

### USE CASE: SELF REPORTING

#### Description:

The user of the software is suspicious that they have caught COVID-19 and chooses to self-report themselves to book a medical test.

#### Actors

Users, their mobile phones, other users of the track and trace system and their phones, the medical staff, and the health statistics dashboard

#### Pre-conditions

The user of the app would have hopefully preregistered with the app thereby generating a unique ID and in this case would also have internet connectivity so that information would be able to be sent to the track and trace system with the unique ID.

#### Post-conditions

The system would have updated this mobile phone for the user from the green level to the amber level. The system would have also sent the unique ID to medical professionals to book in an appointment for the user. Additionally, any users' phones would be alerted if they were around the self-reporting user's phone for a prolonged period.

#### Main Scenario

Firstly, the user feels unwell and fears that they may have contracted COVID-19. They open the app and self-report themselves including any conditions that they may have. This report is sent with the unique user ID to the system which logs the sending and forwards the user ID to the medical professionals to book in an appointment. The information is also sent to the dashboard to update the number of suspected cases. This information includes the location and time of self-report to ensure that the dashboard is up to date with the latest cases. The information that this user is now in the amber level is put is stored in memory storage. This is sent back to the phone to show confirmation to the user that the self-report has gone through. This confirmation also allows for other users who have been in contact in the last 14 days to be alerted that there is a user in the amber region. This further reduces the spread of the virus as users will be more aware and try to follow governmental regulations more strictly.

#### Alternative Scenarios

1. In the case of no internet connectivity, the self-report is stored locally with the confirmation of sending still being given to the user. Seeing as the application uses Bluetooth, the device can communicate locally with other devices to alert other nearby users. Once internet connectivity is given, the local device can transmit the self-report to the main track and trace system with the medical appointment booked after this contact.
2. There may be errors when a self-report is sent so the user may have to resend the message. The mobile phone should be sent an alert if an error occurs when sending through the app. This will then result in an error message being displayed to the user in which case, the user will have to resend the report to the system. In worst case, the user may need to relaunch the app if the error message persists, however this will be displayed to the user on the error message.
3. If the user tries to send multiple self-reports after already having a successful send, they will be informed that a self-report would already have been sent. This message will persist till the user has been updated with a green status from the medical report later sent by medical professionals if they think that they have been infected after the prior test .