

Team Swfters

Members: Apat

## **Part 1: Understanding the Problem**

### **Overview**

It is known that Davao City is one of the fast-growing cities in terms of population, geography, and economic condition in the Philippines and in Southeast Asia. Based on the 2020 census, the city had a total population of 1,776,949 individuals that represented 33.89% of the total population of the Davao Region. Due to it being one of the fast-growing cities, Davao City has been experiencing lack of transportation due to the decline of the number of public vehicles. Based on an article by Francisco, C. (2022) There was a huge decline of number of public transportation vehicles wherein in 2017, there were 7,417 public utility jeeps (PUJs) and 5,563 taxicabs and at the end of 2020, there were only 6,515 PUJs and 5,354 taxicabs plying the city streets.

### **Solving the Problem:**

Davao City's public transport system necessitates a comprehensive strategy to address the shortage of public utility vehicles (PUVs). Revitalizing the existing jeepney fleet is paramount. While traditional solutions like fleet expansion are crucial, a technological approach can offer immediate and long-term benefits. Developing a mobile application for booking motorcycle taxis will revolutionize Davao City's public transport system.

Team Swfters has produced a solution to combat the declining numbers of public vehicles. The team aims to create an application that will allow commuters to access an alternative during peak traffic hours. It will provide users with a unique experience to book a ride in just a minute or depending on the availability of the riders.

Our team recognizes the significant transportation difficulties that many people experience in congested cities across the country. To address these difficulties, we created an app that transforms the way people commute by providing a convenient and safe motorbike transit service. Our application allows clients to simply book rides with trusted motorcycle riders, delivering a rapid and efficient mode of transportation across congested urban areas. This shortens travel times and provides a cost-effective alternative to traditional modes of transportation.

Additionally, our app provides real-time tracking and notifications, giving users peace of mind knowing their ride is on its way. By offering a reliable and efficient motorcycle transit service, we aim to alleviate the challenges of commuting in congested cities, making travel easier, safer, and more accessible for everyone.

### **The Application:**

- **Application name: SWFT (Safety with Fast Transit)**

- **What is it:**

- SWFT is transportation application that aims to provide an alternative to public utility jeeps especially during rush hours as it gets difficult to find a jeep or taxi that is vacant due to the number of PUVs not being able to cater the number of commuters. With the use of SWFT it provides the user with a convenient and safe experience without the hassle of traffic as our riders are screened thoroughly to determine if they are fit and able to pass the road safety training. Users would also be able to avail discounts through vouchers.
- The app offers a seamless booking experience for motorcycle rides, ensuring rapid transit through congested urban areas. With a focus on safety, all riders undergo thorough background checks and training. SWFT incorporates real-time tracking and user feedback to continually enhance service reliability and efficiency, making it a trustworthy choice for daily commuting needs.

- **Features:**

- **Creating an account or signing up** - A crucial aspect of account creation is the user information section, where users enter their name, email, password, address, and phone number
- **Personal profile** - This area provides information about the user's role (buyer or seller) in a transaction. It also includes details on payments made, shipment progress, and any feedback left.
- **24/7 availability** - Accessible and ready to be used any time of day, every day of the week.
- **Book a ride** - lets the user hail a ride, choose your car type, track your driver, and pay digitally.
- **Track bookings** - can monitor the status of your reservations in real-time.
- **Show information about the driver** - provides details about your driver. Name, photo, and car info, for a sense of security.

- **Questions about the Application:**

- **Who are the potential users?**

- ♣ Potential users of this application would be commuters who would like to access commuting in an efficient way.

- **What tasks do they seek to perform?**

- ♣ This application will allow the users to book a service where they can reach from one destination to another. It will also allow users to have payment options such as cash or online payment.

- **What functionality should any system provide to these users?**

- ♣ The system will provide an efficient and accessible way of commuting, especially during rush hours as there will be a high demand for public transportation. It will also display the amount to be paid even before booking the ride to be able to differentiate different prices from different platforms.

- **What constraints will be placed on your eventual design?**

- ♣ Application design will only be limited to ios and android users.
- ♣ Application's only available language would be English.
- ♣ Does not allow non-registered users to book a ride.
- ♣ Application may not be available to older versions.

- **What criteria should be used to judge if your design is a success or not?**

- ♣ If the user has reached their destination safely and on time
- ♣ User and rider will be able to easily navigate the application.
- ♣ Provides seamless and secured transactions ensuring users' online payment methods will be secured.
- ♣ Users will be able to book rides efficiently.

## **Approach**

