VIC SAFE

Visit: http://vicsafe.tk

PROJECT PROPOSAL

ABSTRACT

This document provides an overview of the project background which includes the problem statement, proposed solution, main deliverables and security aspects.

Lightning Coders

Introduction

This report includes the overall view of the project background, problem statement, proposed solution. The main deliverables in each phase of the development of the project will be included as an overview of the features of the website.

Project Background:

Access to our website:
Website URL: http://vicsafe.tk/
Password: ta21

Product video link:
https://youtu.be/nNg8fvyb4VM

Define the problem:
International students in Victoria have been victims of attempted robberies near their university campus. They are susceptible to becoming victims because they are unaware of their rights in Victoria, and have been unable to protect themselves.

As Victoria's crime rate rises, international students' safety has become a major issue. In 2019, the Federal Education Minister discussed enlisting the help of law enforcement authorities and upgrading their training on on- and off-campus threats. Furthermore, education providers must inform international students about the support services that are available to them, so that students are aware of what to do if they become victims. Because overseas students are likely to be unfamiliar with which regions of Victoria are more prone to experience crime, they will need a way to determine which locations are safe to visit. These problems continue to exist in Victorian neighbourhoods, particularly during the present COVID-19 outbreak.
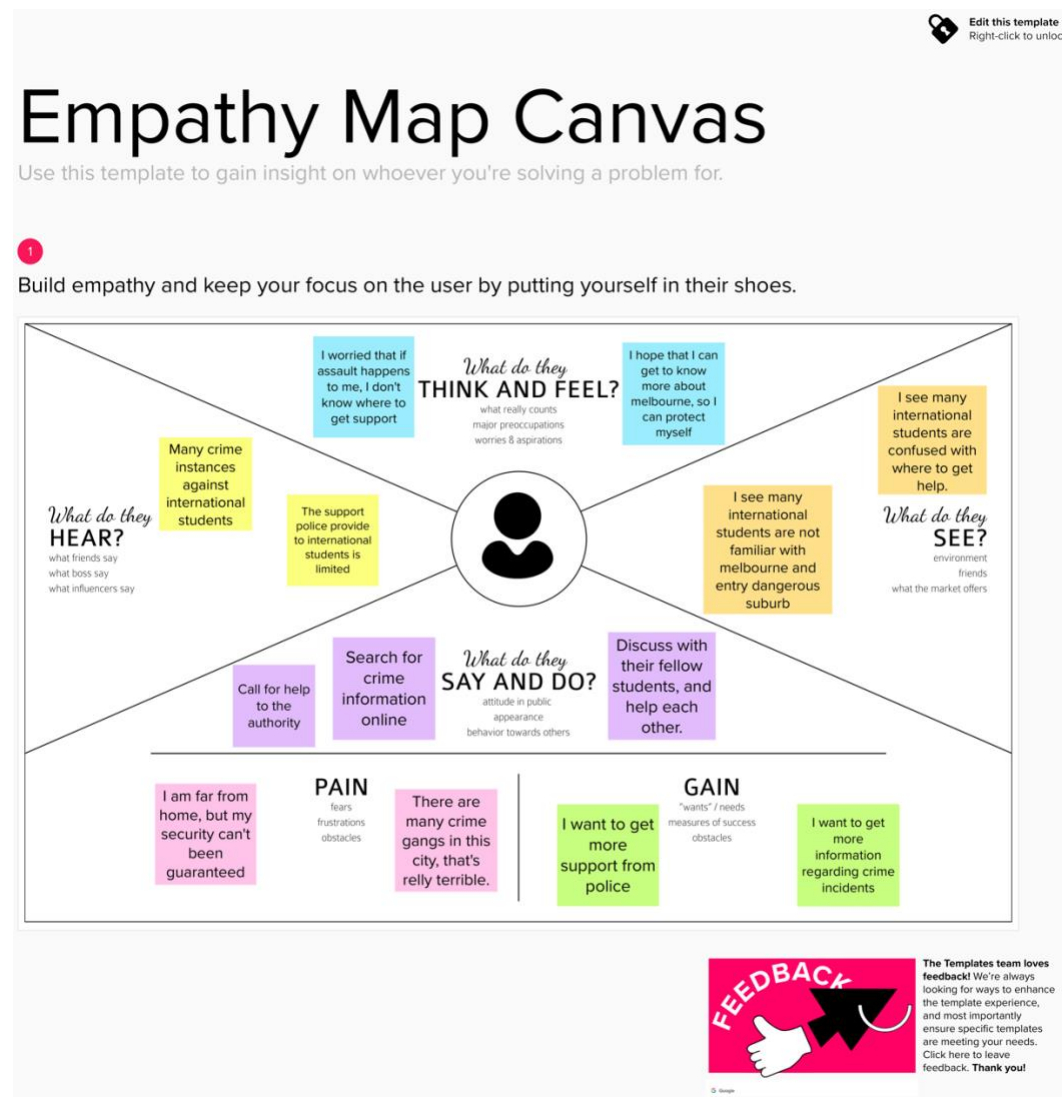
Solution:
To address this issue, we propose a website with features such as browsing the safest LGAs in Victoria and providing users with other relevant crime statistics. Users may also access information about police stations and community legal centres in Victoria on the website, which includes a search function to assist them identify the ones closest to them. Tips to keep users safe in Victoria and instructions to identify if you've been the victim of a crime are among the additional features.

The aim of this project is to help international students planning to arrive in Victoria and already studied in Victoria to access the safety information including locate the police station and community legal center immediately while they are studying and living in Victoria.

Target audience:
International students in Victoria have been victims of attempted robberies near their university campus. More attention has been paid to the safety of international students, so it is essential to help international students stay safe. The target audience of our product are university international students between the ages 18 to 29 who are new to Victoria.

The Empathy Map below is the way we used to identify the needs of the user. Satisfy the needs of the users and their feelings towards the project are the preparation work we do before implementing the project, so that we can better know which features should be included in the project to achieve a software that can be widely used by the target audience.

Deliverable:

Iteration 1:

- Safety rating: International students can know the information of how safe the areas near their location are so they can choose a safe area to live in. The users can view the safety rating of each area in Victoria on the safety rating map.
- Service map: Users can find more information on the locations of nearby police stations and community legal aid centres in order to know where to go for help if they need legal assistance.
- Student safety guide: Users can find informative tips for international students on what to do to stay safe in Victoria in order to know what to do to ensure their safety while living in Victoria.
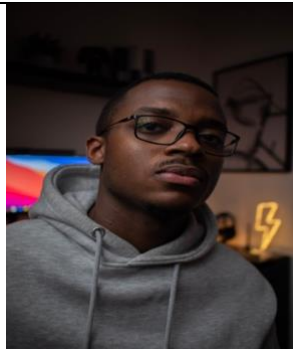
<u>Iteration 2:</u>

- Road safety: Information of the traffic safety rules in Victoria and fatigue measuring tools. For the international students new to Victorian, it is essential to know what kind of factors can lead to putting themself at risk while driving on the road so that they know how to prevent themself from causing a road accident.
- Community page: International university students should be informed about the cultures and laws in Victoria so that they can be prepared for the differences during their stay in Victoria.

<u>Iteration 3:</u>

- Student help quiz: the quiz is designed for students to answer certain questions related to their current situation and provide some helpful tips and external sources that might help them deal with the emergency situation.
- Added function on service map: more functions in our search for service map in order to help users to find the service they need more quickly. The users can find the best route from their current location to the selected service location in the map with the time taken to get the service, so that users can know how they can reach the nearest service.
- Safety Guide: In order to better inform international students about the Victorian laws regarding crimes and car accidents, we will provide guide and informative tips of how they can do and where to find help if they are in an emergency. The guide will include the Victorian laws regarding sexual abuse and harassment, cybercrime and car accident.

Personas:

Name: David	Name: Steff	Name: Leo	Name: Sarah
- *Age*: 25	- *Age*: 22	- *Age*: 18	- **Age**: 20
- *Gender*: Male	- *Gender*: Male	- *Gender*: Male	-**Gender**: Female
- *Major*: Master of Economics	- *Major*: Bachelor of Business	- *Major*: Bachelor of Information Technology	-**Major**: Diploma of Business Analytics
- *Background*: International student living in Melbourne	- *Background*: International student currently living and studying in Melbourne	- *Background*: International student new to Victoria (just arrived in Victoria)	-**Background**: An international student who is living and studying in Victoria for 2 months.
- *Motivation*: Ensure his own safety when walking on the street.	- *Motivation*: Get information on the location of the police station and legal center.	- *Motivation*: Get more information	-**Motivation**: Access to information on

- **Goals**: Get the crime rate of certain areas in Melbourne - **Technical ability**: Familiar with using smartphones and different apps, unfamiliar with the local crime situation.	- **Goals**: Get help from the authorities nearby. - **Technical ability**: Familiar with using smartphones and different apps, unfamiliar with the distribution of local authority offices.	on how to protect himself in dangerous situations - **Goal**: Get advice on how to safely live in a community in Victoria.	legal rights in Victoria. -**Goal**: Protect herself from harm caused by other people in the community. -**Technical ability**: Familiar with using web applications and search online information.

Security aspects

Our application does not store any privacy data from the client, but there is still a possibility that some malicious attackers change the data stored in our database, which will lead to incorrect analysis results and advice.

- **SQL injection:** Our application requires users to input several information to obtain crime static data, which can be exploited by the attacker to apply SQL injection.
- **Mitigation measure:** Using prepared statements when performing CRUD operation to avoid SQL injection.
- **DDOS attack:** Attackers may perform DDOS attack to our server, and cause temporary interruption to our service.
- **Mitigation measure:** Using defend software to monitor the state of our server, and detect abnormal request surge, block suspicious IP addresses.

Appendix

Data sets and source	- Community Legal Centers in Victoria- The data collected was available as a PDF in https://clcs.org.au/sites/default/files/202103/Member%20org%20directory%20March%202021.pdf - Police Stations in Victoria: Data for the police stations was available in the website: https://www.police.vic.gov.au/location - Open street map: https://api.openstreetmap.org/ - Crime data was obtained as an Excel spreadsheet from

	https://www.crimestatistics.vic.gov.au/crime-statistics/latest-crime-data-by-area. • Victorian University data was obtained from https://universityreviews.com.au/list-of-universities/victori
Potential Sponsors	• StudyMelbourne. Study Melbourne is a Victorian Government initiative providing support and information to the international students that helps them have the best possible protection for international students while studying and living in Victoria. • The universities in Victoria that want to protect the safety of international students and attract their attention on how to protect themselves.
Potential Users	• University international students between the age 18-29 who are new to Victoria.