

ID	DESCRIPTION	Demo Implementation (Y/N)
FR - 1	The application shall provide the ability for users to login	Y
FR - 1.1	The application shall allow for users to enter their login details	Y
FR - 1.1.1	The application shall allow a user to enter their username	Y
FR - 1.1.2	The application shall allow a user to enter their password	Y
FR - 1.2	The application shall verify the user's login details against the registered users database	Y
FR - 1.2.1	The application shall verify the user's email	Y
FR - 1.2.2	The application shall verify the user's password	Y
FR - 1.2.2.1	The application will display an error message upon three consecutive incorrect login attempts	N
FR - 1.2.2.2	After three consecutive incorrect password attempts, the application shall implement a 30-second cooldown period before allowing another login attempt.	N
FR - 1.2.2.3	The application shall reset the cooldown upon a successful login attempt	N
FR - 1.3	The application shall allow a user to login via facial recognition	N
FR - 1.3.1	The application shall allow a user to scan their face	N
FR - 1.3.2	The application shall verify a user's facial scan against the one stored in the registered user database	N
FR - 2	The application shall provide the ability to create new users	Y
FR - 2.1	The application shall allow for users to enter their user details	Y
FR - 2.1.1	The application shall allow for users to enter their name	Y

FR - 2.1.1. 1	The username must be between 8 and 20 alphanumeric characters.	Y
FR - 2.1.2	The application shall allow for users to enter their password	Y
FR - 2.1.2. 1	The password type data must be text of at least 8 characters and less than 20 characters	Y
FR - 2.1.2. 2	The password character type must include at least one number	Y
FR - 2.1.2. 3	The password character type must include at least one symbol	Y
FR - 2.1.2. 4	The password character type must include at least one lowercase letter	Y
FR - 2.1.2. 5	The password character type must include at least one uppercase letter	Y
FR - 2.1.3	The application shall allow for users to enter their mobile number	Y
FR - 2.1.3. 1	The mobile number type data must be exactly 8 digits	Y
FR - 2.1.3. 2	The mobile number must contain only numeric characters	Y
FR - 2.1.3. 3	The mobile number must only be applicable within the area code of +65	Y
FR - 2.2	The application shall allow a user to store their facial pattern	N
FR - 2.3	The application must store the user details in the registered users database	N
FR - 3	The application shall provide the ability for users to automatically file a report to the nearest police station to their location	Y
FR - 3.1	The application shall locate the nearest police station to the user's location	Y

FR - 3.1.1	The application shall have real-time tracking capability of the user's last known location.	Y
FR - 3.1.2	The application shall access the Singapore Police Force Establishments (2018) (GEOJSON) database	Y
FR - 3.1.3	The application shall calculate the distance from the user location to the police establishments	Y
FR - 3.2	The application shall display the most common crimes at the user's location	Y
FR - 3.2.1	The application shall have real-time tracking capability of the user's last known location.	Y
FR - 3.2.2	The application shall access the Cases Recorded For Selected Major Offences, Annual database	Y
FR - 3.2.3	The application shall display the most common major offences in that area	Y
FR - 3.2.4	The application shall display a predefined 'Other' offence	Y
FR - 3.3	The application shall provide the ability for users to make a police report	Y
FR - 3.3.1	The application shall provide users the ability to choose a particular offence from the display	Y
FR - 3.3.2	The application shall generate a standardised automated message when an offence is chosen	Y
FR - 3.3.2.1	The message shall contain the user's details	Y
FR - 3.3.2.2	The message shall contain the offence chosen	Y
FR - 3.3.3	The application shall convert the message to SMS	Y
FR - 3.3.4	The application shall request for user confirmation	Y
FR -	The application shall send the SMS to the	N

3.3.5	nearest police precincts	
NFR - 1	The application shall authenticate a user within 2 seconds of submitting login credentials	N
NFR - 2	The application shall process police report submissions within 5 seconds under normal network conditions	N
NFR - 3	The application shall support up to 10,000 concurrent users without a delay in response time	N
NFR - 4	The system shall update the user's location every 5 seconds when tracking is enabled	N
NFR - 5	The database should handle at least 100,000 registered users without performance issues	N
NFR - 6	The application shall encrypt all user passwords	N
NFR - 7	The application shall implement two-factor authentication (2FA) for user login	N
NFR - 8	The application shall enforce account lockout for 5 minutes after 5 failed login attempts	N
NFR - 9	The application shall support English as the default language, with options for Chinese, Malay and Tamil	N
NFR - 10	All error messages shall provide clear, non-technical explanations of issues and suggest corrective actions	N
NFR - 11	The system shall be compatible with both Android and iOS	N
NFR - 12	The codebase shall follow MVC (Model-View-Controller) architecture for maintainability	Y
NFR - 13	The application shall comply with Singapore's Cybersecurity Act for handling sensitive data	N