Project Description:

SWFT is a transportation android application proposed by Apat of Team SWFTERS which aims to provide a convenient way of commuting especially during rush hours in Davao City. This application aims to provide motorcycle taxi services to the public and at the same time provide a living for riders that are in need. The application was made due to commuters struggling to find any vacant public transportation during rush hours and at the same time finding a mode of transportation that could let you reach from one point to another at a cheaper rate than taxis.

Requirements summary:

MINIMUM REQUIREMENTS	Processor Cores	Single core
	OS	Android 6 (Marshmallow)
	RAM	4GB RAM
MAXIMUM REQUIREMENTS	Processor Cores	Quadcore
	OS	Android 14 (Upside Down Cake)
	RAM	16GB
OTHER REQUIREMENTS	Permissions	Location, notification, and storage

Table 1. System Requirements

To be accessible to the public, the company decided that the minimum requirements for it to be able to function on your phone would be the Android 6 version with single core and 4gb of RAM.

Prototype Description:

The prototype was created with the use of Canva and Figma. Canva is a free-to-use online website which enables us to edit, layout, and design projects such as prototypes and mockups. This platform is also very conducive to collaboration among teams.

User Scenario:

Mark woke up late and has only 30 minutes before school starts. He quickly took a bath and headed straight to where he can hail a jeep or a taxi. He only has 5 minutes left before he becomes late. However, it took him 8 minutes to hail a taxi or jeep due to it being full and occupied. He tried finding jeeps and taxis that are vacant, but he had no luck in finding one. He wished that there could be a way to reach his destination in a fashionable manner. He also wished that there could be an app where he can book rides and know the estimate cost so he could be able to prepare how much it would cost him.

As days went by, he was scrolling through his phone and found an ad that talks about a motorcycle taxi which is called SWFT wherein he could be able to book a ride and locate the current rider and be able to move in a fast manner. He also thought that riding a motorcycle is better than a taxi wherein the motorcycle can get past through traffic and be able to avoid being stuck in traffic.

Splash Art

Our Art/Splash Screen will first pop up the logo, it would then be followed by the welcome and the moving motorcycle icon. After that the log-in option floats in together with the sign up.

SWFT Mock-up/Prototype:

Welcome Screen

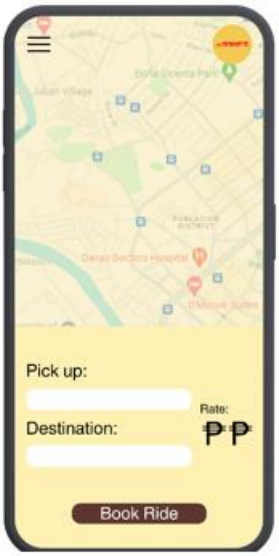
Once the user has completed registering, a welcome screen will appear with an option to book a ride beneath the motorcycle icon.

Sign up

This section is where users will fill up important details in order to create and

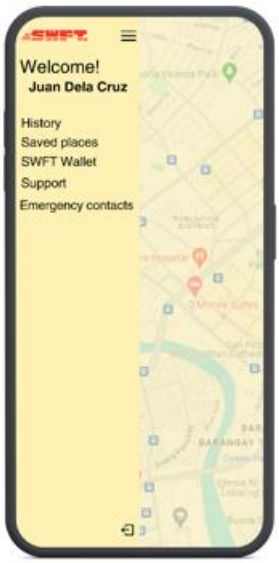
OTP

To ensure the number provided, the app will send an OTP code to verify the number.



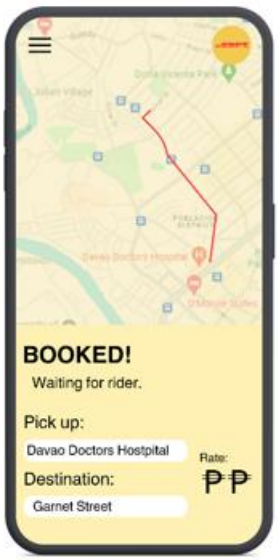
Booking for yourself

It is still the same with the book for a friend, the difference would only be the name and number input.



Toggle Menu

The toggle menu is where previ rides, saved places, SWFT wall support, and emergency conta would be found.



Booking confirmed

This will show that the booking is confirmed and will wait for a rider to accept the trip.

Main Menu

If the user has already registered and has already opened the app multiple times, the main menu will appear wherein there are two option given, book a ride and book for your friend.

After welcome screen

After pressing the book here on the welcome screen right after registering, a map wherein where the user is located.

Booking for a friend

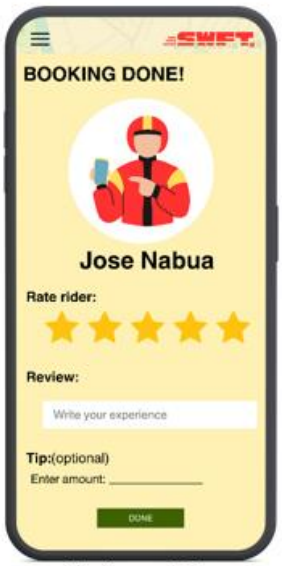
When choosing the first option, The user has to input the number of the friend they have to book, their number, and the pick up and destination of the user.

Rider found

User will be able to track how far the rider is from the pick up point

Tracking ride

User will be able to determine the current location of the ride, real-time.



Rating rider

User will be able to rate the driver, leave a review and tip the driver. However, it is optional.

Home Screen

User will be able to see the application on the home screen wherein the user will enter the application

Be a rider corner

A page for aspiring riders to get a chance to apply for the company.

Vouchers

User will be able to avail vouchers and apply to avail discounts.

Prototype on Phone

On a smaller phone, the prototype will appear like this.

User Profile

User will be able to edit details add payments, view saved payments, and be able to delete account.

Prototype in Laptop/Wider Screen

This is how the prototype will appear when viewed on a larger screen. Laptops or tables are acceptable options.

Prototype Flow

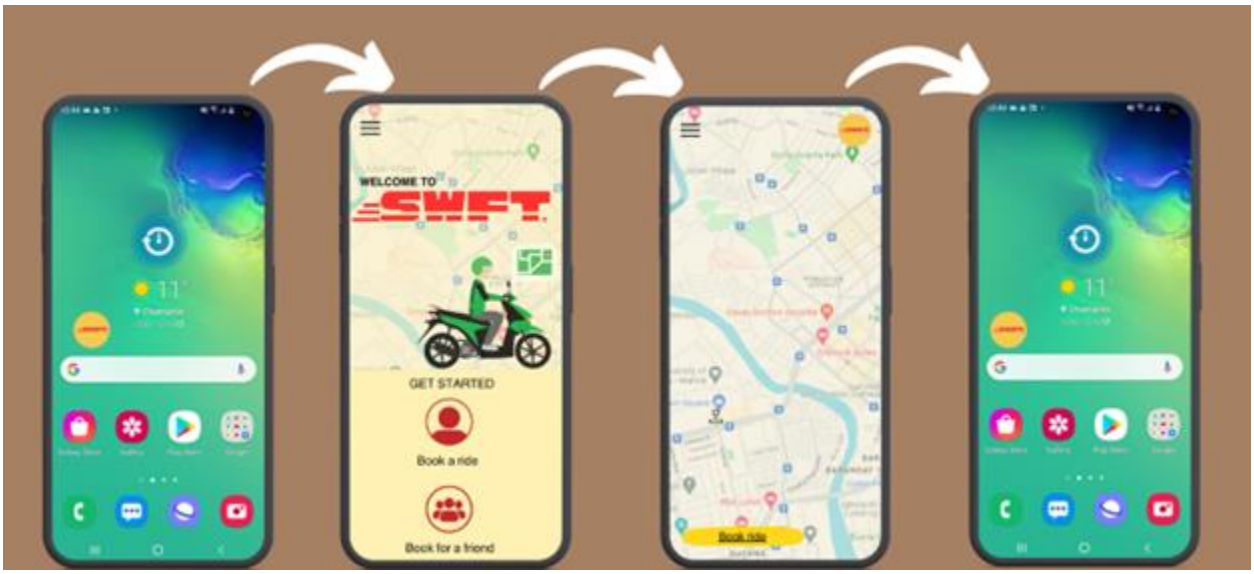


Figure 2. Entering and Exiting Application

Figure 2 will demonstrate how users can enter and exit the program. Users will be able to exit the program by swiping upwards or sidewards on the application screen.

Figure 3. Entering and Exiting Applications for New Users

Figure 3 will demonstrate how unaccustomed users can enter the application by signing up and filling in vital information necessary for the application. Exiting could also be done through swiping up or swiping sidewards.

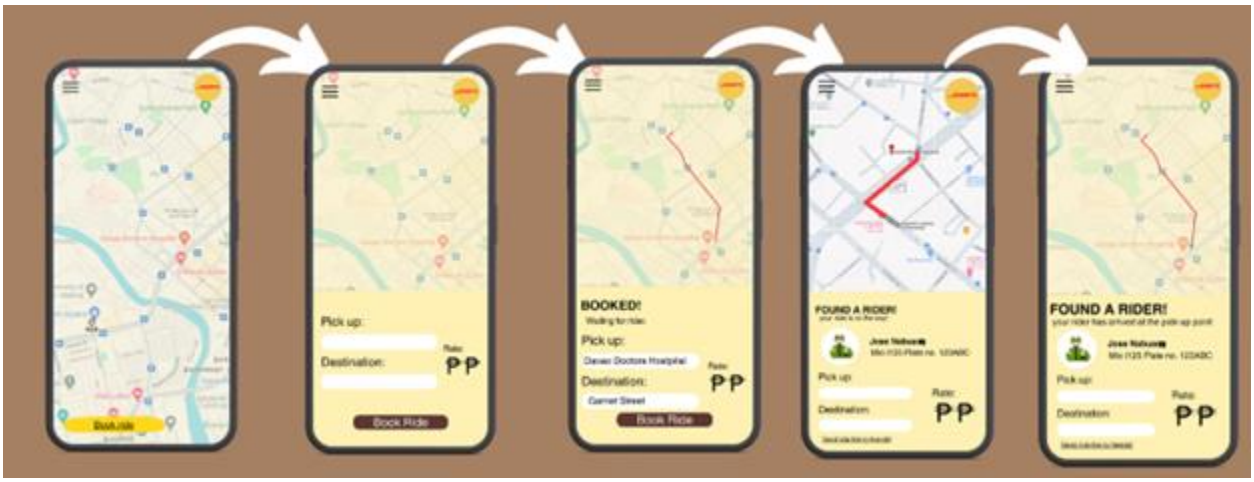


Figure 4. Booking and tracking a motorcycle

Figure 4 will show how a user can book by placing the pick-up point address and the destination address. Once confirmed, it will then show that the booking is confirmed and then prompt a message saying that the app is currently looking for a rider. Once a rider has confirmed the booking, it will then show where the driver is located and how far he is. Once the rider reaches the user, it will then show the directions to your destination.

Figure 5. Booking and tracking a motorcycle for a friend

Figure 5 shows how to book a rider for a friend by entering the friend's name and contact information so that the rider will be able to communicate with the friend. The user will then place the friend's pick-up point and destination. Once confirmed, it will then show that the booking is confirmed and then prompt a message saying that the app is currently looking for a rider. Once a rider has confirmed the booking, it will then show where the driver is located and how far he is. Once the rider reaches the user, it will then show the directions to your destination.

Rationale

The team used Figma to create this prototype due to it being free and is an interactive website wherein members could also collaborate. It also allows the team to show off the application's result once launched. Figma is useful for presenting and sharing prototypes with users who are not currently around and could provide immediate feedback. However, Figma requires internet connection which means users cannot use it without internet connection. Another problem would be the syncing of progress, which depends on the user's internet, and there would be instances that the output is different from the other user.

Changes to the Requirements:

There were no changes made. However, enhancements were made for some layouts for the prototype to make it more detailed in its functions.

Initial Evaluation Plan:

The team will conduct a face-to-face survey and at the same time conduct it through google forms. This evaluation will be divided into three parts: Usability Specifications, Heuristics, Evaluation, and Participant Survey and Feedback.

Usability Specification

The creation of this prototype aims to achieve the following measures when it appeals to the use:

Effectiveness: When accomplishing this measurement, it will show the effectiveness of the prototype when performing required tasks.

Efficiency: The outcome of this measurement will reveal how easy and straightforward the prototype will be.

Utility: The outcome of this measurement will show if the prototype supports various functions in order to accomplish certain tasks.

Learning Ability: The outcome of this measurement will showcase how easy the user will be able to learn to use the prototype system.

Memorization: The outcome of this part will show how easily the user will remember in using the system's function.

Population

The population that will participate in this evaluation will be the college students. They will be a part of the test run wherein they would book a ride to reach from one point to

another. The SWFT software prototype should be able to perform the tasks that were given to be considered accomplished.

Prototype Tasks

The tasks for this prototype are split into three (3) tasks: Main Menu Task, Registering, and Booking

Enter and Exit the Prototype and navigating the app (Main Menu Task)
Participants will be asked to register for an account (Registering)
Participants will be asked to try to book a ride (Booking)

Roles

The team will gather at least 10 participants when conducting this evaluation. The team will split the number of participants and will have similar roles in this evaluation.

Developer/UI Designer Member	Task(s)
Makki Apat	Will be recording the time spent on the tasks given by the application and take notes about the user's experience on the application.
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Table 1. Tasks of Members

Main Menu	Within 1 minute or below	Highly Acceptable	Successful

	Over 1 minute	Not Acceptable	Unsuccessful
Registering	Within 3 minutes or below	Highly Acceptable	Successful
	Over 3 minutes	Not Acceptable	Unsuccessful
Booking	Within 5 minutes or below	Highly Acceptable	Successful
	Over 5 minutes	Not Acceptable	Unsuccessful

Table 2. Time Interpretation

In this table, it will show how the team will be interpreting on how much users will spend time on specific tasks. This table will serve as a guide to identify whether a task's design is successful or not.

Heuristic Evaluation

The 10 Usability Heuristic will also be used in the evaluation of SWFT.

Visibility of System Status

Participants will be informed of the updates to the prototype.

Match Between System and Real World

The prototype will use the language that is familiar to the user which enhances the user-experience and would not encounter any difficulties in any prototype.

User Control and Freedom

Users have the freedom to choose the location to check the prices of the trip without booking the ride. Users also have the capability to change accounts or edit information.

Consistency and Standards

This prototype will ensure that the user will not experience difficulties with different buttons.

Error Prevention

Error prompts would be shown to ensure that the users will not experience any issues.

Recognition rather than recall

The prototype will ensure that it will not require the user to remember any extensive steps and information. As to where all objects, actions, and options should be visible.

Flexibility and Efficiency of Use

Ensures that the prototype is user-friendly and will help experienced and inexperienced users.

Aesthetic and Minimalist Design

Prototypes will provide direct information and there would be no useless information. Simple designs were also added to avoid distractions.

Help Users, Recognize, Diagnose, and Recover from Errors

Errors and problems are explained straightforwardly to avoid confusion to the user.

Help and Documentation

The prototype will ensure that the user can easily seek help and documentation about the prototype.

Participant Survey and Feedback

DATA GATHERING METHOD	DESCRIPTION
Survey (Quantitative)	To gather data for the experience of user with the prototype, the team will be handling out survey to participants. The team will also use the 5-point Likert scale.

Feedback/Comments (Qualitative)	The survey will have a section that includes the feedback/comments to have a specific concern regarding the prototype.

Table 3. Data Gathering Methods

The table above shows the different gathering methods that the team will be using. These include the survey (quantitative) and feedback/comments (qualitative).

Questions	**Method of Answer**
Section 1	
Participant Number	
On a scale of 1 to 5 how would you rate your experience with the SWFT prototype?	5-Point Scale
On a scale of 1 to 5 how would you rate the design and colors of the prototype?	
On a scale of 1 to 5 how would you rate the simplicity of the tasks?	
Questions	**Method of Answer**
Section 2	
Creation of Action	5-Point Scale
Booking a ride	
Ratings	
Personal Profile	
Question	**Method of Answer**
Section 3	
Feedback/Comments	Short Answer

Table 4. Survey Questionnaire

The table above lists the questions that will be included in the prototype's survey. The survey will be handled to the participants using a link and can still be viewed through this link: https://forms.gle/yBJMgN4NJ51W6YA79

Task	Time to accomplish	Interpretation	Classification
Scale	**Range value**	**Interpretation**	**Classification**
5	4.50-5.00	Highly Acceptable	Successful
4	3.50-4.49	Acceptable	
3	2.50-3.49	Moderately acceptable	Neutral
2	1.50-2.49	Fairly Acceptable	Unsuccessful
1	1.00-1.49	Not Acceptable	

Table 5. 5-Point Likert Scale Survey Interpretation

In this table, it shows the interpretation of the survey questions that will be given to the participants, and it will be used to interpret whether the design is successful, neutral, or unsuccessful.