Use Case Descriptions

Use Case No: 1	Use Case Name: Contact us	Rating: Should

Purpose: User should be able to contact the development team of the application

Main Actor: User	Secondary Actors: Developer

Description:
The user should be able to access the 'contact us' page from the applications home page. The system should then load up a page which is titled 'Contact Us' and present to the user the developments team email address and a contact number. The contact us page should also inform the user of the office telephone opening hours, and a rough estimation of a timescale on when their email query will be answered.

Non-Functional requirements
- Upon selecting the 'contact us' page, the system should reliably load and present the page to the user within 2 seconds.
- The page should be compliant with colour-blind users if they select the colour-blind option in the applications settings.

Use Case No: 2	Use Case Name: Retrieve Crime Data	Rating: Should

Purpose: In order to recommend safe and unsafe routes, we must first be able to retrieve crime data.

Main Actor: User	Secondary Actor: N/A

Description:
The user must be able to see the relevant crime data for given routes, via color-coded heat maps or crime vs. time data.

Non-Functional requirements
- The colour coded heat maps should be displayed within 2 seconds of the user opting to view them.
- The crime vs. time data must be based off the crime data for the last three months, and should be reliably updated on the first of every month.

Use Case No: 3	Use Case Name: Divergence From path	Rating: Must

Purpose: Alert a trusted contact after a countdown as one of the main security features of the app

Main Actor: User	Secondary Actors: Trusted contact

Description:
Once the user has input their destination and has began their journey, if they leave the chosen path and get too far away the app will alert a trusted contact if the user doesn't input their passcode in time to cancel it.

Non-Functional requirements
- If the user's divergence from the path exceeds a maximum distance of 25 metres, initiate a countdown timer and alert the user
- At the end a ten second countdown, a message is sent to the user's trusted contact.

Use Case No: 4	Use Case Name: User is attacked	Rating: Must

Purpose: Police are alerted if the user is attacked.

Main Actor: User	Secondary Actor: Police

Description:
If the user strays off path, fails to reach destination, the gyroscope detects abnormalities, or if the user fails to verify their identity when prompted to do so, the police will be alerted with the user's current coordinates.

Non-Functional requirements
- The user will have the opportunity to intercept the contact with police 100% of the time.
- Verification should be completed within 2 seconds of user input.
- Once verified, the contact with police should be cancelled reliably.

Use Case No: 5	Use Case Name: Get best path	Rating: Must

Purpose: The user should be able to navigate using the app.

Main actor: User	Secondary actor: N/A

Description:
The user can select the navigation option and enter their chosen destination. They will then be offered a selection of routes that they can take based on time vs. safety. Once one is selected, the user's progress along the route is monitored and displayed until it is completed or cancelled.

Non-functional requirements:
- The user should easily be able to find navigation from the main menu.
- The routes should always be correct, and the data displayed (time vs crime) should be accurate.