NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Computer Science and Engineering
**College of Engineering**

iWILL Mobile Application

A real-time application to expedite first-aid and reduce casualties

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Project Objectives

Several casualties including (but not limited to) out-of-hospital cardiac arrests (OHCAs) could have been addressed, provided some form of first aid such as CPR is performed by a bystander, before the arrival of the emergency medical system. This project aims to create an application which expedites emergency response times, thereby reducing casualties.

iWILL is a mobile emergency response application designed to provide prompt and efficient assistance to individuals experiencing emergencies. The application enables users to quickly seek help in times of emergencies, which then creates an alert that is broadcasted to nearby CPR-trained users who are also registered with the application. These trained users can then navigate to the incident location using the application to provide expedited first-aid measures before the professional medical services arrive. In addition, the application displays a map indicating the nearby Automated External Defibrillators (AEDs), which users can navigate to in case of a cardiac emergency.
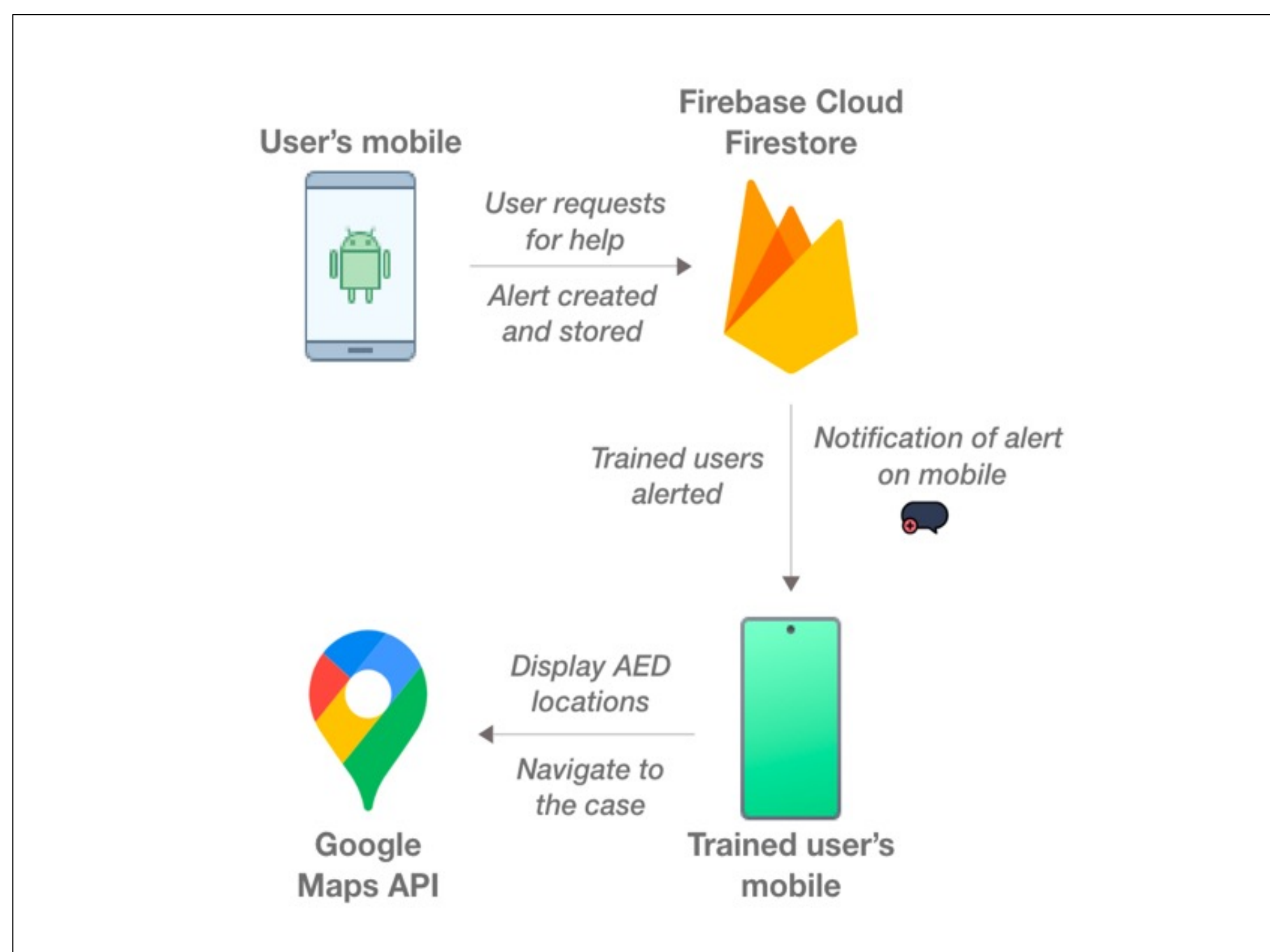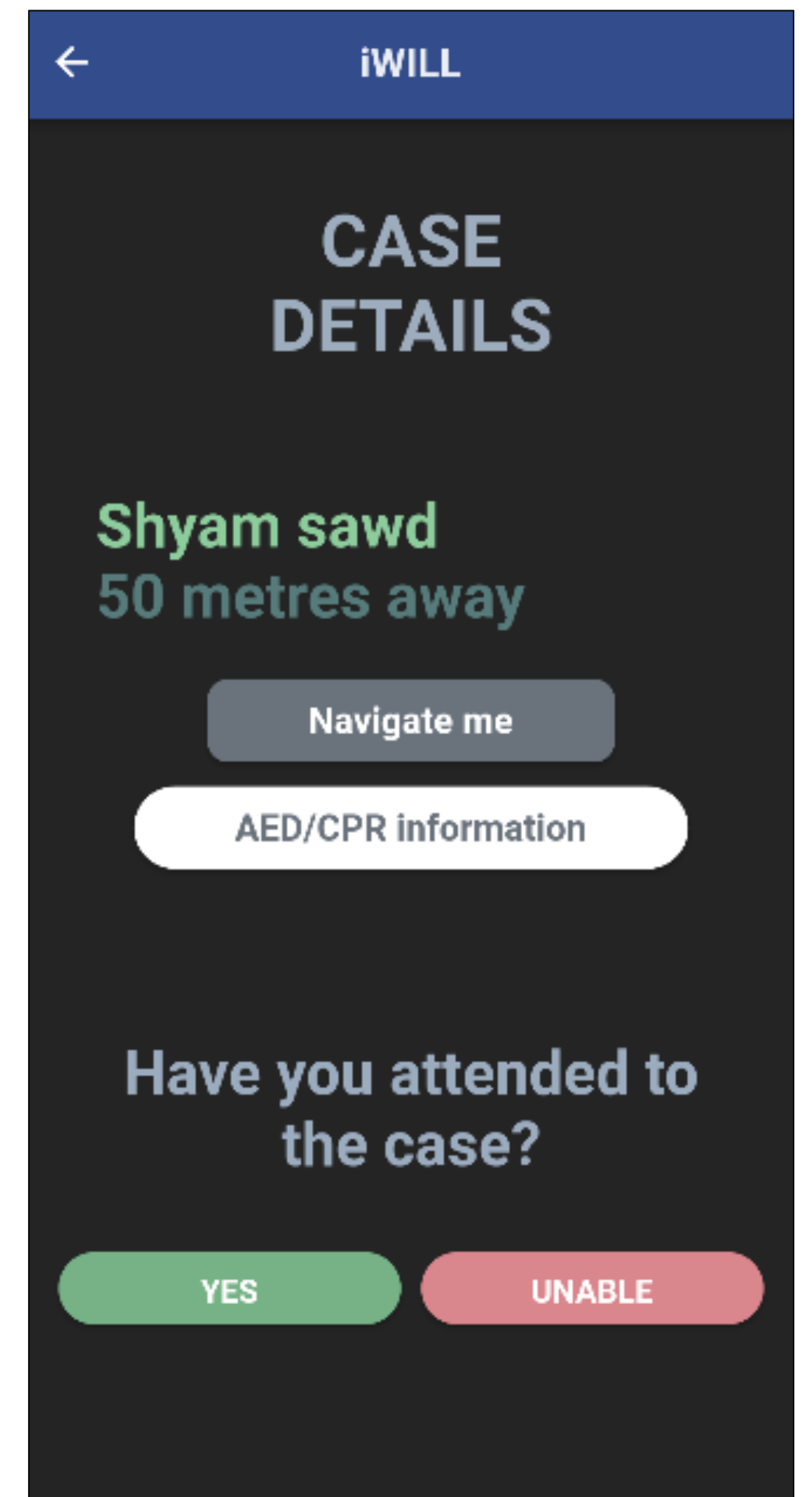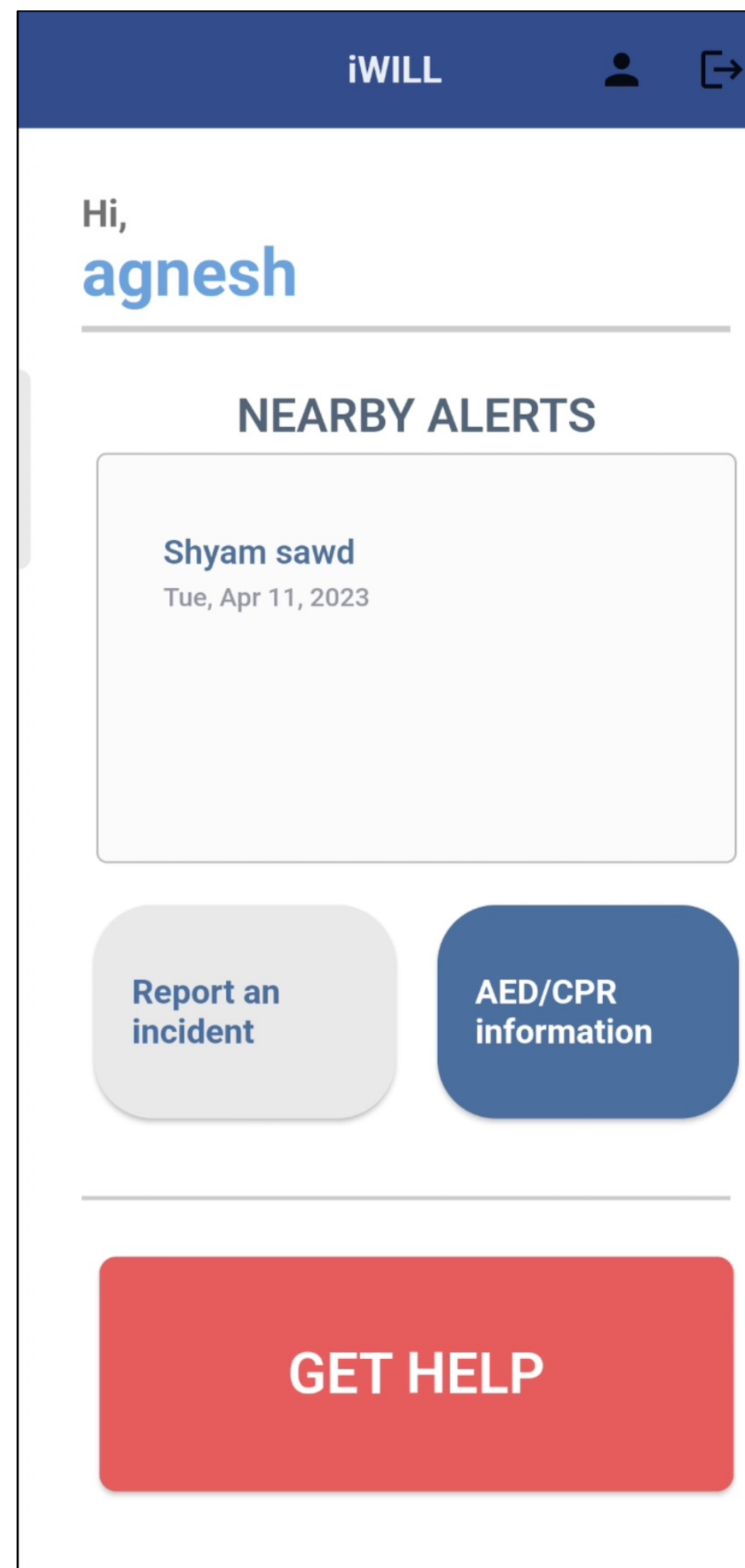
System Overview

The mobile application was developed using the SOLID design principles and established in the Model-View-Controller (MVC) pattern.

The application is developed using the following tools and technologies: