

Entry #	Para #	Requirement	Type	Use Case
1	1.1	The mobile application of the Project is required to operate on Android devices that are no more than three years old.	SWC	
2	1.1	Each of the dashboard components (security firm and business owner) will be accessed through the use of a web browser.	SWC	
3	1.1	The dashboard components will, as a part of the Project, be hosted on a server to be accessed via a domain name.	SWC	
4	1.1	The hosting service will additionally host the API required for the components to communicate with the database.	SWC	
5	1.1	The database will be written in MySQL.	SWC	
6	1.1	The API to communicate with the database will be written in PHP.	SWC	
7	1.2	The mobile application will be developed with a focus on Android devices.	SWC	
8	1.2	It will benefit the Project in the long-term to also develop for iOS devices.	NTH SWC	
9	1.2	The mobile application will be written in Dart, using the Flutter framework.	SWC	
10	1.3	The frontend architecture for the dashboard components will be written in plain HTML and CSS alongside the Bootstrap 4 framework for consistent styling.	SWC	
11	1.3	JavaScript will be used to handle any client-side scripting.	SWC	
12	2.1	The mobile application will be used by both security guards and business owners.	SWC	
13	2.1	Based on either of these users, a different view will be displayed.	SWC	
14	2.1	Security guards will use the mobile application to take notes and submit incident reports on their shifts.	SWC	
15	2.1	Business owners will use the mobile application to receive updates about information shared in the pool that they are subscribed to alongside other local businesses, as well as share information to that same pool if they wish.	SWC	
16	2.2	The dashboard for security firms will exclusively be used by security firms to view and manage security guards and assigned businesses.	SWC	
17	2.3	It would be useful for business owners to view and manage incident reports for their individual businesses alongside having access to the mobile application.	NTH SWC	

18	3.1	The mobile application will consist of two separate components: business owner and security guard.	D 20, 37	
19	3.1	Upon starting the mobile application, the user shall be presented with an option to continue as either a business owner or a security guard.	SW	UC19_User_selects_AccountType
20	3.1.1	Upon selecting to continue as a business owner, the user will be provided a form to login to their business owner account.	SW	UC20_User_views_BusinessLogin
21	3.1.1	This form will consist of both a text field for their email address and a text field for their password.	SWC 20	
22	3.1.1	The password text field must not show ordinary alphanumerical characters, instead it should show the generic password black circle dot character for each character of the password.	SWC 20	
23	3.1.1	The user may press a button to submit their login request.	SWC 20	
24	3.1.2	If the user does not yet have an account, they may press a button to view the sign-up request page.	SW	UC24_User_views_BusinessSignUp
25	3.1.2	A business owner must request an account be created for them by supplying the following details: Name of the business; Business ABN or ACN; Email address; First name of the manager; Last name of the manager; Phone number of the business.	SWC 24	
26	3.2.1	After logging in to the business owner view, the user will be presented with an interactive list of events submitted to the information pool, known hereafter as the Information Pool List View. This list should display a date and time, title, and severity level.	SW	UC26_User_views_InformationPoolList
27	3.2.1	The list should be ordered by date and time from newest to oldest.	SWC 26	
28	3.2.2	An event submitted to the information pool may be one of the following severity levels: Informative, Low, Medium, High, Danger.	SWC 26	
29	3.2.3	The event's severity level will be displayed as a coloured dot with the level letter centred in it, within the Information Pool List View.	SWC 26	
30	3.2.4	The user shall be able to filter the Information Pool List View based on an events level or time submitted.	NTH SWC 26	

31	3.2.5	It would enhance the user experience if the user could refresh the Information Pool List View by dragging from the top of the application downwards to update the list view.	NTH SWC 26	
32	3.2.1.1	When the user selects an event in the list, the event detail's view will be displayed.	SW	UC32_User_views_EventDetails
33	3.2.1.1	It will show the following basic details: Date/Time (the date and time that the event was submitted); Event Title (a brief informative title of the event); Severity Level (coloured dot with severity level centred within); Submitted By (name of business that submitted this event); Number of Perpetrators (range of perpetrators, can be 0 if the number of perpetrators is unknown or event due to natural causes outside of human intervention); Description (a detailed description of the event).	SWC 32	
34	3.3.1	As part of the business owner view, located above the Information Pool List View, a button may be pressed by the user to show a form to create a new event.	SW	UC34_User_creates_Event
35	3.3.1	This form will require the following details to be entered: Event title; Severity level (one of 'Informative', 'Low', 'Medium', 'High', or 'Danger'); Number of perpetrators (a two-value slider for selecting minimum and maximum number of perpetrators); Description.	SWC 34	
36	3.3.2	Upon submitting the event, the Information Pool List View will be refreshed to retrieve new events, including the newly created event.	SWC 34	
37	3.4.1	Upon selecting to continue as a security guard, the user will be provided a form to login to their security guard account.	SW	UC37_User_views_GuardLogin
38	3.4.1	This form will consist of a text field for their email address and a text field for their password.	SWC 37	
39	3.4.1	The password text field must not show ordinary alphanumerical characters, instead it should show the generic password black circle dot character for each character of the password.	SWC 37	
40	3.4.1	The user may then press a button to submit their login request.	SWC 37	
41	3.4.2	If the user does not yet have an account, they may press a button to view the account creation page.	SW	UC41_User_views_GuardSignUp
42	3.4.2	A security guard may then create a new account by supplying the following details in the form: First name; Last name; Phone number; Email address; Password; Unique key provided by security firm.	SWC 41	

43	3.4.3	Upon submitting the request, the system will check if the unique key provided exists and is not already in use by another account.	SWC 41	
44	3.4.3	If both of these are true, then the account will be created, otherwise the user will be informed of the problem.	SWC 41	
45	3.5.1	Once a security guard has logged in to their account, the user will be presented with various digital tools used by security guards in the physical world.	SW	UC45_User_views_SecurityTools
46	3.5.1	These tools will be displayed in the form of various buttons denoted by a unique icon that describes what the button does.	SWC 45	
47	3.5.1	The following are the required buttons: Flashlight; Notepad; Incident report; Request backup; Emergency services.	SWC 45	
48	3.5.1.1	When the user presses the flashlight button, the system should toggle the device flashlight.	SW	UC48_User_selects_Flashlight
49	3.5.1.1	If the flashlight was off, it should be turned on. If it was on, it should be turned off.	SWC 48	
50	3.5.2.1	When the user presses the notepad button, they will be presented with an interactive list of notes taken by the guard, known hereafter as the Notes List View.	SW	UC50_User_views_NotesList
51	3.5.2.1	This list should display a date and time, and a title.	SWC 50	
52	3.5.2.1	The list should be ordered by date and time from newest to oldest.	SWC 50	
53	3.5.2.2	The user should be able to create a new note by clicking a button on the same view.	SW	UC53_User_creates_Note
54	3.5.2.2	This will present the user with a large text field to write in, with the first line of the note to be used as the note title.	SWC 53	
55	3.5.2.2	The details of the note should be saved to the device if the user closes the note by pressing a button on the view.	SWC 53	
56	3.5.2.2	Upon exiting the note taking view, the Notes List View should be updated.	SWC 53	
57	3.5.2.3	The user should be able to edit previously created notes by clicking an entry in the Notes List View.	NTH SW	UC57_User_views_Note
58	3.5.2.3	This will display the note in a larger form.	NTH SWC 57	
59	3.5.2.3	The user will have the ability to edit the details of the note.	NTH SWC 57	
60	3.5.2.4	Entries in the Notes List View will be populated by previously saved notes stored on the device.	SWC 50	

61	3.5.3.1	When the user presses the incident report button, they will be presented with an interactive list of incident reports, known hereafter as the Incident List View.	SW	UC61_User_views_IncidentList
62	3.5.3.1	This list should display a date and time, a title, a business location, and a status.	SWC 61	
63	3.5.3.1	The list should be ordered by date and time from newest to oldest.	SWC 61	
64	3.5.3.2	The user should be able to create a new incident report by clicking a button the same view as the Incident List View.	SW	UC64_User_creates_Incident
65	3.5.3.2	This will present the user with a form requiring the following details: Business location; Date and time the incident occurred; Incident type; Specific area; Description of incident; Name, role, and contact of parties involved; Name, role, and contact of witnesses; Whether a police report has been filed; Option to attach media files (images or videos).	SWC 64	
66	3.5.3.3	The user then has a choice to save as a draft, which will place the incident report into a draft state and not submit to the business but save to the device storage.	SWC 64	
67	3.5.3.3	Or to save and submit the report.	SWC 64	
68	3.5.3.3	Upon submitting, the incident report will be stored in the database, and sent to the business at which the incident occurred.	SWC 64	
69	3.5.3.4	The user should be able to edit draft incident reports that have not yet been submitted by selecting an entry in the list that has the status 'Draft'.	SW	UC69_User_views_Draft
70	3.5.3.4	This will display the same form as creating a new incident report; however, the details will be populated with the draft details retrieved from the device's storage.	SWC 69	
71	3.5.3.5	Entries in the Incident List view will be populated with incident reports saved by the security guard.	SWC 61	
72	3.5.4.1	Upon pressing the request backup button, an alert will be sent to all other on-shift guards which contains the distressed guards name and location that they are guarding.	SW	UC72_User_selects_RequestBackup
73	3.5.4.2	Guards who receive the alert should be able to press a button to inform the distressed guard that they are on their way, or that they are busy and cannot aid.	SWC 72	
74	3.5.4.2	This will be displayed as a numerical value of guards that are on the way to help.	SWC 72	
75	3.5.4.2	This may also be seen by the other on-shift guards to ensure that not every guard on-shift leaves their position.	SWC 72	

76	3.5.5.1	When the user presses the emergency services button, the devices phone application will be opened with '000' dialled in ready to be called.	SW	UC76_User_selects_Emergency
77	3.5.5.2	It would enhance the application if once the emergency services button is pressed, the devices phone application is opened, and '000' is dialled in, and automatically calling.	NTH SWC 76	
78	3.6.1	As part of the main security guard view, the user should have the ability to begin their shift at a selected business location.	SW	UC78_User_selects_BeginShift
79	3.6.1	This option will only be available if the guard starting their shift is not already on a shift that is started.	SWC 78	
80	3.6.2	Starting a shift will display a list of businesses that the user has been assigned to.	SWC 78	
81	3.6.3	Additionally, a guard should have the ability to end their shift.	SW	UC81_User_selects_EndShift
82	3.6.3	This option will only be available if the guard ending their shift is already on a shift that is started.	SWC 81	
83	3.6.4	A guard cannot access the incident report or request backup tools if they have not started a shift, as this uses information including business location, and area they are guarding.	SWC 81	
84	3.6.1.1	When the user starts a shift, an interactive list of businesses that the guard has access to will be displayed.	SW	UC84_User_views_GuardBusinessList
85	3.6.1.2	Selecting a business from this list will then display an interactive list of pre-set security locations that are available to be guarded.	SW	UC85_User_views_BusinessAreaList
86	3.6.1.2	The entries in this list are stored in the database and determined by the business that is being guarded.	SWC 85	
87	3.6.1.3	Selecting a security location will then begin the shift for that guard.	SWC 85	
88	4.1	That dashboard application will consist of security firm view.	D 90	
89	4.1	Upon visiting the dashboard, the user shall be presented with an option to continue as a security firm.	SW	UC89_User_selects_DashboardType
90	4.1.1	Upon selecting to continue as a security firm, the user will be presented with a form to login to the security firm account.	SW	UC90_User_views_FirmLogin
91	4.1.1	This form will contain a text field for the account email address, and a text field for the account password.	SWC 90	

92	4.1.2	The password text field must not show ordinary alphanumeric characters, instead it should show the generic password black circle dot character for each character of the password.	SWC 90	
93	4.1.1.1	If the user does not have an account to log into, they may press a button to view the security firm account creation page.	NTH SW	UC93_User_views_FirmSignUp
94	4.1.1.1	The account creation page will display a form requiring the following details: Name of the security firm, ABN or ACN of the security firm, Email address of the firm, Phone number of the firm, Managing Employee first name, Managing Employee last name.	NTH SWC 93	
95	4.1.2.1	After logging in to the security firm dashboard, the user will be presented with an interactive list of generated security keys, known hereafter as the Key List view.	SW	UC95_User_views_KeyList
96	4.1.2.1	This list should display a status square that is red if assigned or green if open for use.	SWC 95	
97	4.1.2.1	Additionally, a value should be visible above the Key List View that informs the user of how many keys have been used, and how many keys are remaining.	NTH SWC 95	
98	4.1.2.2	The user should be able to generate a new key by pressing a button on the view.	SWC 95	
99	4.1.2.2	A user can only generate a new key if they have used less than the total number of keys assigned to their security firm.	SWC 95	
100	4.1.2.2	A generated key will take the form of a universally unique identifier (UUID).	SWC 95	
101	4.1.2.3	Generated keys that have not been assigned to a guard account may then be distributed to security guards so they may create accounts via the mobile application.	NTH SWC 95	
102	4.1.3.1	When the user presses an entry in the Key List View, they will be presented with a popup window of which guards are assigned to the selected key.	NTH SW	UC102_User_selects_Key
103	4.1.3.1	If no guard is assigned, the popup will display details that there is no guard yet assigned.	NTH SWC 102	
104	4.1.4.1	As part of the main security firm dashboard view, adjacent to the Key List View, the user will be presented with an interactive list of security guard accounts, known hereafter as the Guard List View.	SW	UC104_User_views_GuardList

105	4.1.4.1	This list should display names in the format 'Last Name, First Name', email address, and whether the guard is currently on-shift or not.	SWC 104	
106	4.1.4.1	The list shall be ordered by the guards' name in descending order.	SWC 104	
107	4.1.5.1	The user may select an entry in the Guard List View to display a popup window of the selected guards' details.	SW	UC107_User_selects_Guard
108	4.1.5.1	The details displayed will include the following: First name, Last name, Email address (a link which when clicked will open the mail app), Phone number, Assigned Business locations, Submitted incident reports.	SWC 107	
109	4.1.6.1	The user shall be able to edit the list of assigned business locations for the selected guard by pressing a button.	NTH SW	UC109_User_edits_GuardLocations
110	4.1.6.1	This will be displayed as a list of current assigned locations for that guard, and available locations to assign by the security firm.	NTH SWC 109	
111	4.1.7.1	The user shall be able to view a submitted incident report by pressing a button on the view.	SW	UC111_User_selects_IncidentReport
112	4.1.7.1	This will display the relevant details of the incident report as when submitted by the guard.	SWC 111	
113	4.1.7.2	The details of the incident report shall not be editable, as any incident report that has been submitted is immutable.	SWC 111	
114	4.1.8.1	As part of the main security firm dashboard view, the user will be presented with an interactive list of businesses that have been assigned to the security firm, known hereafter as the Business List View.	SW	UC114_User_views_BusinessList
115	4.1.8.1	The list should display the name of the business, and the business contact number.	SWC 114	
116	4.1.8.1	The list shall be ordered by the business name in descending order.	SWC 114	
117	4.1.9.1	The user may select an entry in the Business List View to display a popup window of the selected business' details.	SW	UC117_User_selects_Business
118	4.1.9.1	The details displayed will include the following: Business name; ABN or ACN of the business; Contact number; Email address (a link which when clicked will open the mail app); Manager name (formatted as 'First Name Last Name'); Security locations (displayed as a list).	SWC 117	

119	4.3.1	It would enhance the user experience and the functionality of the dashboard if the user could continue as a business owner.	NTH SW	UC119_User_selects_BusinessOwner
120	4.3.2	Upon selecting to continue as a business owner, the user will be presented with a form to login to the business owner account.	SW	UC120_User_views_BusinessLogin
121	4.3.2	This form will contain a text field for the account email address, and a text field for the account password.	SWC 120	
122	4.3.3	The password text field must not show ordinary alphanumerical characters, instead it should show the generic password black circle dot character for each character of the password.	SWC 120	
123	4.3.1.1	Once the user has logged into the business owner dashboard, an interactive list of submitted events by other businesses will be displayed to the user, identical to the Pool List View, however, displayed on the web dashboard.	SW	UC123_User_views_BusinessEvents
124	4.3.1.2	Similar to the mobile application, the user should be able to select an entry in the Pool List View on the dashboard to view that events' details.	SW	UC124_User_selects_PoolEntry
125	4.3.1.3	The user should be able to press a button on the view to create a new event, where they may then submit the event.	SW	UC125_User_creates_PoolEntry
126	4.3.1.3	Importantly, drafts will not be saved on the web dashboard. Meaning that they unable to be returned to later.	SWC 123	
127	4.3.1.4	Once the user submits an event, the list should automatically update to reflect the database changes.	SWC 123	
128	4.3.2.1	Additionally, adjacent to the Pool List View, an interactive list of security locations for the business will be displayed to the user, known hereafter as the Locations List View.	SW	UC128_User_views_LocationsList
129	4.3.2.1	The list should display the name of the security location and be ordered by the name of the location in descending order.	SWC 128	
130	4.3.2.2	The user should be able to select an entry in the Locations List View to either edit the name of the location or delete it entirely.	SW	UC130_User_selects_Location
131	4.3.2.3	The user should be able to press a button on the view to create a new security location.	SW	UC131_User_creates_Location

134	4.3.2.3	Once submitted, the Locations List View should be automatically updated to reflect the addition.	SWC 131	
135	4.3.3.1	A third interactive list should be visible on the dashboard that will display submitted incident reports made by guards at the business, known hereafter as the Incident Report List View.	SW	UC135_User_views_ReportList
136	4.3.3.1	The list should display the date and time the incident report was submitted, the type of incident, and the area the incident occurred.	SWC 135	
137	4.3.3.1	The list should be ordered by the date and time, from newest to oldest.	SWC 135	
138	4.3.4.1	The user should be able to select an entry in the Incident Report List View to display a popup window of the selected incident reports details.	SW	UC138_User_selects_Report
139	4.3.4.1	The details displayed will include the following: Name of guard reported by; Incident number; Business location; Business address (formatted as 'Street, Suburb/City, State, Postcode'); Date and time the incident occurred; Incident type; Specific area; Description of incident; Name, role, and contact of parties involved; Name, role, and contact of witnesses; Whether a police report has been filed; Option to view attached media files (images and videos).	SWC 138	
140	4.3	To add word or choose a cleaner icon to show what function is each button stands for.	SW	