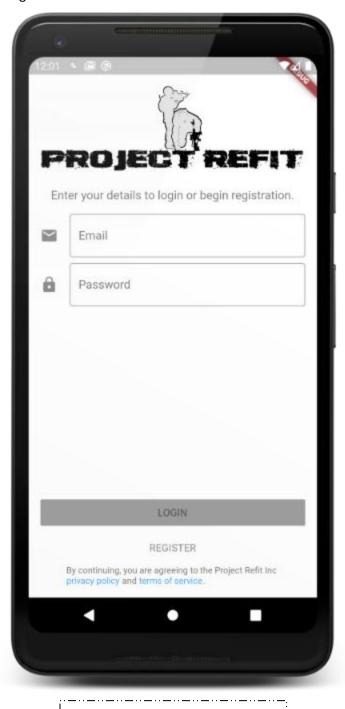
- 2.2.3-A If the user taps ACCEPT (thereby accepting the ToS), the user has agreed to the Blue Skies app's Terms of Service Contract.
- 2.2.3-B The user shall be taken to the Onboarding phase of the app setup.
- 2.2.3-C The app shall log the date, time, and other evidential data (such as device information) that the user did, indeed, accept the Terms of Service and its respective information.

2.2.4 [P1] Terms of Service (ToS) declination

- 2.2.4-A If the user taps DECLINE the ToS (thereby declining the ToS), the user declined to agree to the Blue Skies app's Terms of Service.
- 2.2.4-B The user shall be notified that the Blue Skies app cannot be unless they agree by the terms set forth in the Blue Skies app ToS.
- 2.2.4-C The screen shall take no other action, other than allowing the user to go back to the ToS screen with the option to re-read and/or accept or decline the ToS.
- 2.2.4-D The app shall log the date, time, and other evidential data (such as device information) that the user did, indeed, decline the Terms of Service and its respective information.

2.3 Account Login/Registration

Upon opening the app, the user shall be presented with a login/registration screen. The user must enter his/her e-mail address and a new password if creating an account, or existing credentials if signing-in. If creating an account, the user will then tap Register; if logging in, the user will tap Login.



BS-Login_Fig1

2.3.1 [P1] Login/Registration Screen (LRS) graphical elements

- 2.3.1-A The LRS shall contain proper identifying characteristics of its intended purpose.
- 2.3.1-B The LRS shall contain both the Blue Skies and Project Refit logos.

2.3.2 [P1] Login/Registration Screen (LRS) interactive elements

- 2.3.2-A The LRS shall contain fields for entering both a user e-mail address and password.
- 2.3.2-B The LRS shall contain Login and Register buttons.
- 2.3.2-C The LRS shall contain a "password recovery" function button.

2.3.3 [P1] E-mail address validation

2.3.3-A The app shall validate user's e-mail address and passwords once submitted on the LRS.

2.3.4 [P1] E-mail address verification

2.3.4-A The app shall enforce e-mail verification when submitting credentials.

2.3.5 [P1] Robust State Management

2.3.5-A Robust State Management shall be employed in the app.

2.3.6 [P1] Recovery of user account passwords

- 2.3.6-A The LRS shall a contain a password recovery process functionality for forgotten/lost user account passwords.
- 2.3.6-B The app shall process password recovery requests with the Firebase backend.

2.3.7 [P2] Invitation Code entry

2.3.7-A The LRS may allow the user to submit an Invitation Code, if provided with one.

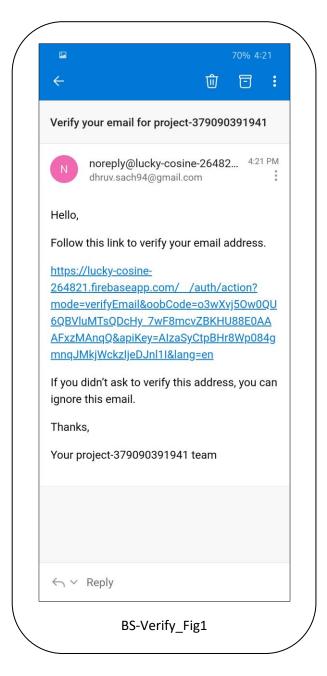
2.3.8 [P2] Invitation Codes generation and tracking

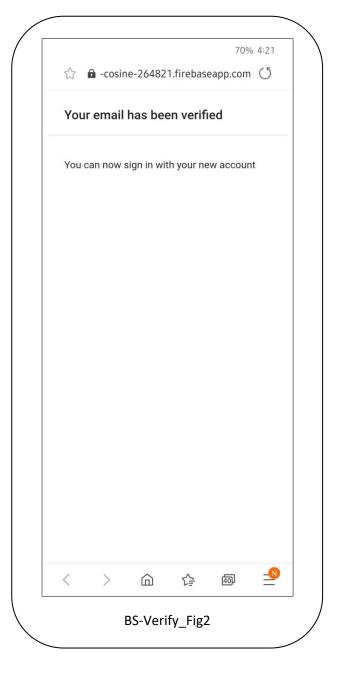
2.3.8-A The app or Admin Interface may be capable of generating an invitation code on a user-specific basis used to share and invite new users to the app.

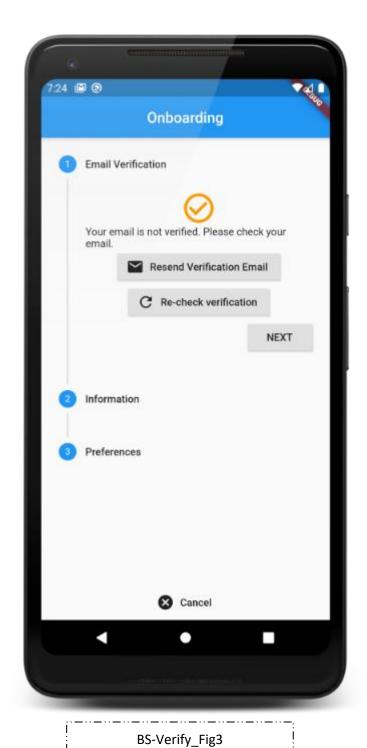
2.3.8-B The app or Admin Interface may be capable of tracking the generation, sharing, and receipt of Invitation Codes among users throughout their lifecycle and workflow; this requirement's intention may be used for tracking and accountability purposes.

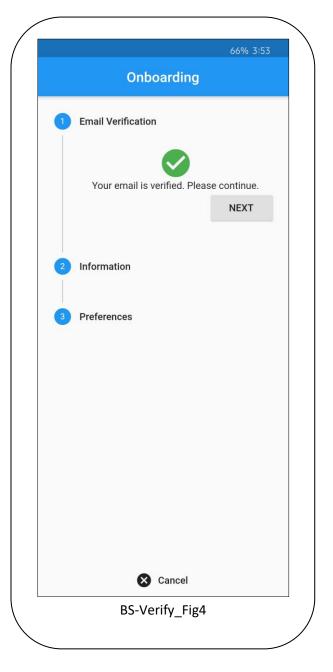
2.4 Account Verification

The user must verify their registered e-mail address.









2.4.1 [P1] Onboarding screens graphical elements

2.4.1-A The Onboarding screens shall contain proper identifying characteristics of its intended purpose.

2.4.2 [P1] Onboarding screens interactive elements

2.4.2-A A **Cancel** button shall be present at the top-left corner of the screens to allow the user to return to the cancel the Onboarding process.

2.4.3 [P1] Verification e-mail delivery

2.4.3-A A verification e-mail shall be automatically sent to the user's registered e-mail address.

2.4.4 [P1] Verification e-mail confirmation

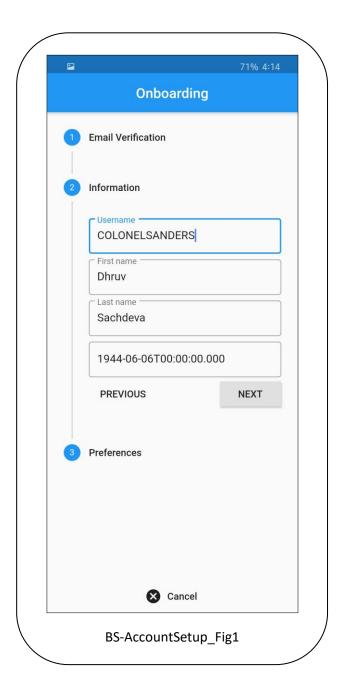
2.4.4-A The user shall open the verification e-mail and follow the provided link to complete account verification.

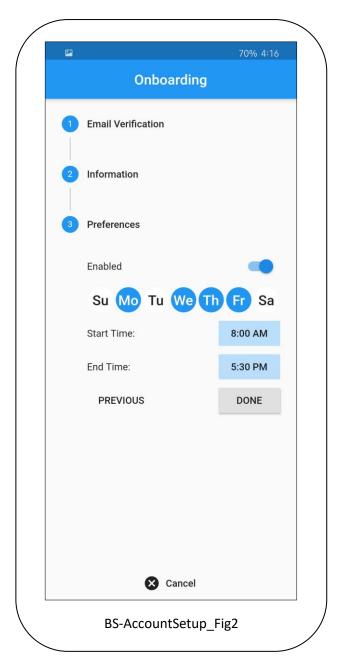
2.4.5 [P1] Verification e-mail functions

- 2.4.5-A There shall be a button to re-send the verification e-mail.
- 2.4.5-B There shall be a button to manually re-check if the e-mail address has been verified.

2.5 Account Setup

The user shall specify basic information and preferences to complete account setup.





2.5.1 [P1] Onboarding screens graphical elements

2.5.1-A The Onboarding screens shall contain proper identifying characteristics of its intended purpose.

2.5.2 [P1] Onboarding screens interactive elements

2.5.2-A A **Cancel** button shall be present at the top-left corner of the screens to allow the user to return to the cancel the Onboarding process.

2.5.3 [P1] Account information

- 2.5.3-A There shall be a text-input field for the user to enter his/her username.
- 2.5.3-B The username shall only allow alphanumeric characters up to limited designated length (to be determined).
- 2.5.3-C There shall be a text-input field for the user to enter his/her first name.
- 2.5.3-D There shall be a text-input field for the user to enter his/her last name.
- 2.5.3-E There shall be a data-selection box for the user to specify his/her date of birth.

2.5.4 [P2] Account preferences

- 2.5.4-A There shall be information informing the user that a schedule can be set for during which they may be notified of another user in distress who they can listen to talk.
- 2.5.4-B There shall be a mini calendar scheduler box to optionally specify availability by day and time.

3. BS – Dashboard (DB)

This requirements section pertains to:

- Home
- Cards
- Categories

3.1 Home

The home screen or hub of Blue Skies is first the Dashboard. The Dashboard shall contain collection previews of Dashboard items as edited in the Admin Interface. These collections can be expanded by clicking its adjacent All button. An individual dashboard item, which contains a title, description, background image, and URL, can be expanded by a click or touch. The dashboard contains a dismissible Emergency Banner which links to emergency services.



3.1.1 [P1] Dashboard (DB) graphical elements

- 3.1.1-A The DB shall contain proper identifying characteristics of its intended purpose.
- 3.1.1-B The **Dashboard/Home icon** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

3.1.2 [P1] Dashboard (DB) interactive elements

- 3.1.2-A The DB shall contain the bottom app bar for navigating throughout the app, consisting of the following buttons (per context-defined designs): Home icon, Chat icon, Radio Check icon (?), and Forum icon.
- 3.1.2-B The DB shall be vertically scrollable if content exceeds confines of user's smartphone screen.
- 3.1.2-C The DB shall contain a User Profile icon button.
- 3.1.2-D The DB shall contain a Settings Gear icon button.

3.1.3 [P1] Dashboard (DB) access

3.1.3-A Tapping the **Dashboard/Home** button on the BAB shall take the user to the DB.

3.1.4 [P1] Emergency Button Banner (EBB) on Dashboard screen

- 3.1.4-A The DB shall contain a red-colored Emergency Button Banner (EBB), with white text stating: "Is this an emergency?" and a YES button to its right.
- 3.1.4-B Tapping the **YES** button on the EBB shall take the user to the Emergency Contacts Screen (ECS).
- 3.1.4-C The EBB shall be dismissible.

3.1.5 [P1] Presentation of cards on Dashboard screen

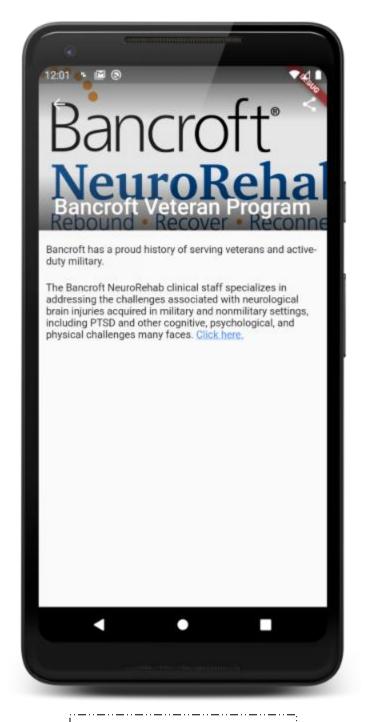
- 3.1.5-A The DB shall display a list of collections as cards.
- 3.1.5-B The DB shall contain category-identifying headers above each row of cards.
- 3.1.5-C The DB shall contain multiple rows of swipeable cards.
- 3.1.5-D The DB shall allow the user to view cards by visually inspecting for brief context.

3.1.6 [P1] Access of Dashboard cards

3.1.6-A The DB shall allow the user to tap on a card to expand its information on over the screen with full details.

3.2 Cards

The Dashboard contains cards, each with unique content.



BS-DBCard_Fig1

3.2.1 [P1] Card screen graphical elements

3.2.1-A The Card screen shall contain proper identifying characteristics of its intended purpose.

3.2.2 [P1] Card screen interactive elements

3.2.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

3.2.3 [P1] Viewing Dashboard cards

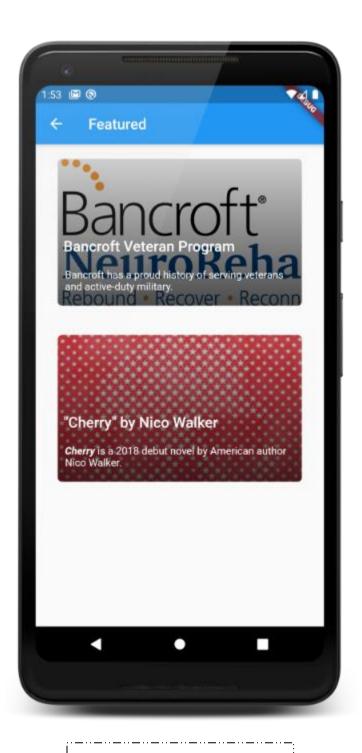
3.2.3-A After tapping a card, the card shall expand over the screen and display its full information.

3.2.4 [P2] Sharing Dashboard cards

3.2.4-A Each card shall contain a button to share the card via standard means of the respective operating system.

3.3 <u>Categories</u>

The Dashboard contains cards sorted by categories.



BS-DBCategory_Fig1

3.3.1 [P1] Categories screen graphical elements

3.3.1-A The Categories screen shall contain proper identifying characteristics of its intended purpose.

3.3.2 [P1] Categories screen interactive elements

3.3.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

3.3.3 [P1] Viewing card categories

3.3.3-A The DB shall contain buttons that state All within each row to open, expand, and display additional or all available cards of the respective category.

4. BS – Emergency Button

This requirements section pertains to:

- Emergency Button Banner (EBB)
- Emergency Button Screen (EBS)
- Emergency Contacts Screen (ECS)

4.1 Emergency Button Banner (EBB)

The app shall contain a persistent, but dismissible prompt, ("Is this an emergency?"), in the case the user requires more immediate assistance. This banner allows the user to access emergency contacts and resources. It will be present on some screens, namely the Dashboard Home and Radio Check screens.

Is this an emergency?

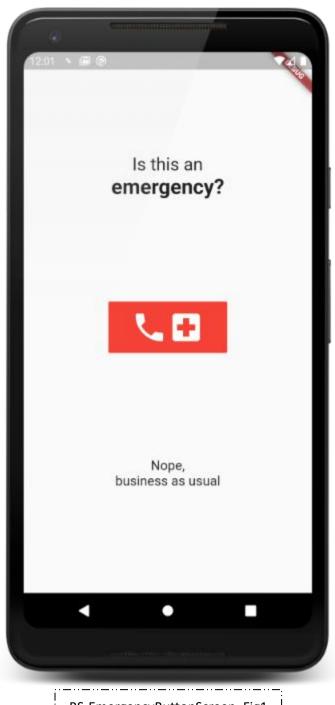
BS-EmergencyBanner_Fig1

4.1.1 Banner characteristics

- 4.1.1-A A persistent, but dismissible banner prompt, ("Is this an emergency?"), shall be present on the Dashboard Home and Radio Check screens.
- 4.1.1-B The banner shall function as a button.
- 4.1.1-C Tapping the banner shall take the user to the Emergency Button Screen.

4.2 <u>Emergency Button Screen (EBS)</u>

The app shall contain a persistent prompt, ("Is this an emergency?"), in the case the user requires more immediate assistance. By tapping this button (YES), the user is presented with a simple screen that requests confirmation from him/her. The screen is intentionally colored with a "soft" blue gradient, to induce a psychologically-calming effect.



BS-EmergencyButtonScreen_Fig1

4.2.1 [P1] Emergency Button Screen (EBS) graphical elements

4.2.1-A The EBS shall contain proper identifying characteristics of its intended purpose.

4.2.2 [P1] "Yes" Emergency Button (EMB)

- 4.2.2-A The EBS shall contain a Phone + Cross icon button (Yes Emergency Button) under the "Is this an emergency?" (?) text.
- 4.2.2-B Tapping the EMB shall take the user to the Emergency Contacts Screen (ECS)

4.2.3 [P1] "No" Emergency Button (OKB)

- 4.2.3-A The EBS shall contain a "Nope, business as usual" (?) textual button (No Emergency Button).
- 4.2.3-B Tapping the OKB shall take the user back to the previous screen.

4.2.4 [P2] Blue Emergency Button Screen appearance

4.2.4-A The EBS's appearance may be colored with a "soft" blue gradient over the full screen, except other graphical and interactive elements.

4.3 Emergency Contacts Screen (ECS)

By tapping the Yes Emergency Button (EMB) on the Emergency Button Screen (EBS), the emergency resources shall be provided on the next screen (also adopting the "calming blue") for the user, such as suicide hotline phone numbers.



BS-EmergencyContactsScreen_Fig1

4.3.1 [P1] Emergency Contacts Screen (ECS) graphical elements

4.3.1-A The ECS shall contain proper identifying characteristics of its intended purpose.

4.3.2 [P1] Emergency Contacts Screen (ECS) interactive elements

4.3.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Emergency Button Screen.

4.3.3 [P1] Emergency Contacts list

4.3.3-A The ECS shall contain one or more relevant mental crisis and/or suicide hotline contact phone numbers.

4.3.4 [P1] Emergency Contacts direct-calling

4.3.4-A Tapping the Phone icon buttons next to Emergency Contact(s) shall automatically/directly dial the number through the user's smartphone phone app (warranted under presumption that user's smartphone to be configured with default settings).

4.3.5 [P2] Blue Emergency Contacts Screen appearance

4.3.5-A The ECS's appearance shall be colored with a "soft" blue gradient over the full screen, except other graphical and interactive elements.

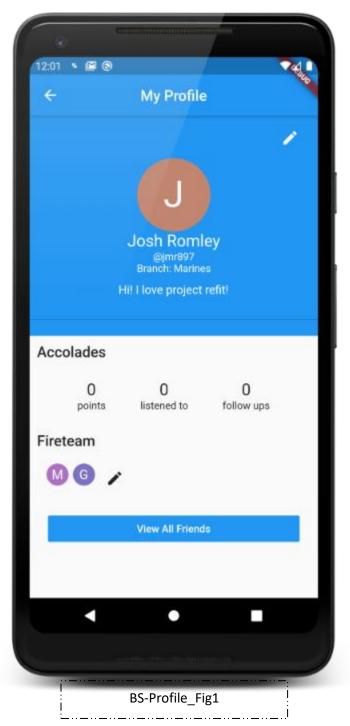
5. BS – My User Profile (MUP)

This requirements section pertains to:

- My Profile (MUP)
- Accolades
- Fireteam
- Friends List
- Friends Management

5.1 My Profile (MUP)

Apart from entering basic information during registration, the user can access his/her profile by tapping the Face/Head icon at the top-left of the Dashboard. From here, the user can enter information in the Biography section. Additionally, the user's Fireteam and Friends are displayed and accessible here. The user has management capabilities for each of these sections.



5.1.1 [P1] My Profile graphical elements

- 5.1.1-A My Profile shall contain proper identifying characteristics of its intended purpose.
- 5.1.1-B As accessed through the DB, the **DB icon** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

5.1.2 [P1] My Profile interactive elements

5.1.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Dashboard screen.

5.1.3 [P1] Profile icon

- 5.1.3-A There shall be a circular identifier icon below the My Profile heading and above the user's name.
- 5.1.3-B The circular identifier icon shall contain the first letter of the user's username by default.

5.1.4 [P2] Profile picture

- 5.1.4-A The identifier icon shall function as a button to prompt the user to upload and replace it with a profile picture.
- 5.1.4-B The identifier icon shall continue functioning as a button for the user to change or remove the profile picture.

5.1.5 [P1] My Profile basic information

5.1.5-A Before the Biography (Bio) section, the user's basic information shall be displayed, which includes: First Name, Last Name, Username, and military and/or first responder Service Record basic information.

5.1.6 [P1] Biography section core aspects

- 5.1.6-A The Biography (Bio) section shall appear after the Header ("My Profile" in this case).
- 5.1.6-B The Bio section shall allow the user to input, modify, and delete its data by first tapping the **Pencil** icon at the top-right of the section (and optionally, by tapping the Bio section box itself), causing a text-input box to appear.
- 5.1.6-C The Bio section shall limit/restrict the number of characters the user may enter, per a length that will be determined.

5.1.6-D A **SAVE** button shall be appear at the bottom-right corner of the Bio text-input box, which shall save and close the content by tapping it.

5.1.7 [P2] Accolades section

- 5.1.7-A The Accolades section, when implemented, shall appear after the Bio section and before the Fireteam section.
- 5.1.7-B Additional requirements of the Accolades feature of the app shall be finalized in accordance with Priority 2 guidelines.

5.1.8 [P1] Fireteam section core aspects

- 5.1.8-A The Fireteam section shall appear after the Bio section.
- 5.1.8-B The Fireteam section shall display the user's top designated friends (up to 5) as icons with names (or in a similar means).
- 5.1.8-C The Fireteam section shall contain a button for the user to manage his/her Fireteam in a mini management interface for fireteams.

5.1.9 [P2] Fireteam section display ordering

5.1.9-A The ordering of members within the Fireteam section shall be determined.

5.1.10 [P1] Friends section core aspects

- 5.1.10-A The Friends section shall appear after the Fireteam section.
- 5.1.10-B The Friends section shall display the user's friends as icons with names (or in a similar means).
- 5.1.10-C The number of friends shown in the Friends section shall be similarly formatted as the Fireteams section, with the "overflow friends" (more than 5 friends) viewable by scrolling/swiping the list horizontally to see additional friends.
- 5.1.10-D Friend requests to the user shall be prominently displayed in the Friends section.

5.1.11 [P2] Friends section display ordering

5.1.11-A The ordering of the user's friends within the Friends section shall be determined.

5.1.12 [P2] Radio Check Availability button

5.1.12-A The **Radio Check Availability** feature may appear within MUP if the Radio Check Custom Availability Schedule is implemented.

5.2 Accolades

The Accolades screen shall display various achievements accomplished by the user and contain management features.

SCREEN(S) TBD

5.2.1 [P2] Accolades screen graphical elements

5.2.1-A The Accolades screen shall contain proper identifying characteristics of its intended purpose.

5.2.2 [P2] Accolades screen interactive elements

5.2.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

5.2.3 [P2] Accolades screen layout

5.2.3-A Opening the Accolades section from MUP shall display a detailed view of the Accolades information, as to be determined.

5.2.4 [P2] Accolades management features

5.2.4-A The Accolades screen shall contain features for the user to manage his/her Accolades, as to be determined.

5.3 Fireteam

The Fireteam screen shall display the user's designated Fireteam members (up to five) and contain management features.

SCREEN(S) TBD

5.3.1 [P1] Fireteam screen graphical elements

5.3.1-A The Fireteam screen shall contain proper identifying characteristics of its intended purpose.

5.3.2 [P1] Fireteam screen interactive elements

5.3.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

5.3.3 [P1] Fireteam screen layout

5.3.3-A Opening the Fireteam section from MUP shall display a detailed view of the Fireteam members, as to be determined.

5.3.4 [P1] Fireteam basic management features

- 5.3.4-A The Fireteam screen shall contain an interface that allows the user to specify which friends should be added/removed from the Fireteam.
- 5.3.4-B The Fireteam interface shall not allow the user to add and have more than 5 friends in his/her Fireteam.

5.3.5 [P2] Fireteam extended management features

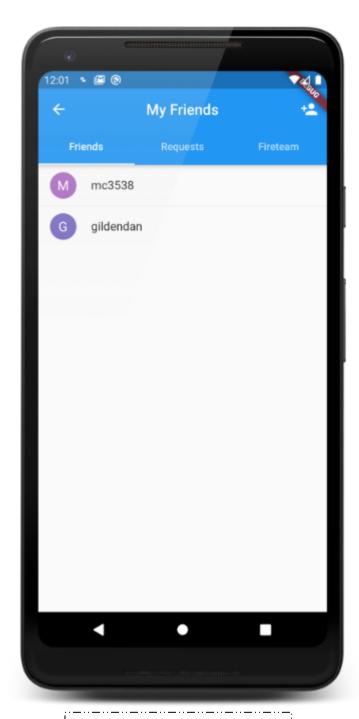
5.3.5-A The Fireteam screen shall contain additional features for the user to manage his/her Fireteam, as to be determined.

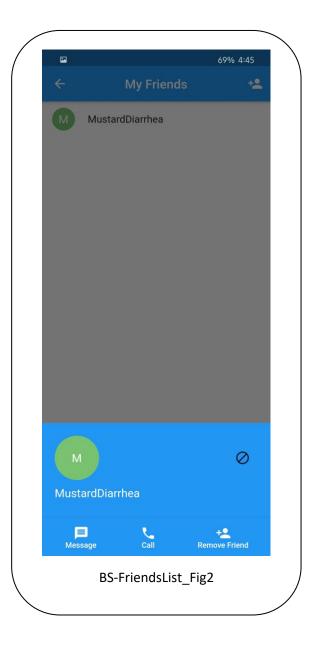
5.3.6 [P2] Fireteam expansion suite

- 5.3.6-A The Fireteam functionality throughout the system shall introduce an expansion to its feature suite, as appropriate through the app's lifecycle.
- 5.3.6-B The Fireteam expansion suite may include direct linking to Accolades and other recognition-based awards and/or achievements.

5.4 Friends List

The Friends screen shall display the user's list of friends and their details and contain management features.





BS-FriendsList_Fig1

5.4.1 [P1] Friends List screen graphical elements

5.4.1-A The Friends List screen shall contain proper identifying characteristics of its intended purpose.

5.4.2 [P1] Friends List screen interactive elements

5.4.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

5.4.3 [P1] Friends List view

5.4.3-A A list of friends shall be displayed in alphabetical order (A-Z, top-bottom) of their usernames.

5.4.4 [P1] Friend info

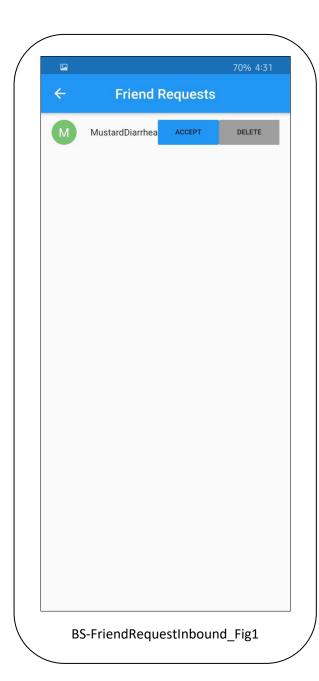
5.4.4-A Tapping a friend shall overlay a view that shows his/her brief details, as to be determined.

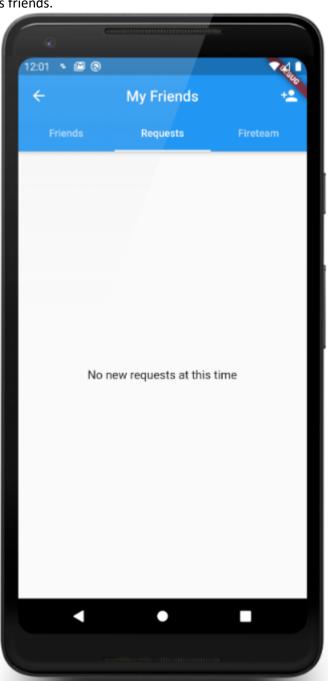
5.4.5 [P1] Friend quick functionality

- 5.4.5-A Tapping a friend shall overlay a view that shows quick functionality, such as a button to send the friend a chat message.
- 5.4.5-B Tapping a friend shall overlay a view that offers quick functionality, such as a button to initiate a phone call with the friend.
- 5.4.5-C Tapping a friend shall overlay a view that offers quick functionality, such as a button to remove the friend.

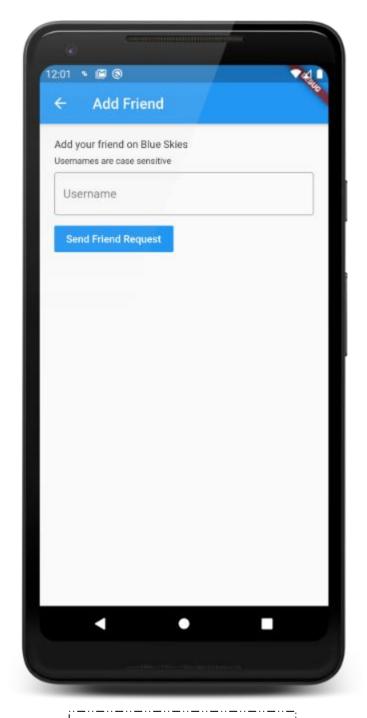
5.5 Friends Management

The Friends screen shall display the any friend requests from other users, in addition to a search function to look for other users to add as friends.





BS-FriendRequestInbound_Fig2





BS-FriendRequestOutbound_Fig1





5.5.1 [P1] Friends Management screens graphical elements

5.5.1-A The Friends Management screens shall contain proper identifying characteristics of its intended purpose.

5.5.2 [P1] Friends Management screens interactive elements

5.5.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

5.5.3 [P1] Friend requests

- 5.5.3-A If someone requests to add the user as a friend, a notification of the request shall be prominent within the Friends screen.
- 5.5.3-B Each friend request shall display the other user's profile identifier and username.
- 5.5.3-C Each friend request shall have buttons to accept or decline/delete the friend request.
- 5.5.3-D The user shall be able to ignore friend requests.

5.5.4 [P1] Searching for other users to add as friends

- 5.5.4-A There shall be a search function that allows the user to query a username that corresponds to a profile.
- 5.5.4-B The search query shall be case-insensitive when comparing against potential usernames in the database.
- 5.5.4-C Any positive results from the query shall either: automatically friend request the match; or display the other user's profile. This gives the user further confirmation to continue with the friend request (method to be determined).

5.5.5 [P2] Pending friend requests

- 5.5.5-A The user may be able to view pending friend requests he/she has sent.
- 5.5.5-B The user may be able to cancel pending friend requests he/she has sent.

6. BS – Other User Profile (OUP)

This requirements section pertains to:

- Other User Profile (OUP) Viewing
- Other User Profile (OUP) Functions

6.1 Other User Profile (OUP) Viewing

The user shall access another user's profile by tapping his/her username or identifier icon in various areas of the app. The OUP screen shall contain information similar to the user's own profile, barring customizability and displaying of personally-identifiable information.

SCREEN(S) TBD

6.1.1 [P1] Other User Profile (OUP) graphical elements

6.1.1-A The OUP shall contain proper identifying characteristics of its intended purpose.

6.1.2 [P1] Other User Profile (OUP) interactive elements

6.1.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the previous screen.

6.1.3 [P1] Other User Profile (OUP) information

- 6.1.3-A Before the Biography (Bio) section, the user's basic information shall be partially displayed, which includes: Username and military and/or first responder Service Record basic information.
- 6.1.3-B The type of information that will be displayed may be dependent on Privacy Settings and/or friend status, as to be determined.

6.1.4 [P1] Profile icon

- 6.1.4-A There shall be a circular identifier icon below the My Profile heading and above the user's name.
- 6.1.4-B The circular identifier icon shall contain the first letter of the user's username by default.

6.1.5 [P2] Profile picture

6.1.5-A The circular identifier icon shall contain the user's profile picture, if added.

6.1.6 [P1] Biography

6.1.6-A The Biography (Bio) section shall appear after the Header ("<other user's username>" in this case).

6.1.7 [P2] Accolades section

- 6.1.7-A The Accolades section, when implemented, may appear after the Bio section and before the Fireteam section.
- 6.1.7-B Additional requirements of the Accolades feature of the app shall be finalized in accordance with Priority 2 guidelines.

6.1.8 [P2] Fireteam

- 6.1.8-A The Fireteam section may appear after the Bio section.
- 6.1.8-B The Fireteam section may display the user's top designated friends (up to 5) as icons with names (or in a similar means).

6.1.9 [P2] Fireteam section display ordering

6.1.9-A The ordering of members within the Fireteam section shall be determined.

6.1.10 [P2] Friends

- 6.1.10-A The Friends section may appear after the Fireteam section.
- 6.1.10-B The Friends section may display the user's friends as icons with names (or in a similar means).
- 6.1.10-C The number of friends shown in the Friends section shall be similarly formatted as the Fireteams section, with the "overflow friends" (more than 5 friends) viewable by scrolling/swiping the list horizontally to see additional friends.

6.1.11 [P2] Friends section display ordering

6.1.11-A The ordering of the user's friends within the Friends section shall be determined.

6.2 Other User Profile (OUP) Functions

The OUP shall contain other functions for the visiting user, such as sending a chat message, requesting as friend, and reporting profile to administrators.

SCREEN(S) TBD

6.2.1 [P1] Request as friend

6.2.1-A There shall be a button that allows the user to request the other user as a friend.

6.2.2 [P1] Send chat message

- 6.2.2-A There shall be a button that allows the user to send the other user a chat message.
- 6.2.2-B Sending the chat message shall create and store the conversation in the Chat feature of the app, in addition to following its respective requirements.
- 6.2.2-C The ability to send a chat message may be dependent on friend status, which shall be determined.

6.2.3 [P1] Report profile to admins

6.2.3-A There shall be a button that allows the user to report the other user's profile to administrators/staff.

7. BS – Settings

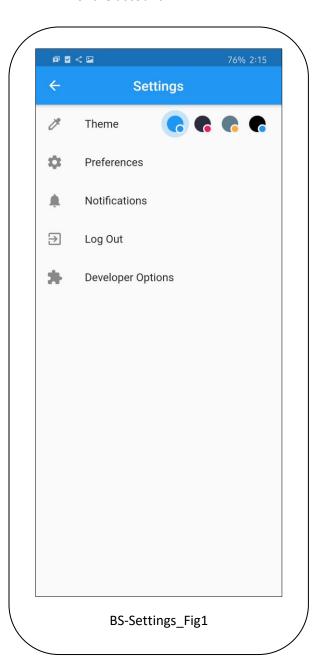
This requirements section pertains to:

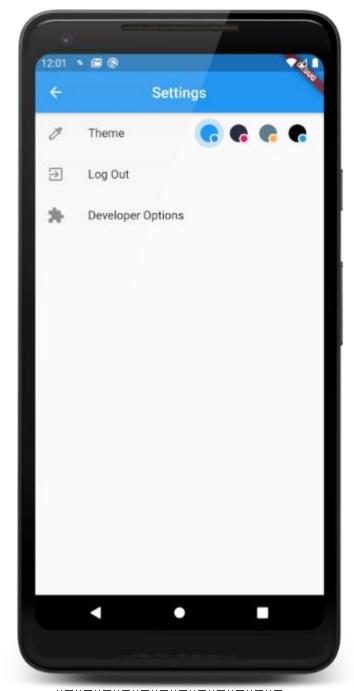
- Settings Screen
- Color Themes
- Notifications
- Tips and Tricks
- Privacy Settings
- Contact Us
- About
- Accessibility
- Logout

7.1 <u>Settings Screen</u>

The use can access the app's settings by tapping on the **Gear** icon at the top-right of the Dashboard. From here, the user change app-wide aspects (such as app color theming), preferences, notifications preferences, check out tips and tricks, learn about and manage privacy settings, reach-out to app point-of-contacts, access official app information, and logout

of the account.





7.1.1 [P1] Settings screen graphical elements

7.1.1-A The Settings screen shall contain proper identifying characteristics of its intended purpose.

7.1.2 [P1] Settings screen interactive elements

7.1.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Dashboard screen.

7.1.3 [P1] Theme buttons

7.1.3-A The Settings screen shall contain respective **Color Palette icon** buttons to access the available app-wide-affecting color themes.

7.1.4 [P1] Notifications button

7.1.4-A The Settings screen shall contain a **Notifications** button to access the Notification Options.

7.1.5 [P1] Tips and Tricks button

7.1.5-A The Settings screen shall contain a **Tips and Tricks** button to access the Tips and Tricks, Help, and Tutorials.

7.1.6 [P1] Privacy Settings button

7.1.6-A The Settings screen shall contain a **Privacy Settings** button to access the Privacy Settings.

7.1.7 [P1] Contact Us button

7.1.7-A The Settings screen shall contain a **Contact Us** button to access the Contact Us Portal (CUP).

7.1.8 [P1] About button

7.1.8-A The Settings screen shall contain an **About** button to access the About section (for App and Blue Skies information)

7.1.9 [P2] Accessibility button

7.1.9-A The Settings screen shall contain an **Accessibility** button to access the Accessibility Features.

7.1.10 [P1] Logout button

7.1.10-A The Settings screen shall contain a Logout button to logout the user from the app.

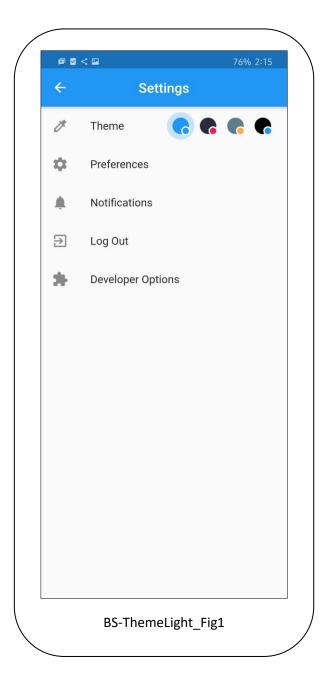
7.1.11 [P2] Radio Check Availability button

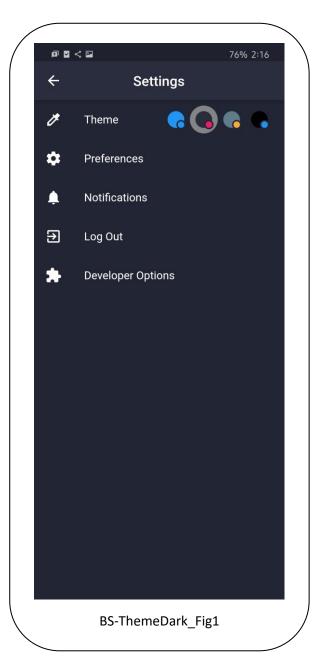
7.1.11-A The Settings screen shall contain a **Radio Check Availability** button to access the Radio Check Custom Availability Schedule.

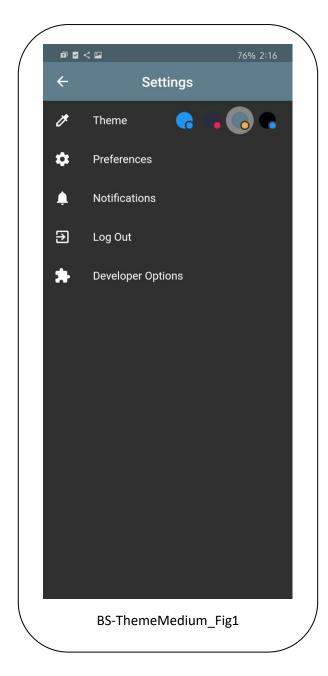
7.2 Color Themes

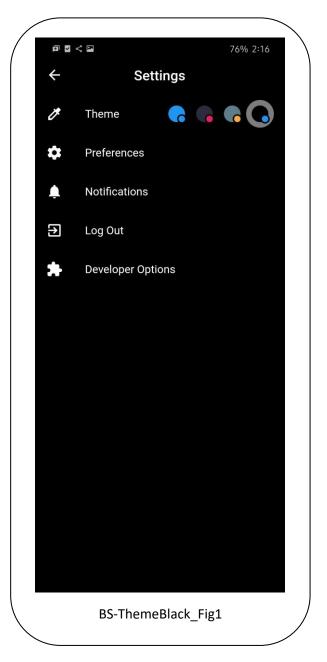
On the Settings screen, the user can change the app's color theme by tapping one of the available **Color Palette icons**. The app aims to provide enough contrasting color options to make the user experience as enjoyable and comfortable as possible. Therefore, light, dark, medium-contrast, and AMOLED-black modes are available.

(PLEASE SEE APPENDIX - ADDITIONAL IMAGES FOR SCREENSHOTS IN OTHER COLOR THEMES)









7.2.1 [P1] Access of Color Theming options

7.2.1-A The Color Theming options shall be accessible as the first section of the Settings screen as **Color Palette icon** buttons depicting the available base theme colors.

7.2.2 [P1] Application of Color Theming options without app relaunch

7.2.2-A Applying a color theme option shall occur immediately, without the requirement for the user to relaunch the app.

7.2.3 [P1] Light Theme (default)

- 7.2.3-A The app shall contain a light-style app color theme option.
- 7.2.3-B The Light Theme shall be the default Color Theme option, unless changed by the user.
- 7.2.3-C The Light Theme shall be retained through relaunches of the app and restarts of the device.

7.2.4 [P1] Dark Theme

- 7.2.4-A The app shall contain a dark-style app color theme option.
- 7.2.4-B The Dark Theme shall be retained through relaunches of the app and restarts of the device.

7.2.5 [P2] Medium-Contrast Theme

- 7.2.5-A The app may contain a "medium-contrast-style" color theme option.
- 7.2.5-B The Medium Theme shall be retained through relaunches of the app and restarts of the device.

7.2.6 [P2] AMOLED-Black Theme

- 7.2.6-A The app may contain an "AMOLED-black"-style color theme option.
- 7.2.6-B The Black Theme shall be retained through relaunches of the app and restarts of the device.

7.3 Notification Options

The user can change app notification options that pertain to both in-app notifications and push app notifications.

SCREEN(S) TBD

7.3.1 [P1] Notification Options screen

- 7.3.1-A The Notification Options screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.3.1-B The Notification Options screen shall contain proper identifying characteristics of its intended purpose.
- 7.3.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.3.2 [P1] In-App notification options (IAN)

- 7.3.2-A The Notification Options shall contain an In-App Notifications (IAN) options category.
- 7.3.2-B The IAN options shall contain various settings to adjust frequency, type, and other traits of notification that occur when the Blue Skies app is open in the foreground.
- 7.3.2-C The IAN option's various settings shall be determined.

7.3.3 [P1] Push App Notification options (PAN)

- 7.3.3-A The Notification Options shall contain a Push App Notifications (PAN) options category.
- 7.3.3-B The PAN options shall contain various settings to adjust frequency, type, and other traits of notifications that occur when the Blue Skies app is in the background, closed, or if the smartphone screen is turned-off.
- 7.3.3-C The PAN option's various settings shall be determined.

7.4 Tips and Tricks

The user can view and learn tips and tricks about optimal app use and the different functionality and features.

SCREEN(S) TBD

7.4.1 [P1] Tips and Tricks screen

- 7.4.1-A The Tips and Tricks screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.4.1-B The Tips and Tricks screen shall contain proper identifying characteristics of its intended purpose.
- 7.4.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.4.2 [P1] Tips and Tricks primary sections

- 7.4.2-A The Tips and Tricks screen shall contain various tips, tricks, help information, and tutorials.
- 7.4.2-B The content of the Tips and Tricks primary sections shall be determined.

7.4.3 [P2] Tips and Tricks secondary sections

7.4.3-A Other sections on the Tips and Tricks screen shall be determined.

7.5 **Privacy Settings**

The user can view and learn about the various privacy settings available, in addition to their effects.

SCREEN(S) TBD

7.5.1 [P1] Privacy Settings screen

- 7.5.1-A The Privacy Settings screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.5.1-B The Privacy Settings screen shall contain proper identifying characteristics of its intended purpose.
- 7.5.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.5.2 [P1] Privacy Settings primary functionality

- 7.5.2-A The Privacy Settings screen shall contain functionality that allows the user to adjust preferences that hide or show certain elements of user account and profile information to other app users.
- 7.5.2-B The Privacy Settings shall allow the user to opt-in or opt-out of automated collection of anonymous app usage and analytical data.

7.5.3 [P2] Privacy Settings secondary functionality

7.5.3-A Other secondary privacy settings shall be determined.

7.5.4 [P3] Privacy Settings tertiary functionality

7.5.4-A Tertiary privacy settings, such as those relating to the anonymous collection of usage analytics data solely for hand-off to third-parties, may be determined.

7.6 Contact Us

Through the Contact Us screen, the user can reach-out to relevant app point-of-contacts. This includes both Blue Skies'- and Project Refit-specific queries.

SCREEN(S) TBD

7.6.1 [P1] Contact Us screen

- 7.6.1-A The Contact Us screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.6.1-B The Contact Us screen shall contain proper identifying characteristics of its intended purpose.
- 7.6.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.6.2 [P1] Contact Us Portal (CUP) basic information

- 7.6.2-A The Contact Us screen shall contain the Contact Us Portal (CUP), which shall contain information that can be used to communicate with Project Refit and/or Blue Skies staff and/or administrators.
- 7.6.2-B The contact information shall consist of at least one of each: e-mail address, phone number, and physical mailing address.

7.6.3 [P2] Contact Us Portal (CUP) division of information

7.6.3-A The CUP's contact information may be divided by category.

7.6.4 [P2] Contact Us Portal (CUP) interactive interface

- 7.6.4-A The CUP's interface may be made interactive, allowing the user to obtain specific contact information depending on the type of query he/she has.
- 7.6.4-B The CUP's interface may be made additionally interactive, allowing the user to directly reach out to contacts through the app, such as by sending a message or e-mail through the Blue Skies app.

7.7 About Screen for App and Blue Skies Information

From the **About** screen, the user can access general app-related information, officially-registered app information, Terms of Service, Privacy Policy, legal notices, and other information.

SCREEN(S) TBD

BS-**TBD**_Fig**TBD**

7.7.1 [P1] About screen

- 7.7.1-A The About screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.7.1-B The About screen shall contain proper identifying characteristics of its intended purpose.
- 7.7.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.7.2 [P1] General app-related information section

7.7.2-A The About screen shall contain a section that states general app-related information, such as background of Project Refit and Blue Skies, mission, and intended use.

7.7.3 [P1] Officially-registered app information section

7.7.3-A The About screen shall contain a section that states officially-registered information, such as e-mail address, phone number, and physical address, as per registered with the Blue Skies app.

7.7.4 [P1] Terms of Service section

7.7.4-A The About screen shall contain a Terms of Service section that fully states the Blue Skies app Terms of Service.

7.7.5 [P1] Privacy Policy section

7.7.5-A The About screen shall contain a Privacy Policy section that fully states the Blue Skies app Privacy Policy.

7.7.6 [P1] Legal Notices section

7.7.6-A The About screen shall contain a Legal notices section fully states any legal notices that shall be determined.

7.7.7 [P2] Other information section

7.7.7-A The About screen may contain other information that shall be determined.

7.8 Accessibility Features

The user can activate and change user-accessibility features that aid the use of the app. These accessibility features differ from general smartphone-wide accessibility features due to being tailored for the Blue Skies app.

SCREEN(S) TBD

BS-**TBD**_Fig**TBD**

7.8.1 [P2] Accessibility screen

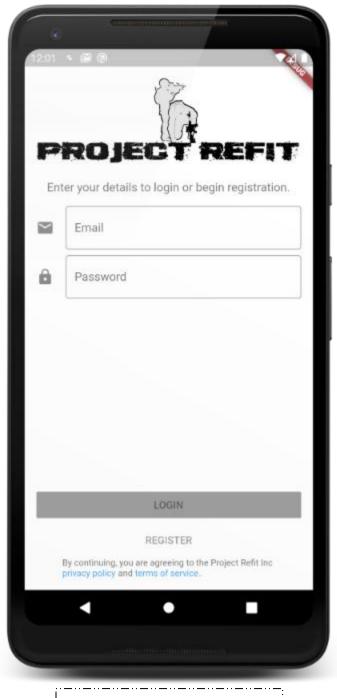
- 7.8.1-A The Accessibility screen, when accessed, shall take the user to a new "nested" screen that does not contain the bottom navigational app bar.
- 7.8.1-B The Accessibility screen shall contain proper identifying characteristics of its intended purpose.
- 7.8.1-C A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Settings screen.

7.8.2 [P2] Accessibility Features

- 7.8.2-A The Accessibility screen shall allow the user to activate and change accessibility features to aid the use of the app.
- 7.8.2-B The accessibility features shall differ from general smartphone-wide accessibility features by being tailored specifically for the Blue Skies app.
- 7.8.2-C The user can activate and change user-accessibility features that aid the use of the app. These accessibility features differ from general smartphone-wide accessibility features due to being custom-made for the Blue Skies.
- 7.8.2-D The accessibility features shall be determined.

7.9 Logout of User Account

If the user would like to logout of their account, they simply tap Logout from the Settings screen; they are then taken to the Login/Registration screen.



BS-Logout_Fig1

7.9.1 [P1] Logout process

- 7.9.1-A Tapping **Logout** on the Settings screen shall sign-out / log-out the user's account from the Blue Skies app and then transition to the Login/Registration Screen.
- 7.9.1-B No user account information shall be retained after account logout.
- 7.9.1-C The user shall not be able to return to any app features before logging-in or registering again.

8. **BS** – Chat

This requirements section pertains to:

- Chat Screen
- Conversation Creation from Chat
- 1-on-1 Chat
- Group Chat

8.1 Chat Screen

Tapping Chat takes the user to the Chat screen showing the chats he/she is participating in. Both 1-on-1 and group chat are visible here, and the user can initiate either from here, as well.



BS-Chat_Fig1

8.1.1 [P1] Chat screen graphical elements

- 8.1.1-A The Chat screen shall contain proper identifying characteristics of its intended purpose.
- 8.1.1-B The **Chat icon** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

8.1.2 [P1] Chat screen interactive elements

8.1.2-A The Chat screen shall contain the bottom app bar for navigating throughout the app, consisting of the following buttons (per context-defined designs): **Home icon**, **Chat icon**, **Radio Check icon** (?), and **Forum icon**.

8.1.3 [P1] Chat access

8.1.3-A Tapping the **Chat** button on the BAB shall take the user to the Chat screen / Chat screen.

8.1.4 [P1] List of conversations (both 1-on-1 and group)

8.1.4-A The Chat screen shall display in order of conversations with most recent messages, descending to conversations with the oldest last-sent messages.

8.1.5 [P1] List of 1-on-1 conversations

- 8.1.5-A The Chat screen shall display the 1-on-1 chat conversations the user is associated with, including conversations that have been initiated but do not have any existing messages between its members.
- 8.1.5-B Each 1-on-1 conversation in the list shall have a circle icon to the left containing the first letter of the other chat participant's username.
- 8.1.5-C Each 1-on-1 conversation in the list shall have the other chat participant's username as the first line (above the message preview).
- 8.1.5-D Each 1-on-1 conversation in the list shall have the most recent message (sent or received) displayed as a message preview on the second line (under the username).
- 8.1.5-E If no messages have yet been sent between the user and other chat participant, the message preview shall state "Start your conversation!" for both users.

8.1.6 [P1] List of group conversations

- 8.1.6-A The Chat screen shall display the group chat conversations the user is associated with.
- 8.1.6-B Each group conversation in the list shall have a circle icon to the left containing identifying characteristics to indicate it is a group conversation, and possibly with whom.
- 8.1.6-C Each group conversation in the list shall have identifying characteristics of that specific group conversation (to act as a title) as the first line (above the message preview). Naming of group conversations may be implemented.
- 8.1.6-D Each group conversation in the list shall have the most recent message (sent or received) displayed as a message preview on the second line (under the group conversation identifier).

8.1.7 [P1] Refreshing of conversation messages

8.1.7-A The conversations list shall refresh based on server and backend polling intervals as to be determined.

8.1.8 [P1] Opening a conversation

8.1.8-A Tapping a 1-on-1 conversation shall open the conversation on a new screen.

8.1.9 [P2] Conversation creation button

8.1.9-A There shall be a **+ icon** floating action button at the bottom-right of the Chat screen that is used to initiate new chat conversations.

8.1.10 [P2] Message drafts

- 8.1.10-A The system shall save incomplete / in-progress / unsent messages as drafts.
- 8.1.10-B Drafts of conversations shall appear similar to last-sent messages on the Chat screen, but must have an indicator present to inform the user that the message has not actually been sent.
- 8.1.10-C Drafts of conversations shall be persistent regardless of the user switching screens within the app and when exiting the app.
- 8.1.10-D Drafts of conversations may be persistent through phone restarts, as to be determined.

8.2 Conversation Creation from Chat

The user can start a new chat conversation by tapping the **+ icon** floating action button (FAB) at the bottom-right of the Chat screen. This will present the user with options, such as selecting one or more users for 1-on-1 or group conversations, respectively.

SCREEN(S) TBD

BS-*TBD*_Fig*TBD*

8.2.1 [P2] 1-on-1 conversation creation using button

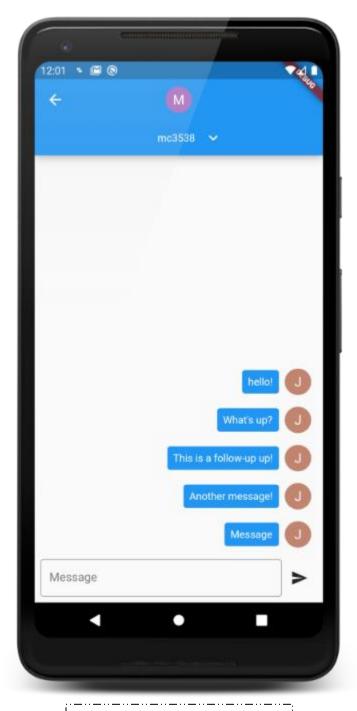
- 8.2.1-A Tapping the **+ icon** floating action button (FAB) at the bottom-right of the Chat screen shall open an interface to search for usernames.
- 8.2.1-B There shall be a **CANCEL** button for the user to return to the Chat screen.
- 8.2.1-C Typing in a username in the search interface shall query the database for the submitted string.
- 8.2.1-D If the string matches a username, the user shall be able to select that user for the new conversation.
- 8.2.1-E The user shall then tap **NEXT** to confirm and proceed to enter a message to send.
- 8.2.1-F Once the user sends a message, the Chat screen shall update the conversations list with the newly-created chat, as per the requirements stated of the Chat screen.

8.2.2 [P2] Group conversation creation using button

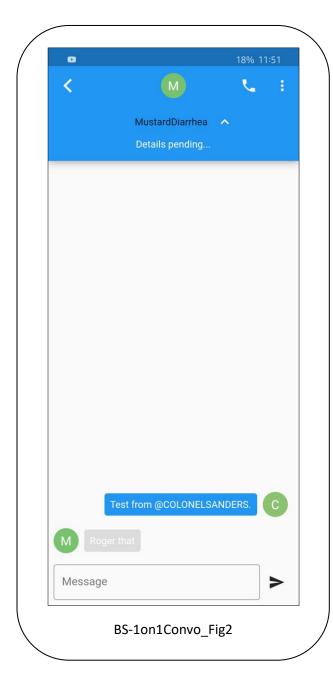
- 8.2.2-A Tapping the **+ icon** floating action button (FAB) at the bottom-right of the Chat screen shall open an interface to search for usernames.
- 8.2.2-B There shall be a **CANCEL** button for the user to return to the Chat screen.
- 8.2.2-C Typing in a username in the search interface shall query the database for the submitted string.
- 8.2.2-D If the string matches a username, the user shall be able to select that user for the new conversation.
- 8.2.2-E The text input box to search for users shall be cleared once a user has been selected for the new conversation.
- 8.2.2-F The user shall be able to add additional participants to the conversation by tapping the open text input box and searching a new user to add.
- 8.2.2-G Once two or more users have been selected, the user shall tap **NEXT** to confirm and proceed to enter a message to send.
- 8.2.2-H Once the user sends a message, the Chat screen shall update the conversations list with the newly-created chat, as per the requirements stated of the Chat screen.

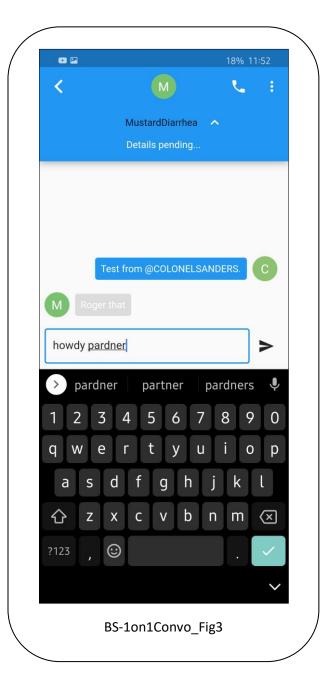
8.3 <u>1-on-1 Chat</u>

Tapping a 1-on-1 conversation from the Chat screen presents the user with the messages within the respective conversation.



BS-1on1Convo_Fig1





8.3.1 [P1] 1-on-1 conversation screen graphical elements

- 8.3.1-A The 1-on-1 conversation screen shall contain proper identifying characteristics of its intended purpose.
- 8.3.1-B A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Chat screen.

8.3.2 [P1] 1-on-1 chat conversations backend protocols

- 8.3.2-A Conversations shall be called "chat rooms" for backend protocol purposes.
- 8.3.2-B Chat rooms shall be linked to the database of messages between conversation participants.
- 8.3.2-C Conversation participants shall be assigned under a chat room.
- 8.3.2-D Chat rooms communicate with the server for transmission of messages.

8.3.3 [P1] 1-on-1 conversation screen messages

- 8.3.3-A Tapping a conversation from the Chat screen shall open that chat's conversation.
- 8.3.3-B The conversation shall display the messages between the participants in chronological order (starting from most recent at the bottom).
- 8.3.3-C The conversation shall display messages as bubbles.
- 8.3.3-D The conversation shall display the user's own messages on the right-side.
- 8.3.3-E The conversation shall display the other participant's messages on the left-side.

8.3.4 [P1] Refreshing of conversation messages

8.3.4-A The conversation shall refresh based on server and backend polling intervals as to be determined.

8.3.5 [P1] Sending messages

- 8.3.5-A There shall be a text-input box at the bottom of the screen.
- 8.3.5-B Tapping the text-input box shall open the smartphone keyboard and allow the user to type a message.
- 8.3.5-C There shall be a **Send Arrow icon** button to the right of the text-input box.

- 8.3.5-D Tapping the **Send Arrow icon** button shall attempt to deliver the message to the other participant.
- 8.3.5-E Character limits and restrictions on messages shall be determined.
- 8.3.5-F Tapping the **Close Arrow icon** button on the smartphone keyboard shall hide/close the keyboard.

8.3.6 [P2] Message drafts

- 8.3.6-A The system shall save incomplete / in-progress / unsent messages as drafts.
- 8.3.6-B Drafts of conversations shall be indicated by appearing in the message text-input box.
- 8.3.6-C Drafts of conversations shall be persistent regardless of the user switching screens within the app and when exiting the app.
- 8.3.6-D Drafts of conversations may be persistent through phone restarts, as to be determined.

8.3.7 [P1] Other participant's information

- 8.3.7-A The 1-on-1 conversation screen shall have a circle icon at the top / in the header containing the first letter of the other chat participant's username.
- 8.3.7-B The 1-on-1 conversation screen shall display the other participant's username under his/her identifier icon.
- 8.3.7-C The 1-on-1 conversation screen shall display a dynamic expandable/collapsible **arrow icon** button to show/hide (respectively) additional details of the other participant.
- 8.3.7-D The additional details that can be shown or hidden shall be determined.
- 8.3.7-E Tapping the other participant's identifier icon shall take the user to that other participant's User Profile.

8.3.8 [P1] 3-dot menu button

- 8.3.8-A There shall be a **3-dot icon** menu button at the top-right to show additional conversation options.
- 8.3.8-B Tapping the **3-dot icon** menu button the top-right shall display a list of features, including **Report** function, and other options that shall be determined.

8.3.9 [P2] Calling feature

- 8.3.9-A The 1-on-1 conversation screen shall have a **Phone icon** button at the top-right.
- 8.3.9-B Tapping the **Phone icon** button at the top-right shall initiate a voice over Internet Protocol (VoIP) call with the other participant.

8.4 Group Chat

Members of a group chat conversation shall be afforded several functionalities to enhance the user experience, including conversation naming and adding additional members.

SCREEN(S) TBD

BS-**TBD**_Fig**TBD**

8.4.1 [P2] Message drafts

- 8.4.1-A The system shall save incomplete / in-progress / unsent messages as drafts.
- 8.4.1-B Drafts of conversations shall be indicated by appearing in the message text-input box.
- 8.4.1-C Drafts of conversations shall be persistent regardless of the user switching screens within the app and when exiting the app.
- 8.4.1-D Drafts of conversations may be persistent through phone restarts, as to be determined.

8.4.2 [P2] Group chat conversation naming

- 8.4.2-A Members of a group conversation shall be allowed to set and modify the group conversation's name.
- 8.4.2-B A user who modifies the group conversation name shall automatically generate a brief textual update within the conversation of the username responsible for the naming.
- 8.4.2-C The textual update within the group conversation shall appear in the middle of the conversation's messages with a timestamp and flow with the conversation as new messages appear.

8.4.3 [P2] Group chat conversation member addition

- 8.4.3-A Members of a group conversation shall be allowed to add new members to the chat.
- 8.4.3-B A new member added to an existing group conversation shall not be able to view messages sent/received before the member's addition.
- 8.4.3-C Members shall not be allowed to remove any other members from their group conversation.

8.4.4 [P2] Group chat conversation muting / do-not-disturb

8.4.4-A A group conversation may be able to be muted.

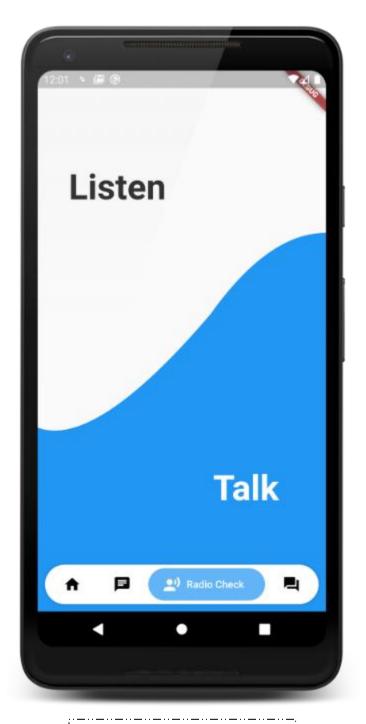
9. BS – Radio Check (Talk/Listen)

This requirements section pertains to:

- Radio Check (Talk/Listen) Screen (RCS)
- Talk Mode Search
- Listen Mode Search

9.1 Radio Check (Talk/Listen) Screen (RCS)

The Blue Skies Radio Check (Talk/Listen) feature first attempts to match a user to someone else. A hierarchy for user matching priority may be implemented.



BS-Radio_Fig1

9.1.1 [P1] Radio Check screen (RCS) graphical elements

- 9.1.1-A The RCS shall contain proper identifying characteristics of its intended purpose.
- 9.1.1-B The **Radio Check** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

9.1.2 [P1] Radio Check screen (RCS) interactive elements

9.1.2-A The RCS shall contain the bottom app bar for navigating throughout the app, consisting of the following buttons (per context-defined designs):

Home icon, Chat icon, Radio Check icon (?), and Forum icon.

9.1.3 [P1] Radio Check access

9.1.3-A Tapping the **Radio Check** button on the BAB shall take the user to the Radio Check screen (RCS).

9.1.4 [P1] Emergency Button Banner (EBB) on Radio Check screen

- 9.1.4-A The RCS shall contain a red-colored Emergency Button Banner (EBB), with white text stating: "Is this an emergency?" and a YES button to its right.
- 9.1.4-B Tapping the **YES** button on the EBB shall take the user to the Emergency Contacts Screen (ECS).
- 9.1.4-C The EBB shall be dismissible.

9.1.5 [P1] Listen button

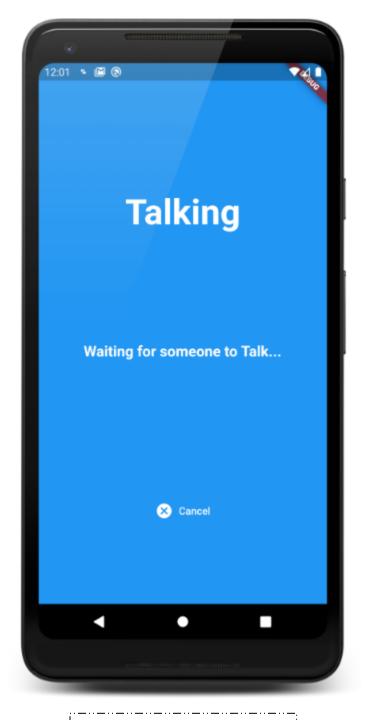
- 9.1.5-A The **Listen** button shall be displayed over half of the screen, not overlaying with the **Talk** button.
- 9.1.5-B Tapping the **Listen** button shall take the user to the Listening Search screen.

9.1.6 [P1] Talk button

- 9.1.6-A The **Talk** button shall be displayed over half of the screen, not overlaying with the **Listen** button.
- 9.1.6-B Tapping the **Talk** button shall take the user to the Talking Search screen.

9.2 Talk Mode Search

The Talking Search of Radio Check feature, once successfully matched between users, initiates a new 1-on-1 chat conversation.



BS-RadioTalk_Fig1

9.2.1 [P1] Talking Search screen graphical elements

9.2.1-A The Talking Search screen shall contain proper identifying characteristics of its intended purpose.

9.2.2 [P1] Talking Search screen interactive elements

- 9.2.2-A The Talking Search screen shall contain a **Cancel** button for the user to cancel the search.
- 9.2.2-B Tapping the **Cancel** button shall cancel the search and return the user to the RCS.

9.2.3 [P1] Talking Search status

9.2.3-A The Talking Search screen shall display an animated or pulsing message stating: "Waiting for someone to listen..." (or a similar statement) during the search.

9.2.4 [P1] Talking Search complete

- 9.2.4-A Once a match is found, a regular 1-on-1 Chat Conversation messages screen shall be displayed.
- 9.2.4-B This conversation shall borrow the same characteristics and requirements as the regular 1-on-1 Chat Conversation screen accessed by tapping the **Chat icon** button.
- 9.2.4-C This conversation shall be stored in the regular Chat screen / Chat List of Conversations, as per the requirements stated of that screen.

9.2.5 [P2] Talking Search based on category of users

- 9.2.5-A The Listening Search functionality may firstly attempt to match the user with somebody in his/her Fireteam as Level 1.
- 9.2.5-B The Listening Search functionality may secondly attempt to match the user with somebody in his/her Friends list as Level 2.
- 9.2.5-C The Listening Search functionality may thirdly attempt to match the user with somebody neither in his/her Fireteam or Friends list as Level 3.
- 9.2.5-D The Listening Search functionality may include a selectable category of users to attempt to match from a specific pool of users.

9.3 <u>Listen Mode Search</u>

The Listening Search of the Radio Check feature, once successfully matched between users, initiates a new 1-on-1 chat conversation.



BS-RadioListen_Fig1

9.3.1 [P1] Listening Search screen graphical elements

9.3.1-A The Listening Search screen shall contain proper identifying characteristics of its intended purpose.

9.3.2 [P1] Listening Search screen interactive elements

- 9.3.2-A The Listening Search screen shall contain a **Cancel** button for the user to cancel the search.
- 9.3.2-B Tapping the **Cancel** button shall cancel the search and return the user to the RCS.

9.3.3 [P1] Listening Search status

9.3.3-A The Listening Search screen shall display an animated or pulsing message stating: "Waiting for someone to vent..." (or a similar statement) during the search.

9.3.4 [P1] Listening Search complete

- 9.3.4-A Once a match is found, a regular 1-on-1 Chat Conversation messages screen shall be displayed.
- 9.3.4-B This conversation shall borrow the same characteristics and requirements as the regular 1-on-1 Chat Conversation screen accessed by tapping the **Chat icon** button.
- 9.3.4-C This conversation shall be stored in the regular Chat screen / Chat List of Conversations, as per the requirements stated of that screen.

9.3.5 [P2] Listening Search based on category of users

- 9.3.5-A The Listening Search functionality may firstly attempt to match the user with somebody in his/her Fireteam as Level 1.
- 9.3.5-B The Listening Search functionality may secondly attempt to match the user with somebody in his/her Friends list as Level 2.
- 9.3.5-C The Listening Search functionality may thirdly attempt to match the user with somebody neither in his/her Fireteam or Friends list as Level 3.
- 9.3.5-D The Listening Search functionality may include a selectable category of users to attempt to match from a specific pool of users.

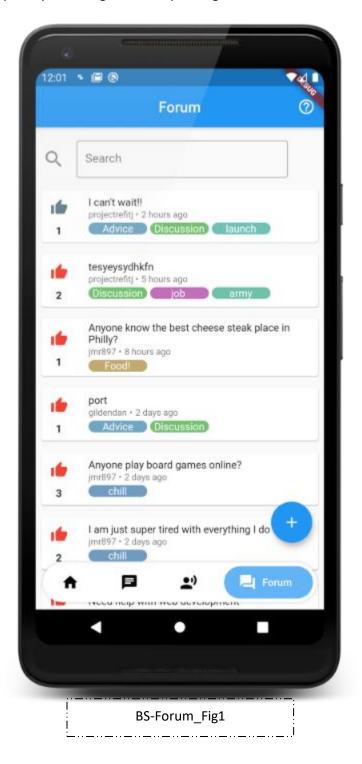
10. **BS** – Forum

This requirements section pertains to:

- Forum Screen
- Post and Comments Viewing
- Post Search
- Post Creation
- Comment Creation

10.1 Forum Screen

The Forum screen shall contain discussion posts by users or administrators. From here, the user can search for, view, Like/up-vote/thumb-up, and designate as favorite the posts displayed on the Forums screen. Additionally, the user can create a new post and comment on an existing post by accessing the corresponding features.



10.1.1 [P1] Forum screen graphical elements

- 10.1.1-A The Forum screen shall contain proper identifying characteristics of its intended purpose.
- 10.1.1-B The **Forum** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

10.1.2 [P1] Forum screen interactive elements

10.1.2-A The Forum screen shall contain the bottom app bar for navigating throughout the app, consisting of the following buttons (per context-defined designs): **Home icon**, **Chat icon**, **Radio Check icon** (?), and **Forum icon**.

10.1.3 [P1] Forum access

10.1.3-A Tapping the **Forum** button on the BAB shall take the user to the Forum screen.

10.1.4 [P1] List of Forum posts

- 10.1.4-A The Forum screen shall display posts in order of most recent posts starting from the top.
- 10.1.4-B The Forum screen shall display each post with its title on the first line above the post preview text.
- 10.1.4-C The Forum screen shall display each post with its preview text on the second line under the post title.
- 10.1.4-D A post's preview text length shall be determined.
- 10.1.4-E The Forum screen shall be vertically scrollable to show additional posts that do not fit on the smartphone's screen.

10.1.5 [P1] Like button for Forum posts

- 10.1.5-A The Forum screen shall display each post with an unfilled Like counter at its left (a **thumbs-up icon** button that also displays the total Likes value of that post).
- 10.1.5-B Tapping the **Like** button shall fill the icon and mark the post as upvoted/thumbed-up, increasing it Like value by 1 (one) unit.

10.1.6 [P1] Post Favorite button on Forum screen

- 10.1.6-A The Forum screen shall display each post with an unfilled **Favorite** button at its right (a **heart icon** button that allows the user to designate certain posts as "favorites".
- 10.1.6-B Tapping the **Favorite** button shall fill the icon and mark the post as Favorite, reflecting on both that post's screen itself and the Forum screen (list of forum posts).
- 10.1.6-C Favorited posts shall not affect the order of the listed posts on the Forum screen.

10.1.7 [P1] Searching of Forum posts

10.1.7-A There shall be a search function at the top of the Forums screen.

10.1.8 [P1] Forum post creation button

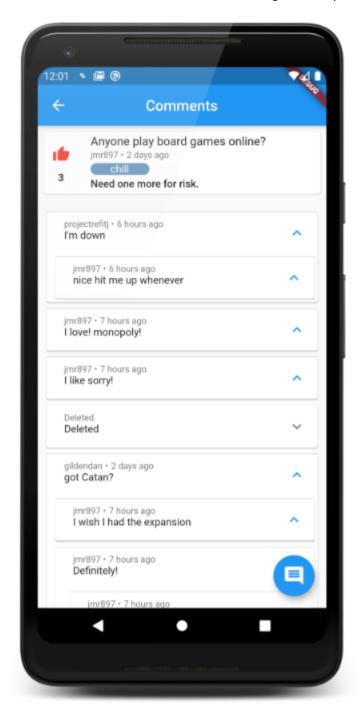
- 10.1.8-A There shall be a **+ icon** button at the bottom-right of the Forum screen.
- 10.1.8-B Tapping the **+ icon** button shall open the Post Creation Interface.

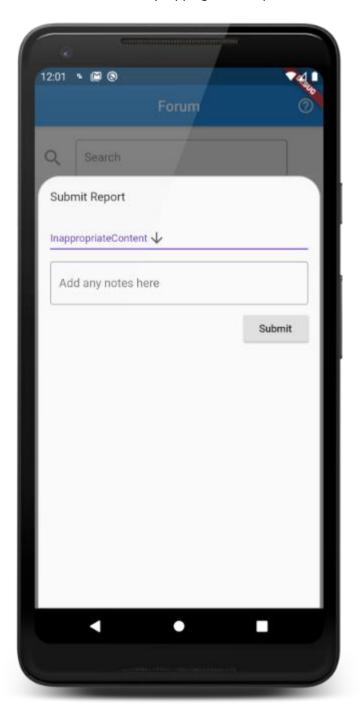
10.1.9 [P1] Refreshing of Forum posts

10.1.9-A The user shall drag the screen down from the top to refresh the Forum screen, which includes posts and their Like values.

10.2 Post and Comments Viewing

The Post screen containing a Forum post's comments shall be viewed by tapping a Forum post.





BS-PostView_Fig1

BS-PostReport_Fig1

10.2.1 [P1] Post screen graphical elements

- 10.2.1-A The Post screen shall contain proper identifying characteristics of its intended purpose.
- 10.2.1-B The **Forum** button on the BAB shall be highlighted with a different color tone to indicate which area of the app the user is on.

10.2.2 [P1] Post screen interactive elements

- 10.2.2-A A **Back arrow** button shall be present at the top-left corner of the screen to allow the user to return to the Forum screen.
- 10.2.2-B The Post screen shall contain the bottom app bar for navigating throughout the app, consisting of the following buttons (per context-defined designs): **Home icon**, **Chat icon**, **Radio Check icon** (?), and **Forum icon**.

10.2.3 [P1] Post screen access

10.2.3-A Tapping a Forum post on the Forum screen shall open the post and display its text and associated comments on the Post screen.

10.2.4 [P1] Forum post and comments viewing

- 10.2.4-A The Post screen shall display the Forum post's title and body of text at the top.
- 10.2.4-B The Post screen shall display the comments of the Forum post under the Forum post.
- 10.2.4-C The comments shall be displayed in order of most recent comments starting from the top of the Comments section.
- 10.2.4-D The comments shall be displayed with timestamps of their initial creation date shown as the number of days, weeks, months, or years ago (threshold for unit difference is to be determined).
- 10.2.4-E Forum post and comment lengths that exceed the smartphone's screen shall be viewable by scrolling.

10.2.5 [P2] Nesting of replies to comments

10.2.5-A Tapping a comment may allow responding to a comment instead of the post itself.

- 10.2.5-B If replies to comments are implemented, the comments and their replies shall be shown as nested to distinguish parent/child hierarchy of comments.
- 10.2.5-C Multiple comment reply chains (comments/replies to other comments/replies over multiple layers) shall show additional nesting.

10.2.6 [P1] Post Favorite button on Post screen

- 10.2.6-A There shall be an unfilled **Favorite** button at the right of the Forum post title and body.
- 10.2.6-B Tapping the **Favorite** button shall fill the icon and mark the post as Favorite, reflecting on both that post's screen itself and the Forum screen (list of forum posts).

10.2.7 [P1] Like button for comments

- 10.2.7-A The Forum screen shall display each post with a Like value counter at its left (a **thumbs-up icon** button that also displays the total Like value of that post).
- 10.2.7-B Tapping the **Like** button shall fil the icon and increase the Like value counter of that comment by 1 (one) unit.

10.2.8 [P1] Commenting on a Forum post

- 10.2.8-A There shall be a **+ icon** button at the bottom-right of the Forum post.
- 10.2.8-B Tapping the **+ icon** button shall open the Comment Creation Interface.

10.2.9 [P1] Refreshing of Forum post comments

10.2.9-A The user shall drag the screen down from the top to refresh the Post screen, which includes comments and their Like values.

10.2.10 [P1] Reporting posts

- 10.2.10-A The user shall tap (or tap and hold; method is to be determined) the post to open a context menu.
- 10.2.10-B The context menu shall contain a Report button.
- 10.2.10-C Other buttons within the context menu shall be determined.
- 10.2.10-D Tapping the Report button shall send the post to staff and/or administrators for review.

10.2.11 [P1] Reporting comments

- 10.2.11-A The user shall tap (or tap and hold; method is to be determined) the comment to open a context menu.
- 10.2.11-B The context menu shall contain a **Report** button.
- 10.2.11-C Other buttons within the context menu shall be determined.
- 10.2.11-D Tapping the **Report** button shall send the comment to staff and/or administrators for review.

10.2.12 [P2] Post creator's user profile access

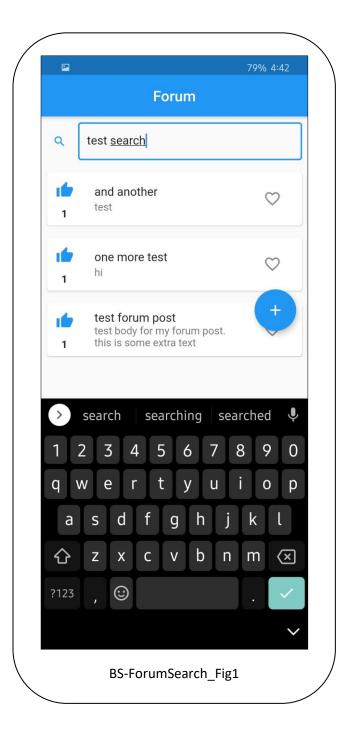
10.2.12-A There shall be a button or context menu (means to be determined) that allows users to visit the Forum post creator's User Profile.

10.2.13 [P2] Comment creator's user profile access

10.2.13-A There shall be a button or context menu (means to be determined) that allows users to visit the Forum post comment creator's User Profile.

10.3 Post Search

The Forum shall contain a search box for text entry, allowing the user to search for Forum posts by keyword(s) in both post titles and post bodies.



10.3.1 [P1] Forum post search box input

- 10.3.1-A The Forum post search box shall be at the top of the Forum screen.
- 10.3.1-B Tapping the search text-input box shall open the smartphone keyboard and allow the user to type keyword(s).
- 10.3.1-C Tapping outside of the keyboard (except the text-input box) shall hide/close the keyword.
- 10.3.1-D Tapping the **Enter icon** button on the keyboard shall submit and query the database for the submitted string.

10.3.2 [P1] Querying and processing of forum search

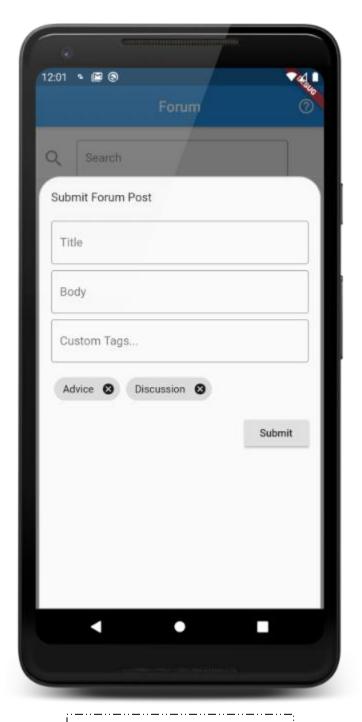
10.3.2-A A submitted Forum search shall query the keyword(s) among both Forum post titles and Forum post bodies.

10.3.3 [P1] Output of forum search

- 10.3.3-A The output of the search shall return and display Forums posts containing the queried keyword(s) among both Forum post titles and Forum post bodies.
- 10.3.3-B Tapping one of the returned posts shall take the user to that post's respective Post screen.
- 10.3.3-C Tapping the **Back arrow** button in the returned post shall return the user to the Forum screen.

10.4 Post Creation

The Forum shall allow the user to create and submit a new Forum post with a title and body of text.



BS-PostCreation_Fig1

10.4.1 [P1] Forum post creation button

- 10.4.1-A There shall be a **+ icon** button at the bottom-right of the Forum screen.
- 10.4.1-B Tapping the **+ icon** button shall open the Post Creation Interface.
- 10.4.1-C Tapping the **+ icon** button shall open the smartphone keyboard.

10.4.2 [P1] Forum post creation

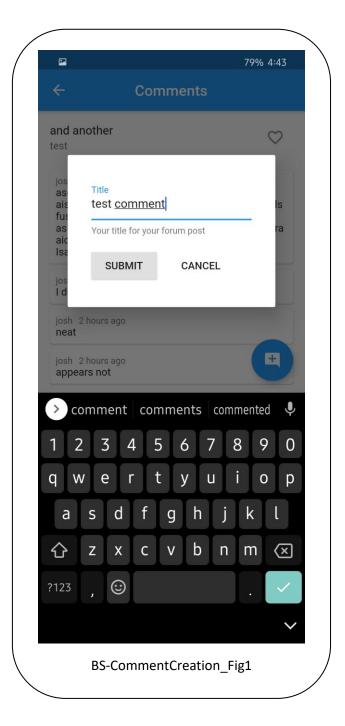
- 10.4.2-A The Post Creation Interface shall overlay the Forum screen.
- 10.4.2-B The Post Creation Interface shall contain a Title field and a Body field.
- 10.4.2-C The user must enter text into both the Title and Body fields and shall tap the **SUBMIT** button to create the post.
- 10.4.2-D Submitting or canceling a post creation shall hide/close the smartphone keyboard.
- 10.4.2-E The user shall tap the **CANCEL** button in the Post Creation Interface to cancel and return to the Forum screen.
- 10.4.2-F Character limits and restrictions on Forum posts shall be determined.

10.4.3 [P2] Post drafts

- 10.4.3-A The system shall save incomplete / in-progress / unsubmitted posts as drafts.
- 10.4.3-B Drafts of posts shall be indicated by appearing in the post creation box.
- 10.4.3-C Drafts of posts shall be persistent regardless of the user switching screens within the app and when exiting the app.
- 10.4.3-D Drafts of posts may be persistent through phone restarts, as to be determined.

10.5 Comment Creation

The Forum shall allow the user to create and submit a new text comment to/within a Forum post.



10.5.1 [P1] Comment creation button

- 10.5.1-A There shall be a **+ icon** button at the bottom-right of the Post screen.
- 10.5.1-B Tapping the **+ icon** button shall open the Comment Creation Interface.
- 10.5.1-C Tapping the **+ icon** button shall open the smartphone keyboard.

10.5.2 [P1] Comment post creation

- 10.5.2-A The Comment Creation Interface shall overlay the Post screen.
- 10.5.2-B The Comment Creation Interface shall contain a single text field.
- 10.5.2-C The user must enter text field and shall tap the **SUBMIT** button to create the comment.
- 10.5.2-D Submitting or canceling a comment creation shall hide/close the smartphone keyboard.
- 10.5.2-E The user shall tap the **CANCEL** button in the Comment Creation Interface to cancel and return to the Post screen.
- 10.5.2-F Character limits and restrictions on comments shall be determined.

10.5.3 [P2] Comment drafts

- 10.5.3-A The system may save incomplete / in-progress / unsubmitted comments as drafts.
- 10.5.3-B Drafts of comments may be indicated by appearing in the comment creation box for only the forum post it pertains to.
- 10.5.3-C Drafts of comments may be persistent regardless of the user switching screens within the app and when exiting the app.
- 10.5.3-D Drafts of comments may be persistent through phone restarts, as to be determined.

- 11. BS (Future BS req provisioning DO NOT REMOVE)
- 12. BS (Future BS req provisioning DO NOT REMOVE)
- 13. BS (Future BS req provisioning DO NOT REMOVE)
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- 19. BS (Future BS req provisioning DO NOT REMOVE)

20. AI – Administrator Interface (AI) Hosting and Access

This requirements section pertains to:

- Hosting Platform
- Access via Website
- Login
- Logout

20.1 Hosting Platform

The Admin Interface will be hosted using Google Cloud Services.

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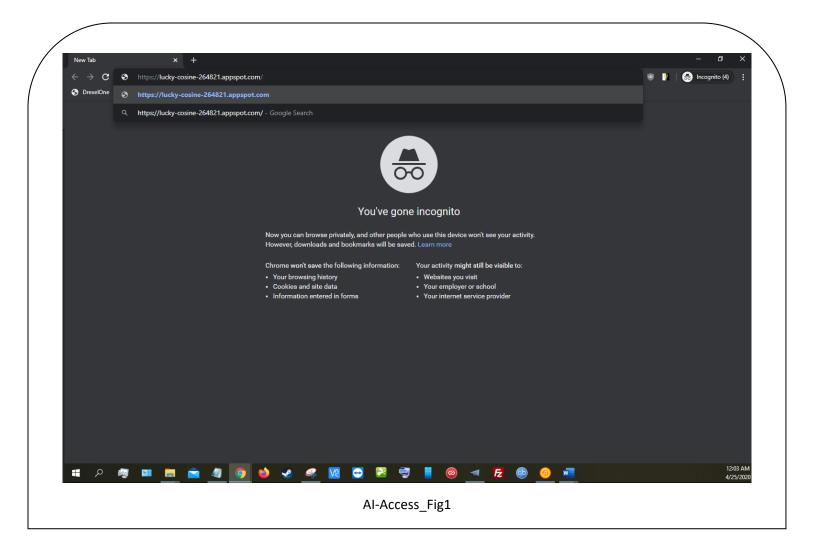
BS-*TBD*_Fig*TBD*

20.1.1 [P1] Google Cloud Services hosting platform

- 20.1.1-A The AI shall be hosted through Google Cloud Services.
- 20.1.1-B The AI shall be configured through Google Cloud Services
- 20.1.1-C The AI shall be managed through Google Cloud Services.

20.2 Access via Website

The Admin Interface shall be accessed by a provided internet website link.

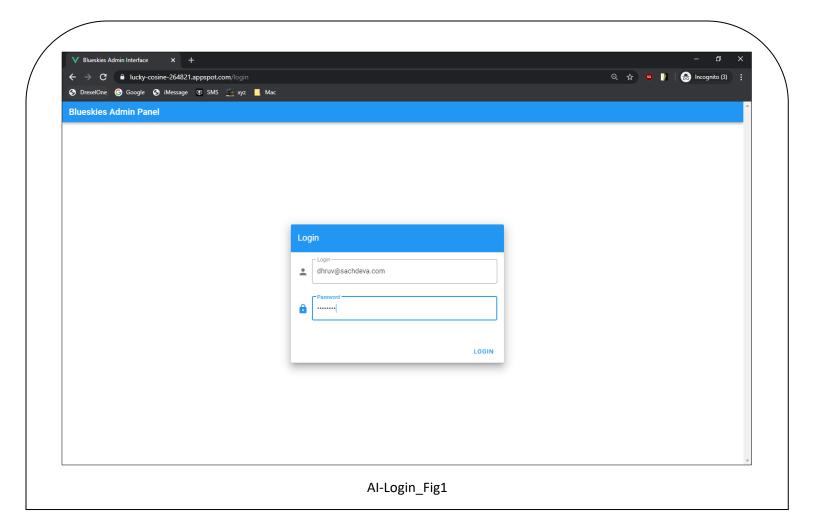


20.2.1 [P1] Admin Interface internet website link

20.2.1-A Users of the AI shall use an access link to reach the AI Login screen.

20.3 Login

The administrator shall login from the Admin Interface (AI) Login Screen.



20.3.1 [P1] Login screen graphical elements

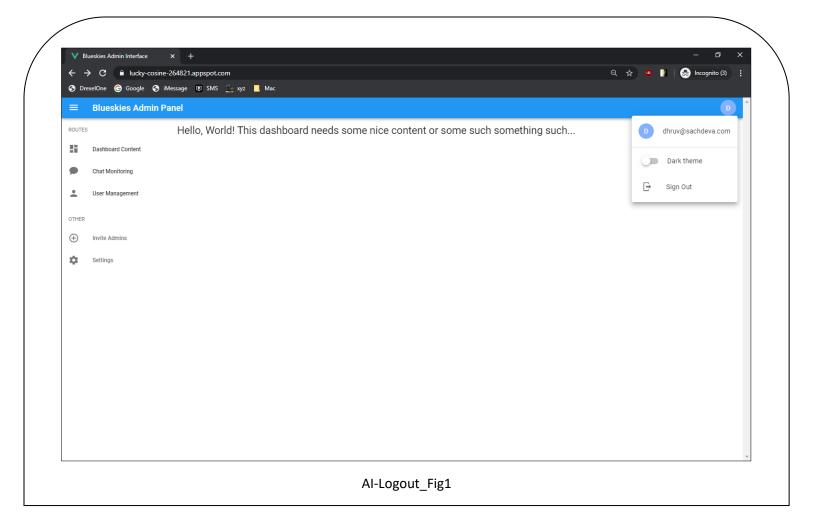
- 20.3.1-A The Login screen shall contain proper identifying characteristics of its intended purpose.
- 20.3.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.

20.3.2 [P1] Login screen interactive elements

20.3.2-A A **Login** text-input box shall allow the user to enter his/her credentials for the AI.

20.4 Logout

The administrator shall logout from the Admin Interface (AI) Auxiliary Functions menu.



20.4.1 [P1] Logging-out of Admin Interface

20.4.1-A The user shall logout by opening the auxiliary functions button at the top-right corner of the screen and clicking **Logout / Sign-out**.

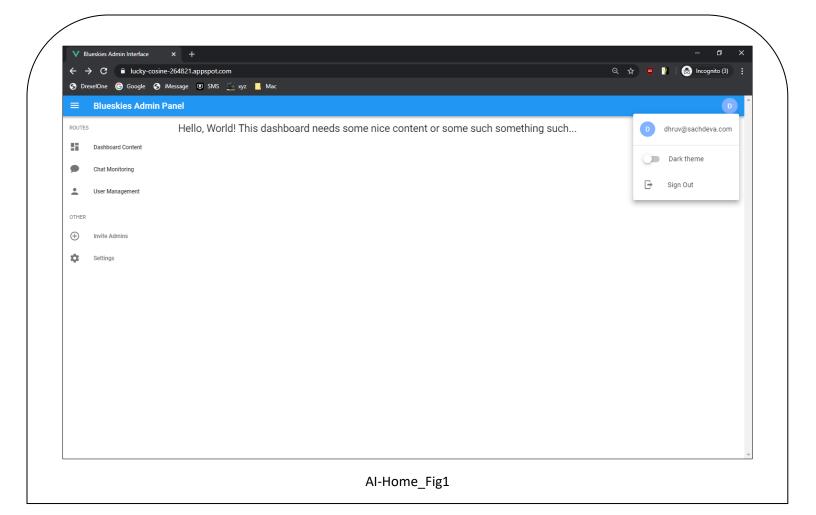
21. AI – Home Screen

This requirements section pertains to:

• Home Screen

21.1 Home Screen

The Home screen is the first screen the user will be taken to immediately after logging-in to the Admin Interface.



21.1.1 [P1] Home screen graphical elements

- 21.1.1-A The Home screen shall contain proper identifying characteristics of its intended purpose.
- 21.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.

21.1.2 [P1] Home screen interactive elements

- 21.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 21.1.2-B The Home screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.

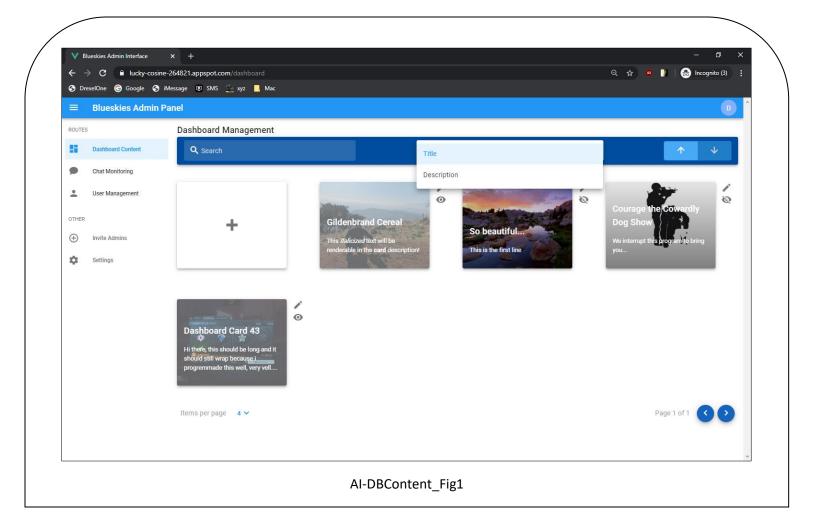
22. AI - Dashboard Content

This requirements section pertains to:

- Dashboard Content Screen
- New Dashboard Content
- Existing Dashboard Content
- Searching Dashboard Content

22.1 <u>Dashboard Content Screen</u>

The Dashboard Content screen contains the content, media, and other resources that will reflect in the Blue Skies app's respective Dashboard.



22.1.1 [P1] Dashboard Content screen graphical elements

- 22.1.1-A The Dashboard Content screen shall contain proper identifying characteristics of its intended purpose.
- 22.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 22.1.1-C The **Dashboard Content** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

22.1.2 [P1] Dashboard Content screen interactive elements

- 22.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 22.1.2-B The Dashboard Content screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): **Dashboard Content**, **Chat Monitoring**, **User Management**, **Invite Admins**, and **Settings**.

22.1.3 [P1] Dashboard Content tiles

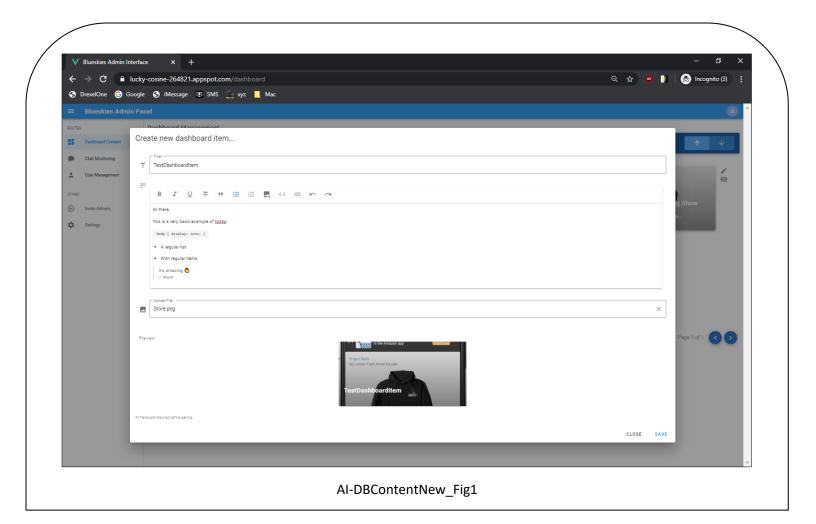
- 22.1.3-A The Dashboard Content shall appear in tiles.
- 22.1.3-B The Dashboard Content tiles shall contain image previews.
- 22.1.3-C The Dashboard Content tiles shall contain buttons to modify them, which open the Existing Dashboard Content overlay.

22.1.4 [P1] Dashboard Content functions

- 22.1.4-A There shall be a text-input box to search for Dashboard Content.
- 22.1.4-B There shall be a drop-down box to select a viewing method (such as by Title, Description, etc.).
- 22.1.4-C There shall be a **+ icon** button as the first in the list of Dashboard Content tiles, which opens the New Dashboard Content overlay.

22.2 New Dashboard Content

Administrators shall create Dashboard Content through the Admin Interface.



22.2.1 [P1] New Dashboard Content overlay graphical elements

- 22.2.1-A The New Dashboard Content overlay shall contain proper identifying characteristics of its intended purpose.
- 22.2.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 22.2.1-C The **Dashboard Content** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

22.2.2 [P1] New Dashboard Content screen interactive elements

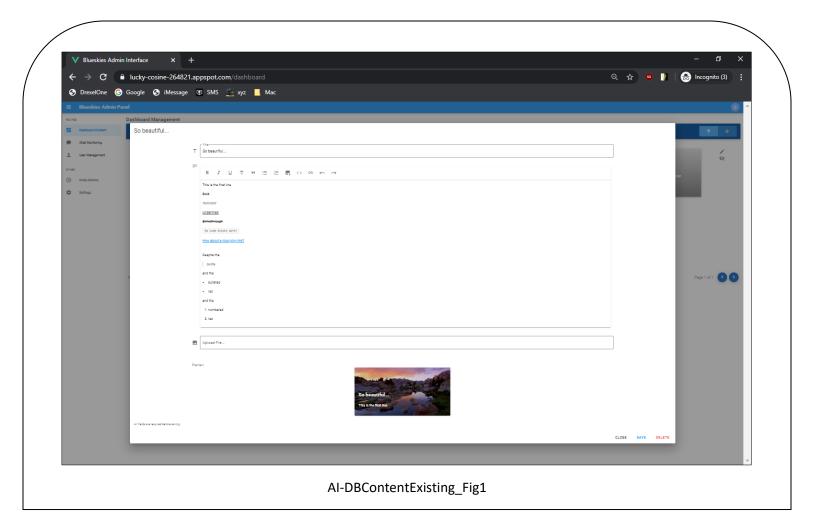
- 22.2.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 22.2.2-B The New Dashboard Content overlay shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): **Dashboard Content**, **Chat Monitoring**, **User Management**, **Invite Admins**, and **Settings**.
- 22.2.2-C Interactive elements not part of the New Dashboard Content overlay shall only be greyed-out and not clickable.

22.2.3 [P1] Creating new Dashboard Content

22.2.3-A The New Dashboard Content overlay shall contain appropriate fields to create new Dashboard Content.

22.3 Existing Dashboard Content

Administrators shall manage existing Dashboard Content through the Admin Interface.



22.3.1 [P1] Existing Dashboard Content overlay graphical elements

- 22.3.1-A The Existing Dashboard Content overlay shall contain proper identifying characteristics of its intended purpose.
- 22.3.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 22.3.1-C The **Dashboard Content** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

22.3.2 [P1] Existing Dashboard Content screen interactive elements

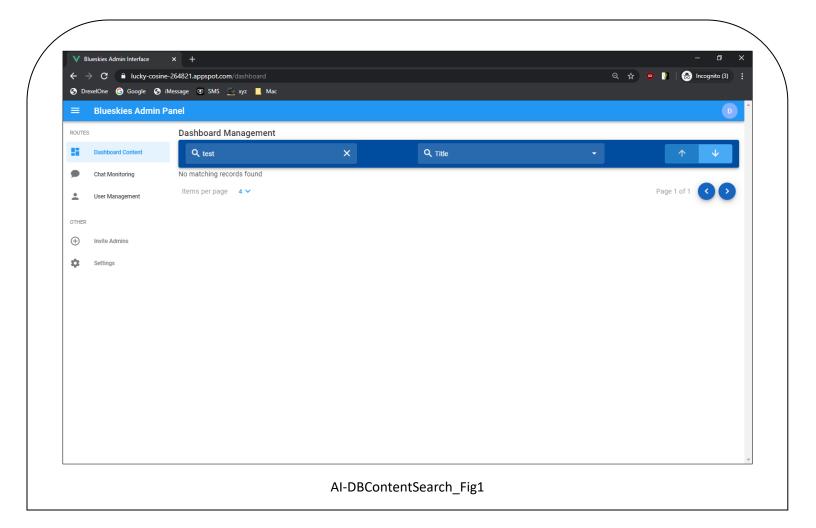
- 22.3.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 22.3.2-B The Existing Dashboard Content overlay shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): **Dashboard Content**, **Chat Monitoring**, **User Management**, **Invite Admins**, and **Settings**.
- 22.3.2-C Interactive elements not part of the Existing Dashboard Content overlay shall only be greyed-out and not clickable.

22.3.3 [P1] Managing existing Dashboard Content

22.3.3-A The Existing Dashboard Content overlay shall contain appropriate fields to manage existing Dashboard Content.

22.4 Searching Dashboard Content

Administrators shall search existing Dashboard Content through the Admin Interface.



22.4.1 [P1] Searching for Dashboard Content screen graphical elements

- 22.4.1-A The Searching for Dashboard Content screen shall contain proper identifying characteristics of its intended purpose.
- 22.4.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 22.4.1-C The **Dashboard Content** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

22.4.2 [P1] Searching for Dashboard Content screen interactive elements

- 22.4.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 22.4.2-B The Searching for Dashboard Content screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs):
 Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.

22.4.3 [P1] Searching for Dashboard Content

- 22.4.3-A The user shall enter text into the text-input search box.
- 22.4.3-B Submitting the text shall query it against existing Dashboard Content titles and their content in the database.
- 22.4.3-C Matches shall be returned and accessible by clicking on them.

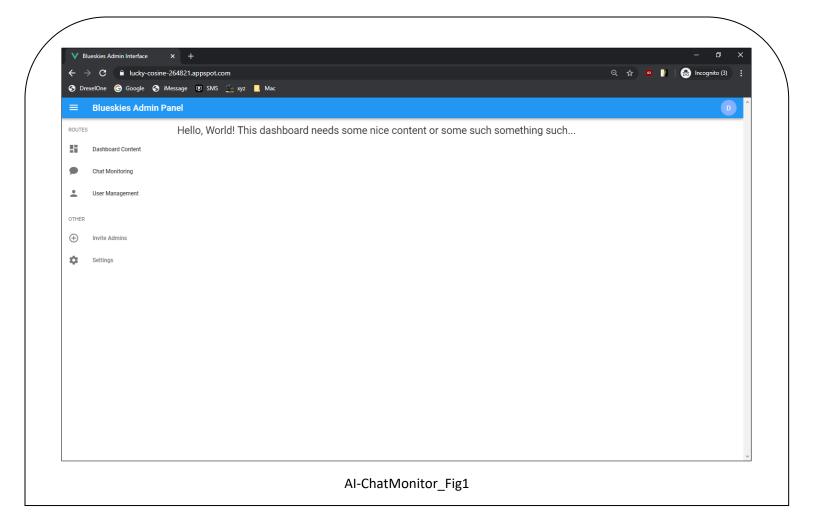
23. AI – Chat Monitoring

This requirements section pertains to:

- Chat Monitoring Screen
- Chat Monitoring Functions

23.1 Chat Monitoring Screen

Administrators shall monitor Chat communication through the Admin Interface.



23.1.1 [P1] Chat Monitoring screen graphical elements

- 23.1.1-A The Chat Monitoring screen shall contain proper identifying characteristics of its intended purpose.
- 23.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 23.1.1-C The **Chat Monitoring** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

23.1.2 [P1] Chat Monitoring screen interactive elements

- 23.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 23.1.2-B The Chat Monitoring screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.

23.1.3 [P1] Chat Monitoring home

23.1.3-A The Chat Monitoring home shall display appropriate content, as to be determined.

23.2 Chat Monitoring Functions

Administrators shall be afforded various functions to monitor Chat communications through the Admin Interface.

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BS-**TBD**_Fig**TBD**

23.2.1 [P1] Chat Monitoring functions

23.2.1-A The Chat Monitoring functions shall be determined.

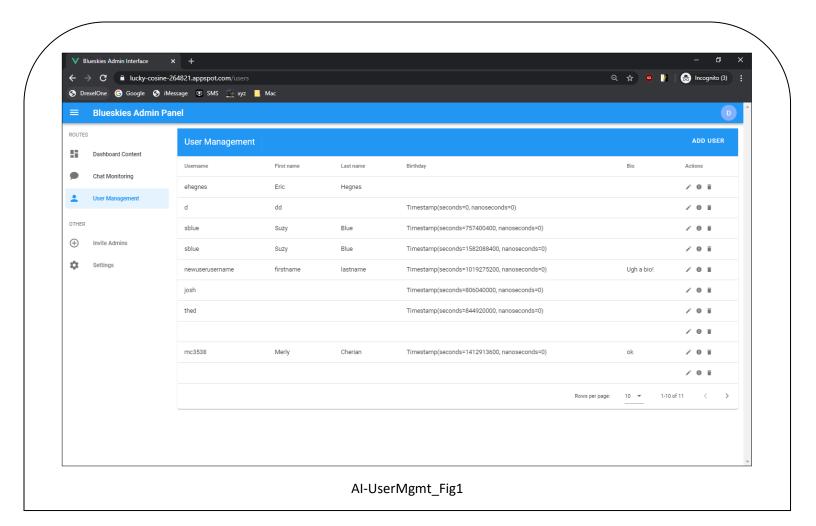
24. AI – User Management

This requirements section pertains to:

- User Management Screen
- Add Users
- Modify Users

24.1 User Management Screen

Administrators shall manage users through the Admin Interface.



24.1.1 [P1] User Management screen graphical elements

- 24.1.1-A The User Management screen shall contain proper identifying characteristics of its intended purpose.
- 24.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 24.1.1-C The **User Management** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

24.1.2 [P1] User Management screen interactive elements

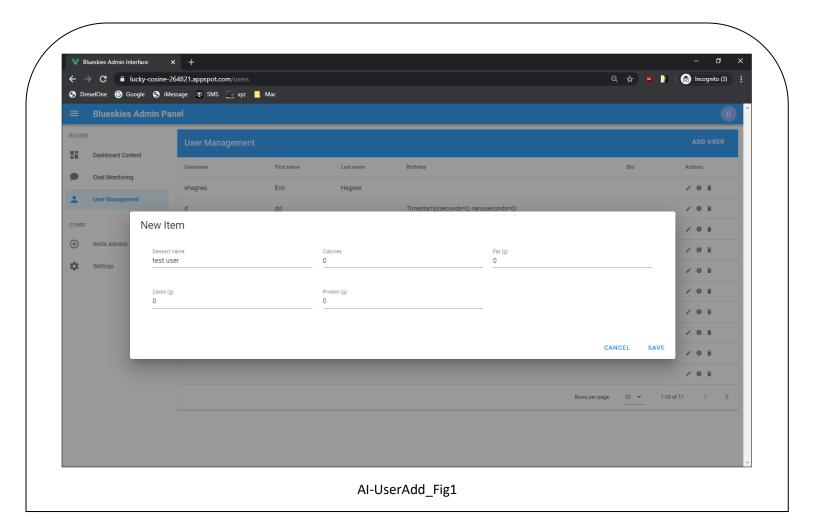
- 24.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 24.1.2-B The User Management screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): **Dashboard Content**, **Chat Monitoring**, **User Management**, **Invite Admins**, and **Settings**.

24.1.3 [P1] List of users

- 24.1.3-A There shall be a list of users, each with appropriate fields shown in a table.
- 24.1.3-B Each user shall have a button to be managed in the Modify Users overlay.
- 24.1.3-C There shall be a button to add users through the Add Users overlay.

24.2 Add Users

Administrators shall add users through the Admin Interface.



24.2.1 [P1] Add users overlay graphical elements

- 24.2.1-A The Add Users overlay shall contain proper identifying characteristics of its intended purpose.
- 24.2.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 24.2.1-C The **User Management** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

24.2.2 [P1] Add users overlay interactive elements

- 24.2.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 24.2.2-B The Add Users overlay shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.
- 24.2.2-C Interactive elements not part of the Add Users overlay shall only be greyed-out and not clickable.

24.2.3 [P1] Add users

24.2.3-A The Add Users overlay shall contain the appropriate fields to add new users (including various permission, as to be determined).

24.3 Modify Users

Administrators shall modify users through the Admin Interface.

SCREEN(S) TBD

BS-*TBD*_Fig*TBD*

24.3.1 [P1] Modify users overlay graphical elements

- 24.3.1-A The Modify Users overlay shall contain proper identifying characteristics of its intended purpose.
- 24.3.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 24.3.1-C The **User Management** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

24.3.2 [P1] Modify users overlay interactive elements

- 24.3.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 24.3.2-B The Modify Users overlay shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.
- 24.3.2-C Interactive elements not part of the Modify Users overlay shall only be greyed-out and not clickable.

24.3.3 [**P1**] Modify users

24.3.3-A The Modify Users overlay shall contain the appropriate fields to modify existing users (including various permission and deletion, as to be determined).

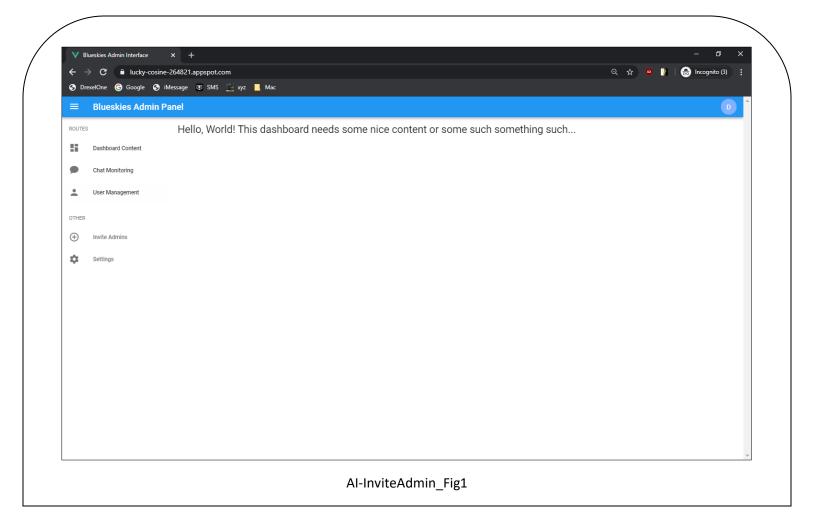
25. AI – Inviting Administrators

This requirements section pertains to:

• Invite Admins Screen

25.1 Invite Admins Screen

Administrators shall invite new administrators through the Admin Interface.



25.1.1 [P1] Invite admins screen graphical elements

- 25.1.1-A The Invite Admins screen shall contain proper identifying characteristics of its intended purpose.
- 25.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 25.1.1-C The **Invite Admins** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

25.1.2 [P1] Invite admins screen interactive elements

- 25.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 25.1.2-B The Invite Admins screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): **Dashboard Content**, **Chat Monitoring**, **User Management**, **Invite Admins**, and **Settings**.

25.1.3 [P1] Invite admins

- 25.1.3-A There shall be an interface that allows the administrator to send an invitation to a new administrator using e-mail address.
- 25.1.3-B The interface shall contain appropriate fields, as to be determined.

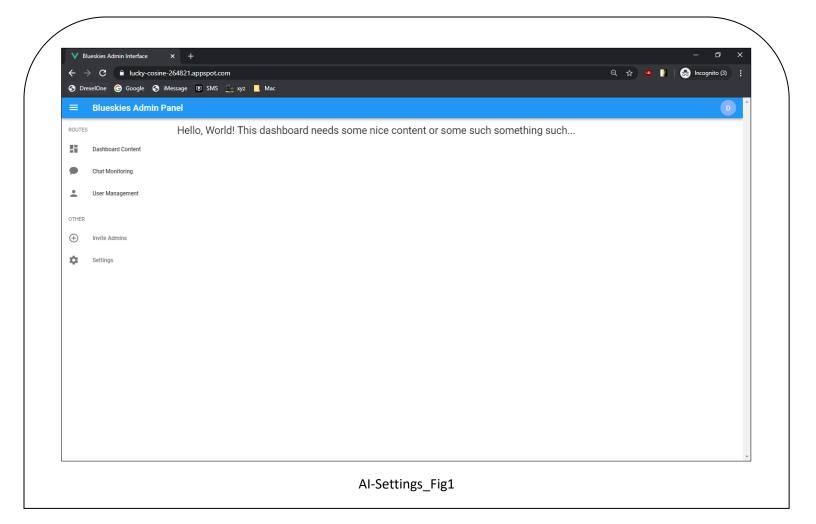
26. Al – Settings

This requirements section pertains to:

• Settings Screen

26.1 Settings Screen

Administrators shall change settings through the Admin Interface.



26.1.1 [P1] Settings screen graphical elements

- 26.1.1-A The Settings screen shall contain proper identifying characteristics of its intended purpose.
- 26.1.1-B A header with the text, "Blue Skies Admin Interface (or Panel)," shall be persistent on the screen.
- 26.1.1-C The **Settings** button on the side panel shall be highlighted with a different color tone to indicate which area of the AI the user is on.

26.1.2 [P1] Settings screen interactive elements

- 26.1.2-A A **circular user identifier** button shall be present at the top-right corner of the screen to allow the user to logout and access auxiliary functions.
- 26.1.2-B The Settings screen shall contain the side panel bar (and its collapsing button) for navigating throughout the AI, consisting of the following buttons (per context-defined designs): Dashboard Content, Chat Monitoring, User Management, Invite Admins, and Settings.

26.1.3 [P1] Changing settings

- 26.1.3-A The administrator shall click the **Settings** button in the side panel to be taken to the Settings screen.
- 26.1.3-B The Settings screen shall contain various settings of the Admin Interface, as to be determined.

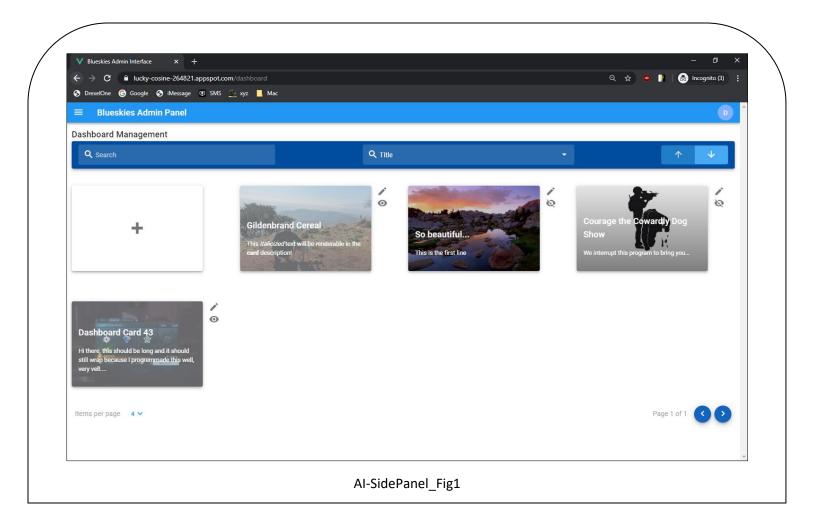
27. AI – Auxiliary Functions

This requirements section pertains to:

- Side Panel Collapsing
- Color Theming

27.1 Side Panel Collapsing

Administrators shall collapse the side panel through the Admin Interface.

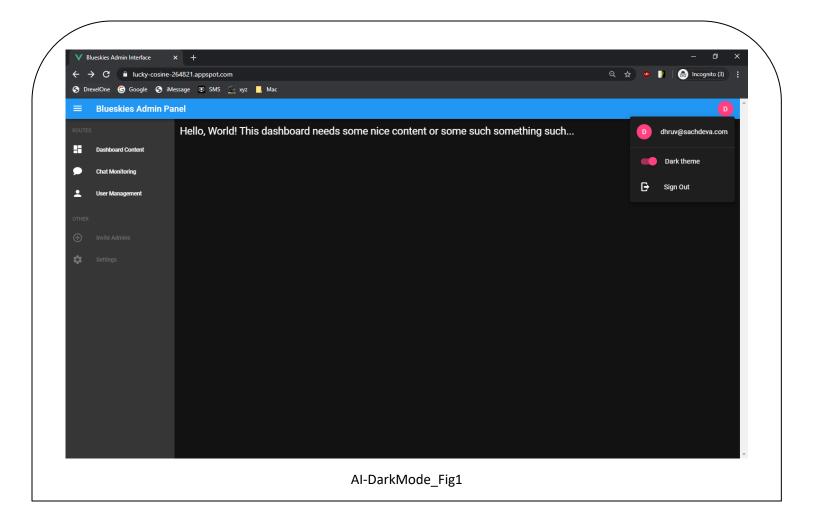


27.1.1 [P2] Side panel collapsing

27.1.1-A The user shall collapse the side panel by clicking the "hamburger menu" button at the top-left of the screen above the side panel.

27.2 Color Theming

Administrators shall change the color theme through the Admin Interface.



27.2.1 [P2] Switch color theme option of Admin Interface

27.2.1-A The user shall switch color themes of the AI by opening the auxiliary functions button at the top-right corner of the screen and clicking the other color theme's toggle (currently **Dark theme**).

- 28. AI (Future AI req provisioning DO NOT REMOVE)
- 29. AI (Future AI req provisioning DO NOT REMOVE)
- 30. AI (Future AI req provisioning DO NOT REMOVE)
- 31. AI (Future AI req provisioning DO NOT REMOVE)
- 32. AI (Future AI req provisioning DO NOT REMOVE)
- 33. AI (Future AI reg provisioning DO NOT REMOVE)
- 34. AI (Future AI req provisioning DO NOT REMOVE)
- 35. AI (Future AI req provisioning DO NOT REMOVE)
- 36. AI (Future AI req provisioning DO NOT REMOVE)
- 37. AI (Future AI req provisioning DO NOT REMOVE)

- 38. AI (Future AI req provisioning DO NOT REMOVE)
- 39. AI (Future AI req provisioning DO NOT REMOVE)

IV. NON-FUNCTIONAL REQUIREMENTS

1. Human Factors

1.1 Types of Users

1.1.1 Technical Users

 These users have the capability to understand and, depending on permissions, modify the underlying code the Project Refit Blue Skies app, as to be determined.

1.1.2 Non-technical Users

• These users do not necessarily have the capability to understand, but will not modify, the underlying code of the Project Refit Blue Skies app.

2. Hardware

2.1 Client-side

- Apple iOS device
- Android OS device
- Microsoft Windows PC or Apple macOS Macintosh computer for BS Admin Interface access

2.2 Server-side

• Google Cloud Hosting Servers

3. Software

3.1 Client-side

- Apple iOS 8.0 or later
- Android Version 5.0 or later

3.2 Server-side

- Google Cloud Firebase Hosting Platform
- Google Chrome or Mozilla Firefox web browser for BS Admin Interface access

4. Performance

4.1 Response Time

App response time will be consistent and less than 1 (one) second for loading content (depending on user's internet connection quality). Non-internet-related actions will take less than 0.1 (zero-point-one) second per action.

5. Error Handling and Reliability

5.1 System Downtime

There will only be system downtime during scheduled service updates and maintenance. As this app often engages users who are at-risk at any time, there will never be *planned* system downtime that is *not* intentional and without notice to the users. All unexpected downtime will be avoided, and risks will be planned for.

5.2 Input Errors

The Sentry.io service will handle our application monitoring in regard to errors.

6. Security

6.1 Virtual Security

The database will have 256-bit AES (Advanced Encryption Standard) at-rest encryption. Access to Blue Skies internal items, such as the database is restricted based on user permissions (only for system administrators and authorized users or persons). We will have the following characteristics and policies employed:

Enforcement of granular security rules, such as:

Users must have verified e-mail addresses

Maintenance of collection-specific rules, such as:

• Users may only write to their own profiles

Adherence of backup protocols and practices, such as:

- 30-day automatic backups
- Daily automatic security and vulnerability reports for dependencies

Other types of standard operating procedures, such as:

• No project-critical keys stored in VCS (Version Control System)

6.2 **Physical Security**

6.2.1 Client-side

- User's own device security at the user's own responsibility (e.g. possession of device, resistance to social engineers, etc.).
- User's device must be on most up-to-date app, operating system, and security patch versions.

6.2.2 Server-side

 Google Cloud Servers must be safeguarded in accordance to their datasecurity and physical security standard operation procedures, policies, and practices.

7. Exported Code

7.1 <u>Usability of Exported Code</u>

- Blue Skies shall support .ipa package files for Apple iOS devices.
- Blue Skies shall support .apk package files for Android OS devices.

7.2 Readability of Exported Code

- Exported code must comply with the following conventions:
 - o Indentation and white-space for indication of code hierarchy.
 - Lines containing single/related statements.
 - Variable naming respective to the context of the code.
 - o Code commenting demarcated with ease of readability and context.
- The Blue Skies code shall remain as *black-box*, such that unauthorized users and persons cannot see and inspect internal functionality.

V. SYSTEM EVOLUTION

1. Permissions

The Blue Skies app will grow to include documentation scanning to enforce the nature of this veteran- and first responder-only community.

2. Features

The Blue Skies app will have *Accolades* or recognition-based awards / achievements to incentivize and reward participation and good behavior.

The Blue Skies app will have a store-front for purchasing and supporting the Project Refit effort.

3. Data Handling and Safeguards

Data handling and safeguards will evolve with the Google Cloud and Firebase platform, as the over-encompassing system for the Blue Skies app back-bone.

4. Long-Term Outlook

The Blue Skies app will eventually collect anonymous usage data to be used by research institutions and organizations in an effort to better understand and study PTSD and suicide among veterans and first responders. This hand-off of data will be in exchange for funding that will help sustain Project Refit and Blue Skies, ultimately helping the veterans and first responders.

VI. APPENDIX – ADDITIONAL IMAGES

0.	BS - A	A aa A	Release	Phase	Screer	shots	Pack
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https://lucky-cosine-264821.web.app/BlueSkies-SRS-Screens.zip

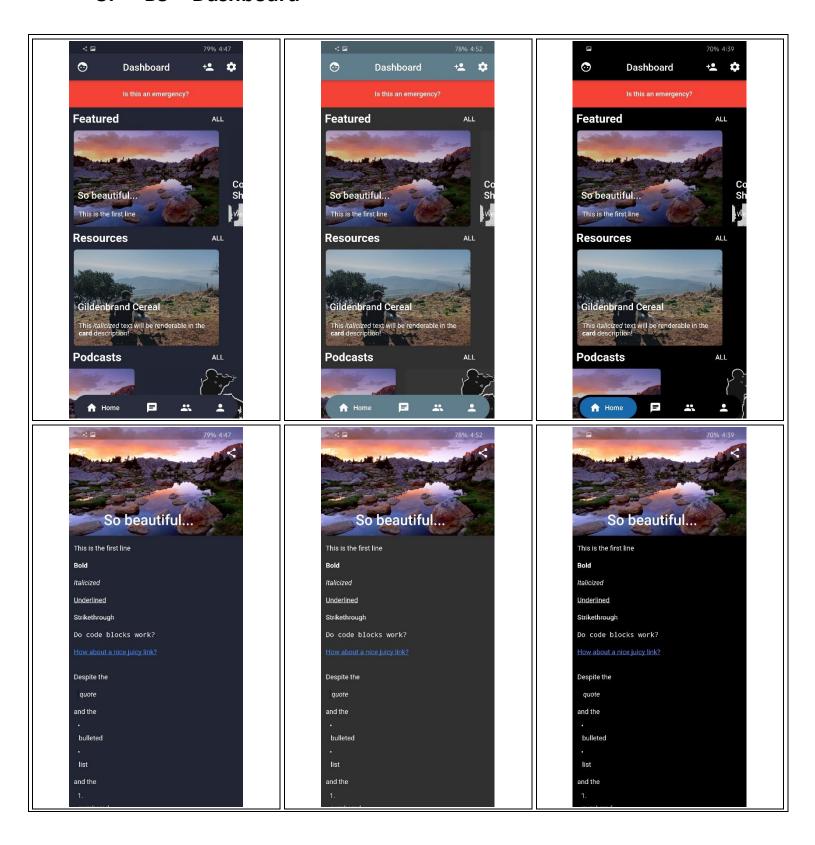
1. BS – Blue Skies App Hosting and Access

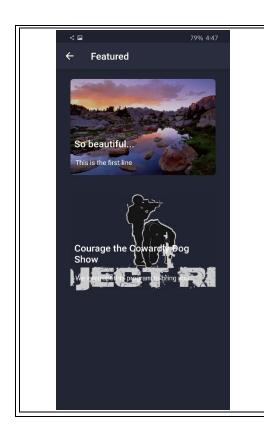
N/A N/A N/A	N/A	N/A	N/A
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2. BS – Account and Onboarding



3. BS – Dashboard

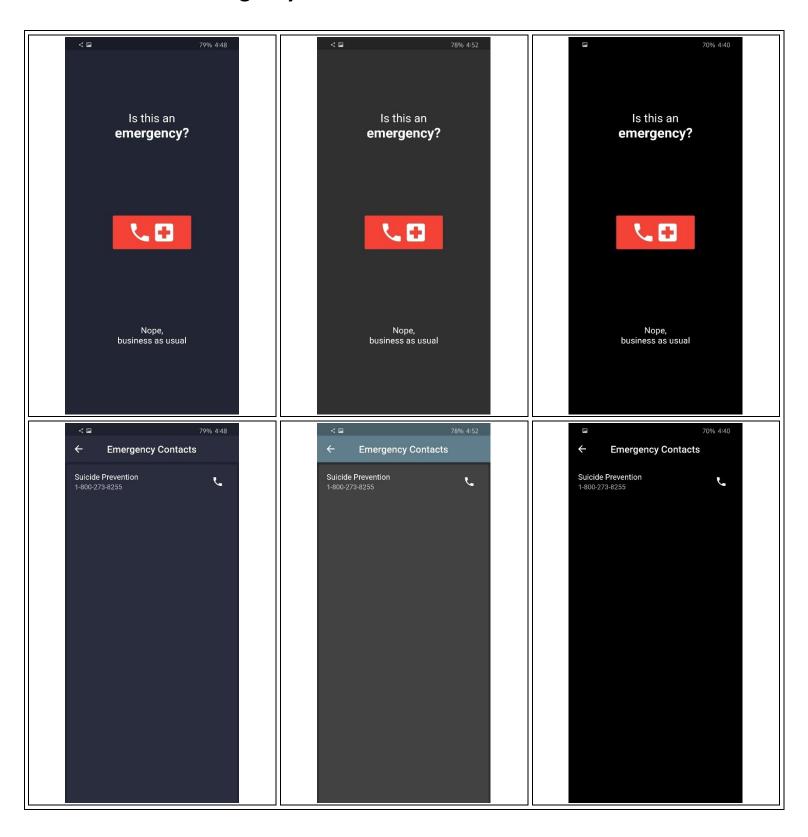




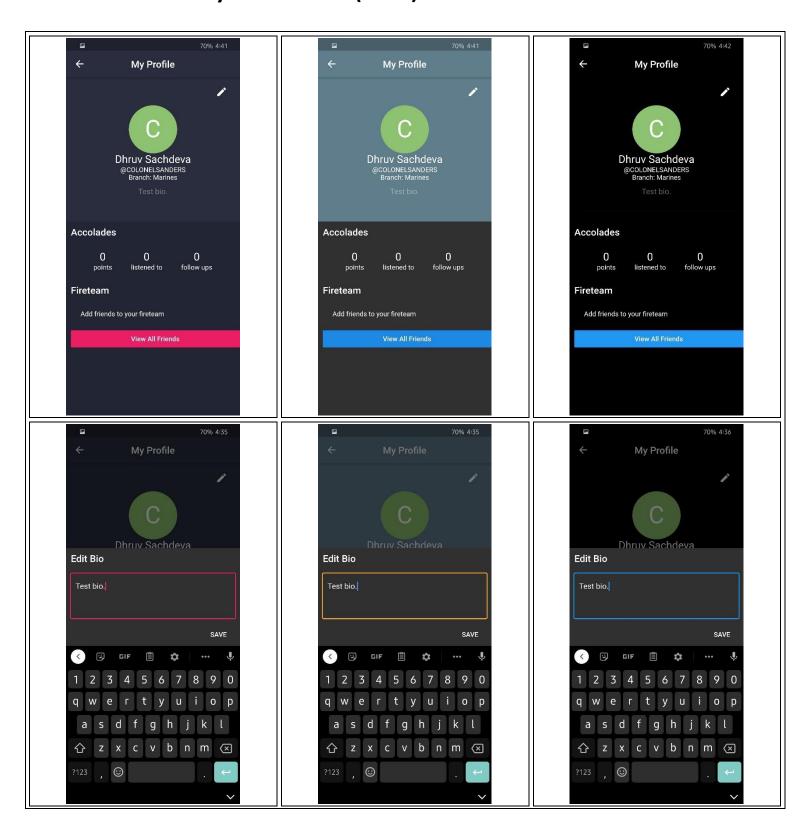


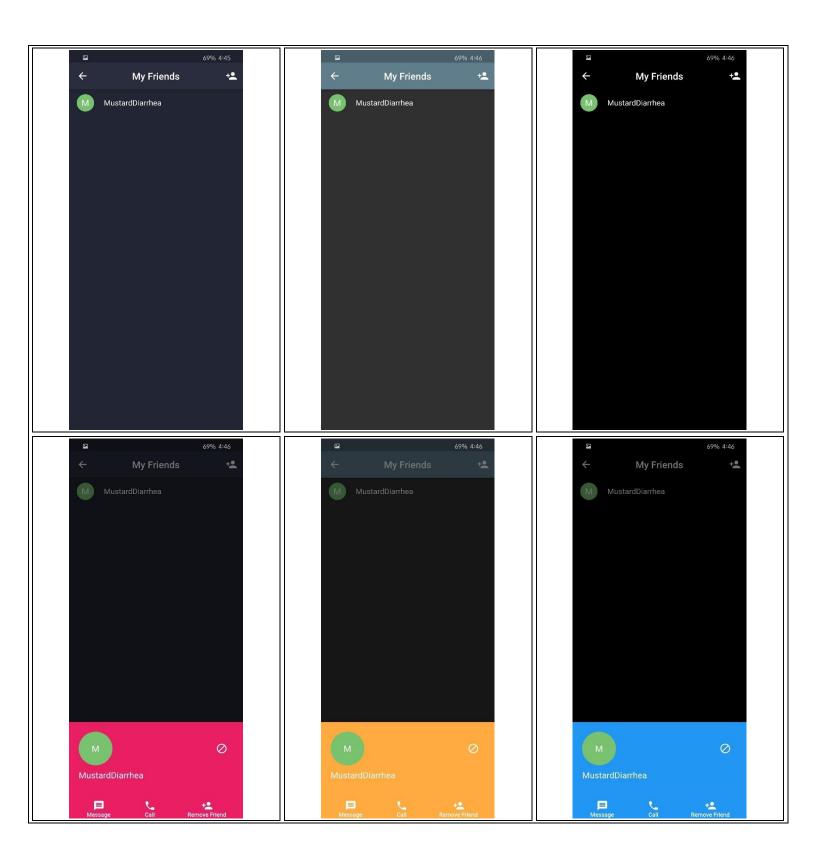


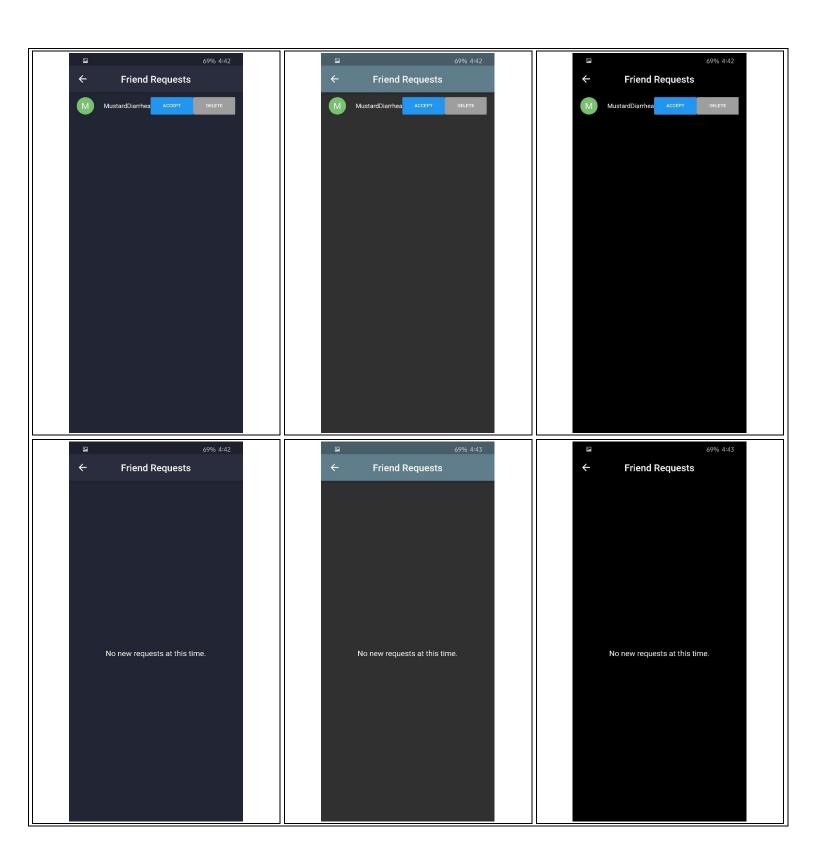
4. BS – Emergency Button

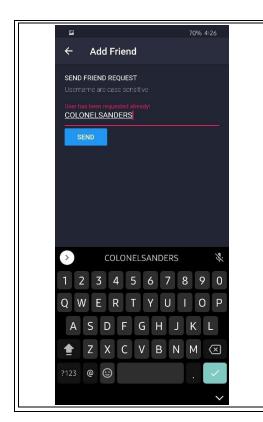


5. BS – My User Profile (MUP)

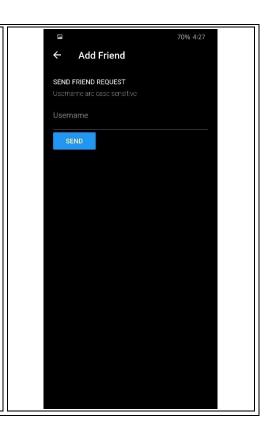






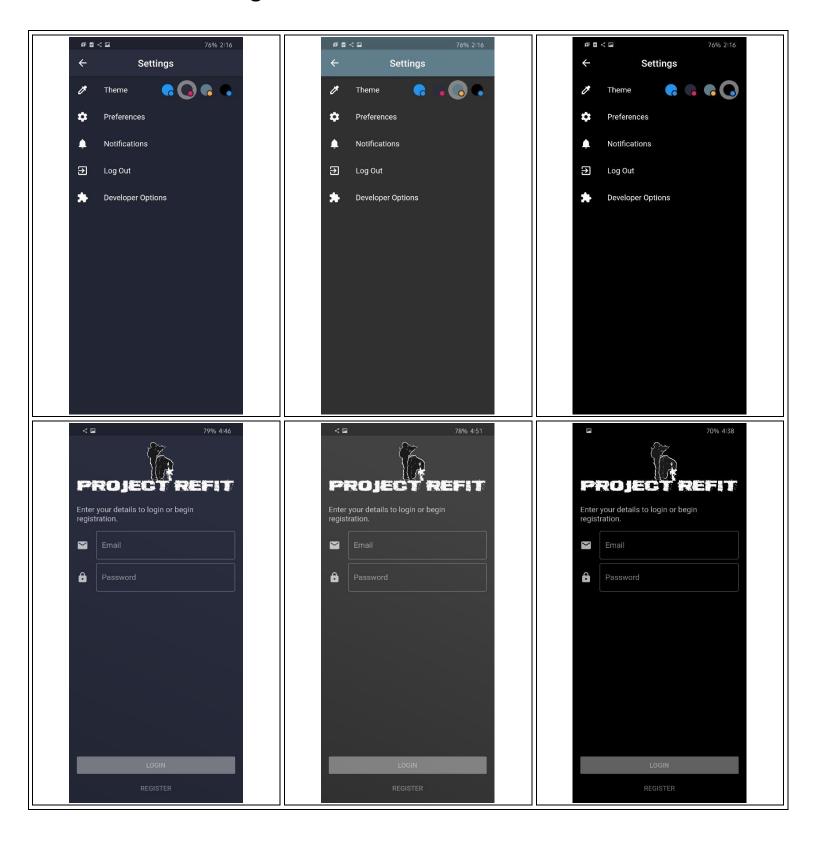






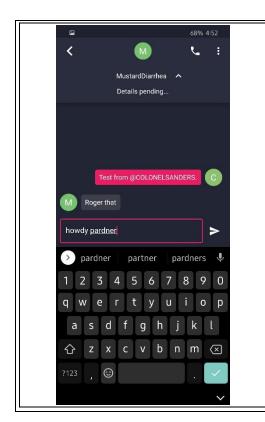
6. BS – Other User Profile (OUP)

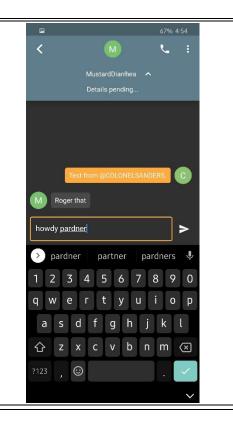
7. BS – Settings

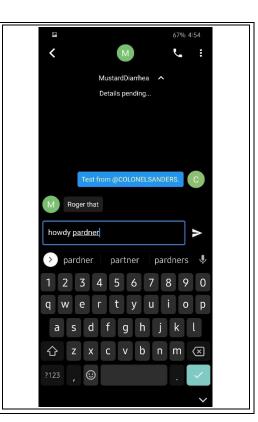


8. **BS** – Chat

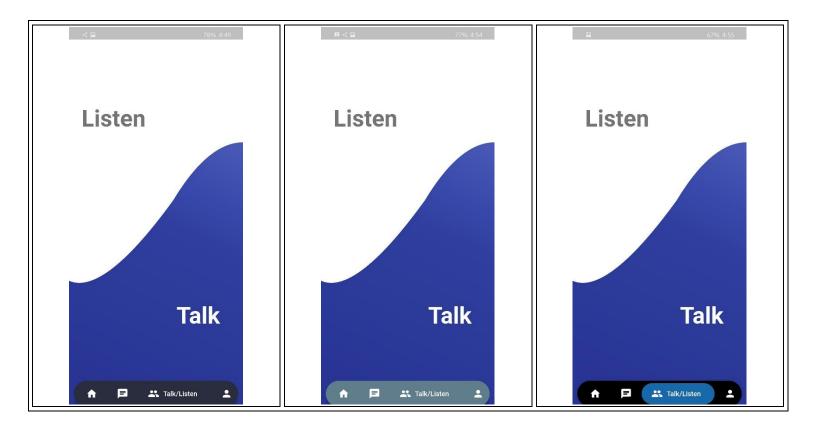




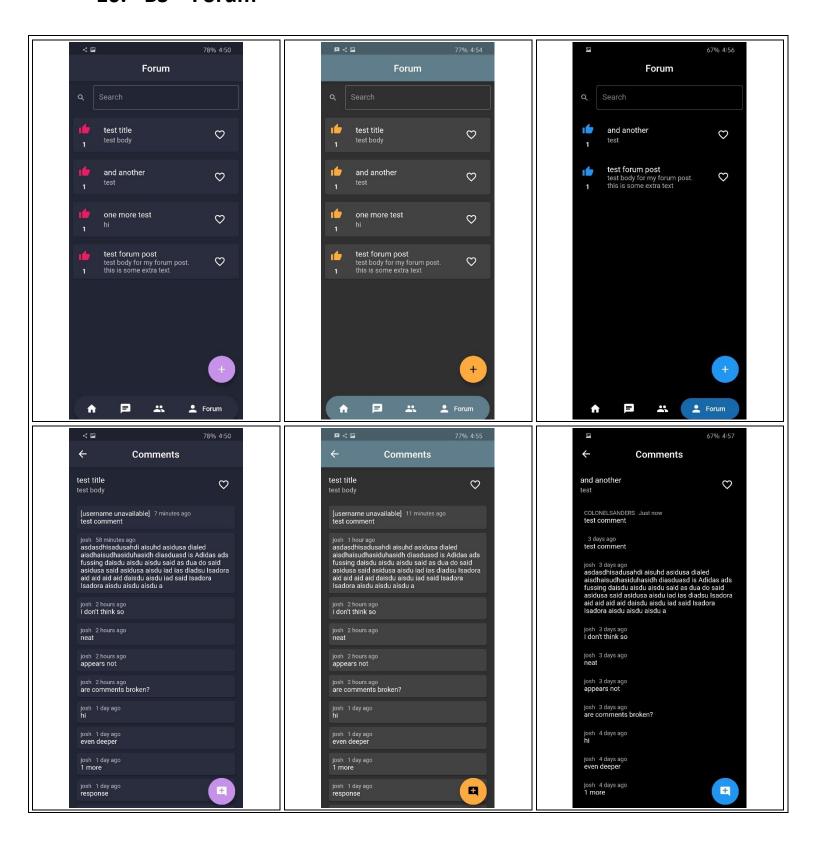


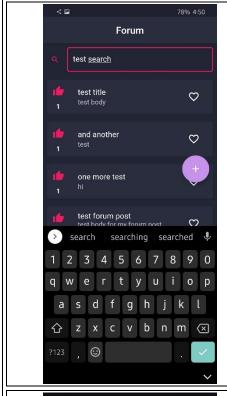


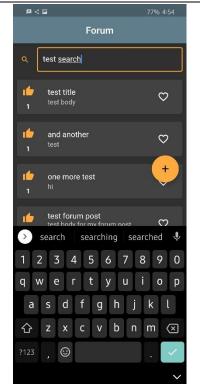
9. BS – Radio Check

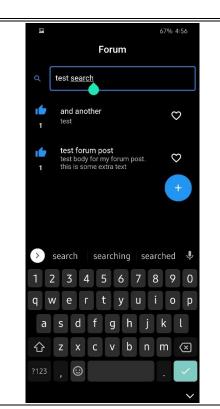


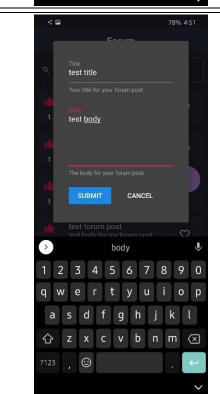
10. BS – Forum

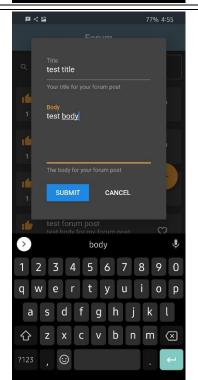


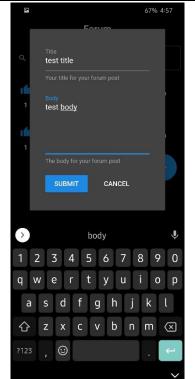


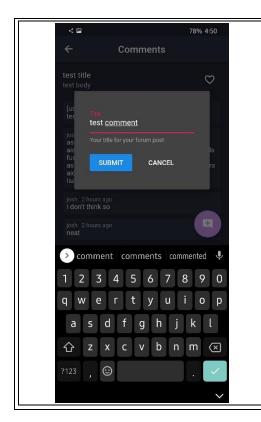


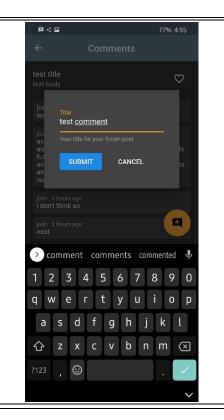


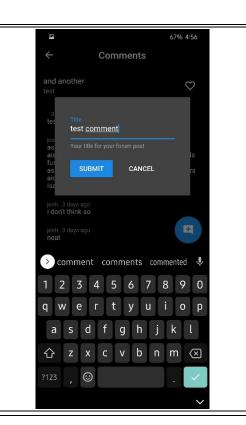




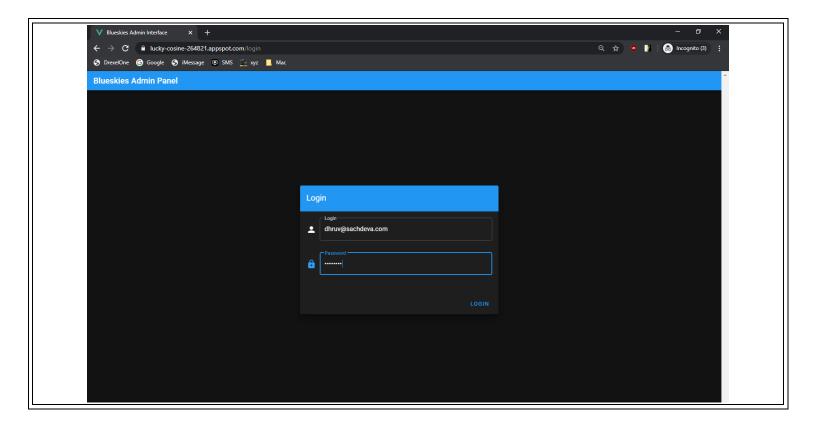




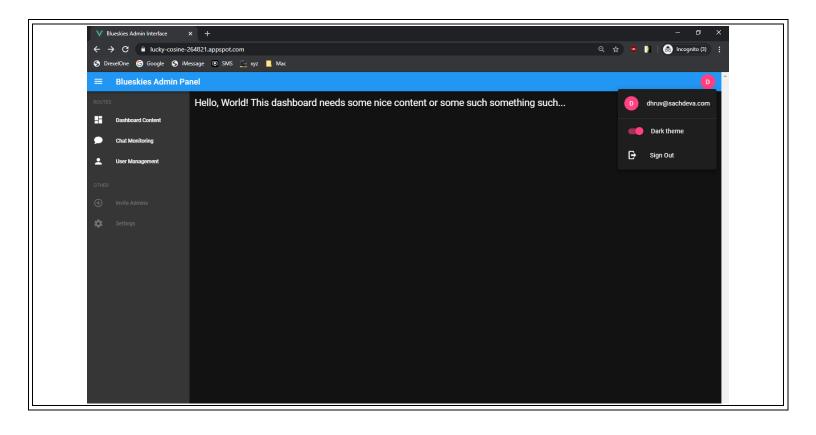




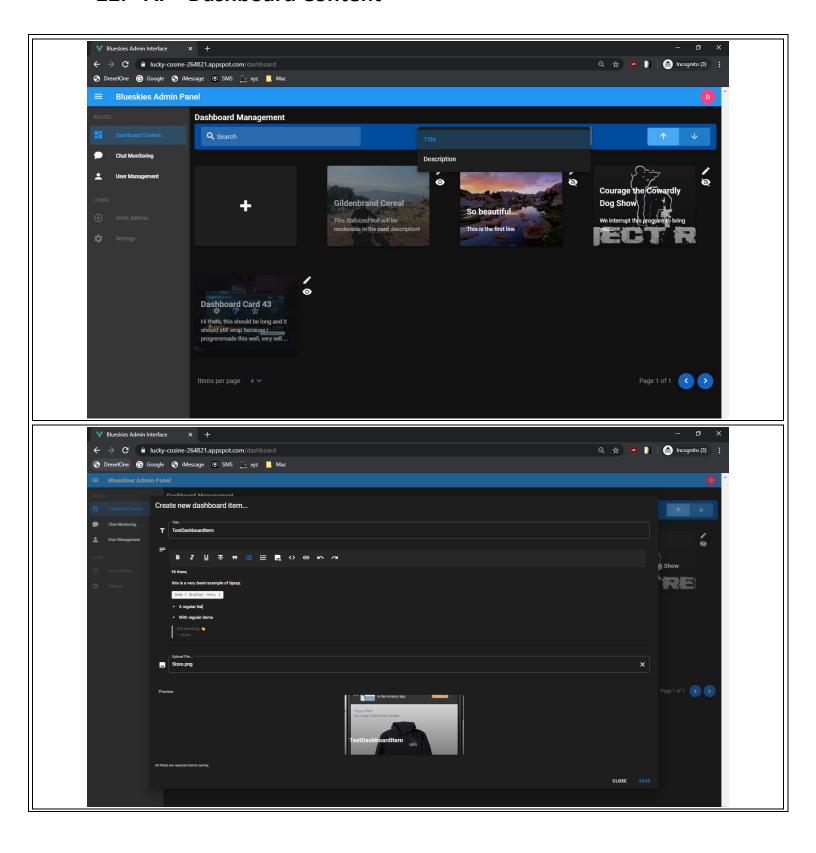
20. AI – Administrator Interface (AI) Hosting and Access

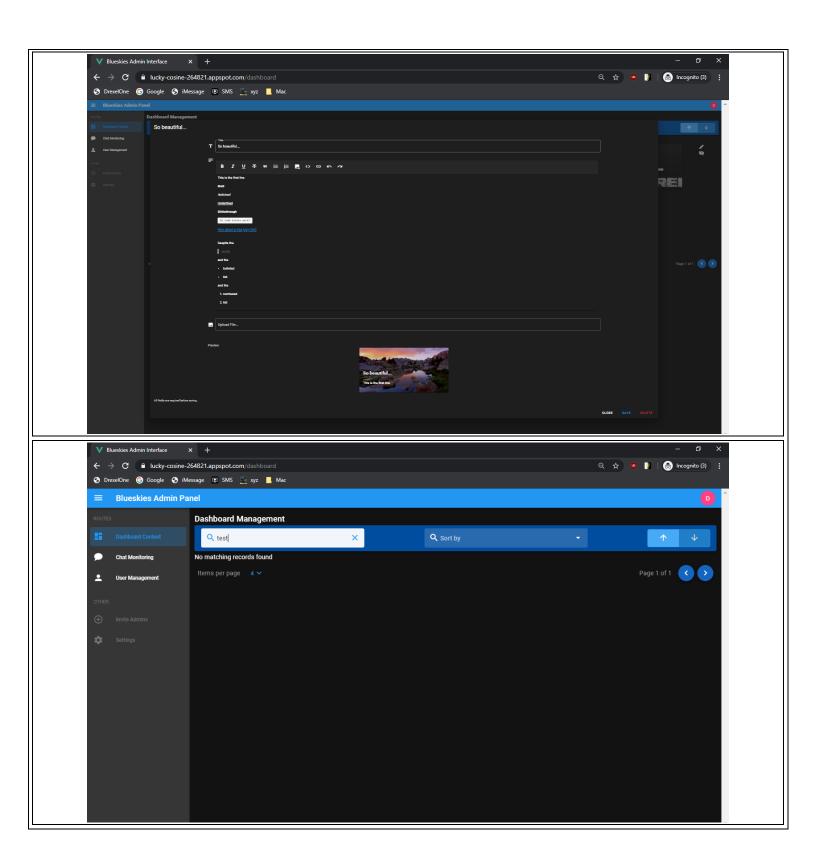


21. Al – Home Screen

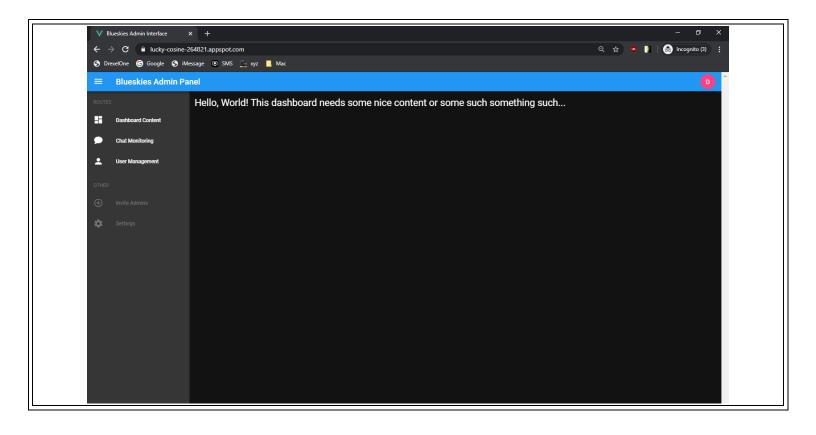


22. AI – Dashboard Content

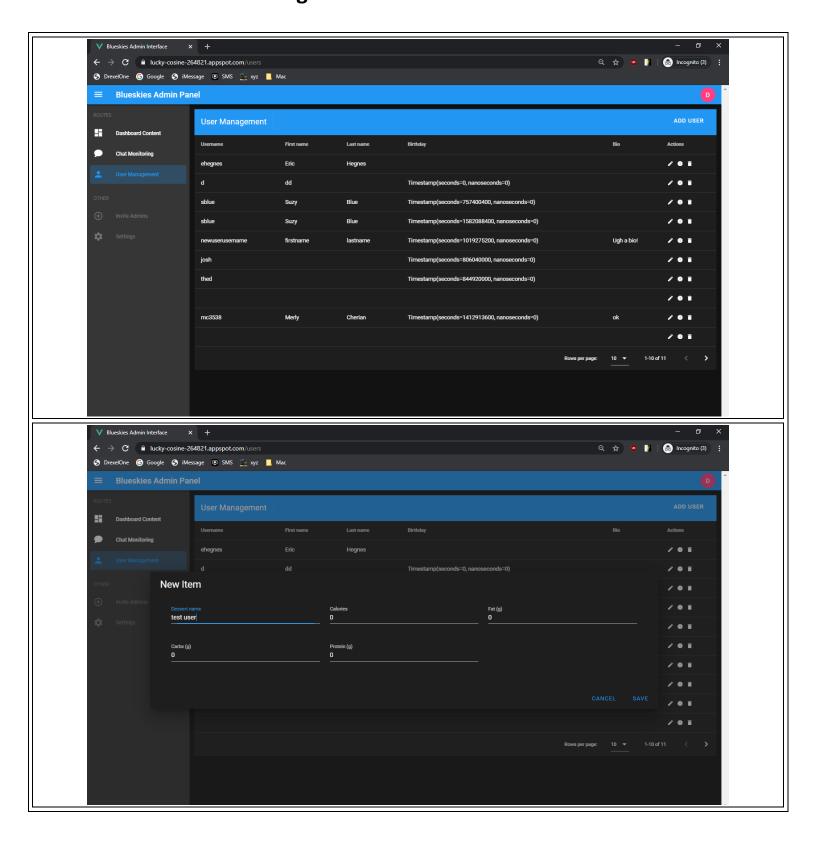




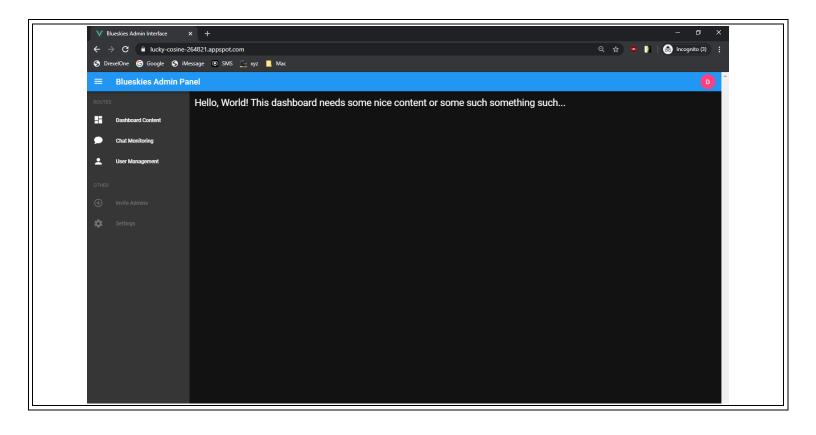
23. AI – Chat Monitoring



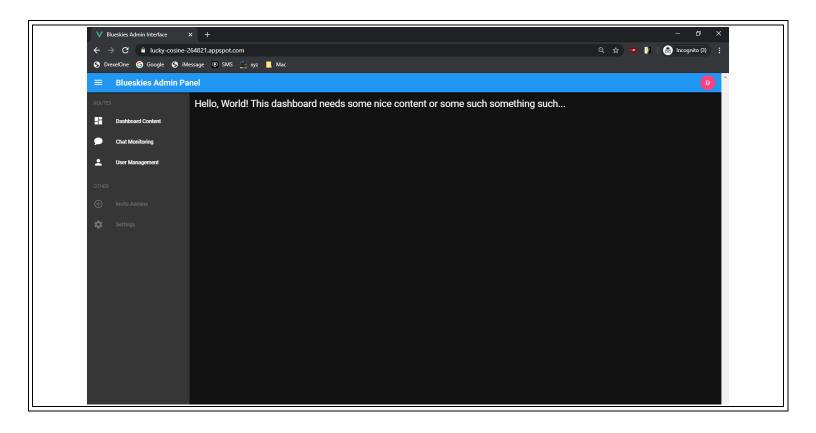
24. AI – User Management



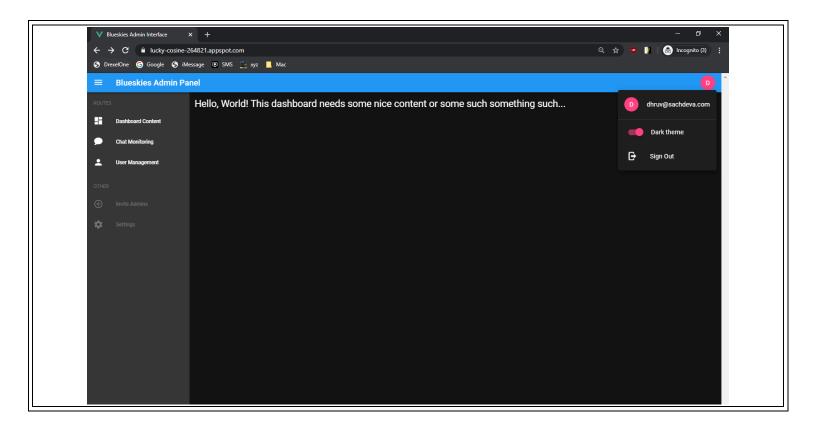
25. AI – Invite Admins



26. AI – Settings



27. AI – Auxiliary Functions



28. AI - TBD

N/A
N/A

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