



**VAN TRACKING AND SCHEDULING
MANAGEMENT SYSTEM**
(A WEB AND MOBILE-BASED APPLICATION)

FABIES ANGELS



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VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

a web and mobile-based application



THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

INTRODUCTION

- The student finds it difficult to travel from one place to another because he doesn't know the arrival and departure times of the van. Thus, making him waste a lot of time waiting at the terminal.
- This project aims to create an **online booking website** and an **application** (mobile and desktop) that uses real-time tracking to make public transportation with vans easier and accessible for commuters.

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

MISSION STATEMENT

The mission of this project is to provide the following:

1. A system that would allow commuters to have a seamless van booking experience.
2. A system that tracks the identity of passengers and drivers for security purposes.

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

Technical Objectives	Performance Measures
Create a website and mobile application that allows users to create an account.	<p>The use of a registration and login module</p> <p>Test creating 10 accounts using various user credentials.</p> <p>The test must be 100% successful using valid information.</p> <p>Users should be able to login and out of the system.</p>

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

Technical Objectives	Performance Measures
Create a website, mobile, and desktop application that allows registered users to book rides.	<p>The use of the booking and selecting seats module.</p> <p>Test creating 10 accounts to determine if the passenger can book rides and if they can arrive successfully at their destination.</p> <p>The test must be 80% accurate in using valid accounts and details.</p>

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

Technical Objectives	Performance Measures
Create a website, mobile, and desktop application that allows registered users to edit and view their personal details and also be able to change seats.	<p>The use of edit, change and view modules</p> <p>Users should be able to edit and view their ride details in the system.</p> <p>Conduct a user-satisfactory survey to determine if the users can successfully edit and view details, and can change seats.</p> <p>The test must have at least a 90% response rate to measure the system's usability.</p>

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

Technical Objectives	Performance Measures
Create a website, mobile, and desktop application that allows registered users to track rides.	<p>The use of the tracking module</p> <p>Test creating 10 registered accounts to measure the accuracy of the real-time location of the van travels.</p> <p>The test must be 80% accurate in tracking the rides.</p> <p>Testing the accuracy of estimated time location.</p> <p>The estimated time should change depending on its current traffic flow (just like the app Waze).</p> <p>Users should be able to view the current location of the van to be able to know the arrival and its departure.</p>

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

Technical Objectives	Performance Measures
Create a ride history	<p>The use of history modules</p> <p>Conduct a user-satisfactory survey to determine if the users feel safer after using the app.</p> <p>The survey method will be a Likert scale to obtain accurate results from the user.</p> <p>The test must have at least a 90% response rate to measure the system's performance reliability.</p>

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

SCOPE AND LIMITATION

This program will provide commuters with the ability to **book, track, edit, view and change trips** using a mobile and web browser.



View of the
commuters



View of the drivers



View of the admin

THE NEEDS DOCUMENT OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

SCOPE AND LIMITATION

Restrictions:

Bookings cannot be canceled and no money will be refunded.

Intended users of this project:

Students, professors and staff, officials, and public commuters in Camarines Sur are the intended users of this project.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 1: CREATE A WEBSITE AND MOBILE APPLICATION THAT ALLOWS USERS TO CREATE AN ACCOUNT

OPERATIONAL SCENARIO:

The **user will either open the mobile application or visit the website** using their preferred web browser. The **user interface** of the application initially **consists of a “Login” and a “Sign Up” button**. This allows users to either sign in to their **existing accounts or create new accounts** when the application is first launched. A window containing a login form will appear if the user clicks the login button on this page.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

**TECHNICAL OBJECTIVE 1: CREATE A WEBSITE AND MOBILE
APPLICATION THAT ALLOWS USERS TO CREATE AN
ACCOUNT**

OPERATIONAL SCENARIO:

If the **user does not have an account** yet, they will be **redirected to
the registration page..**

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

**TECHNICAL OBJECTIVE 2: CREATE A WEBSITE, MOBILE,
AND DESKTOP APPLICATION THAT ALLOWS REGISTERED
USERS TO BOOK RIDES.**

OPERATIONAL SCENARIO:

After successfully logging in, a window with a "**Book Now**" button appears, redirecting the user to a window with a list of vans and locations. This enables the user to plan rides and select a preferred location for their trip. If users continue to schedule a ride, a window with a list of vans available for their chosen destination will be presented.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

**TECHNICAL OBJECTIVE 2: CREATE A WEBSITE, MOBILE,
AND DESKTOP APPLICATION THAT ALLOWS REGISTERED
USERS TO BOOK RIDES.**

OPERATIONAL SCENARIO:

If he **successfully selects a destination for his trip, a popup window will appear with a selection of the scheduled time of a van.** A window containing a form that **requests the user's name and contact number** appears after the user finishes selecting a time.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 3: CREATE A WEBSITE, MOBILE, AND DESKTOP APPLICATION THAT ALLOWS REGISTERED USERS TO TRACK RIDES.

OPERATIONAL SCENARIO:

On the home page, **the app contains a search bar at the top**. The **user will navigate to the search bar to access the real-time location of the van travels**. He will type the location of the nearby van terminal and his drop-off location. While the user is typing, **the app will also suggest the possible locations that the user prefers for more accuracy**. If the **location cannot be found or identified, an error message will appear and he will be redirected to the home page**.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

**TECHNICAL OBJECTIVE 3: CREATE A WEBSITE, MOBILE,
AND DESKTOP APPLICATION THAT ALLOWS REGISTERED
USERS TO TRACK RIDES.**

OPERATIONAL SCENARIO:

The user can choose between these options to access its real-time locations. Hence, the real-time locations of the vans are accessible to all users.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 4: CREATE A WEBSITE, MOBILE, AND DESKTOP APPLICATION THAT ALLOWS REGISTERED USERS TO EDIT AND VIEW THEIR PERSONAL DETAILS AND ALSO BE ABLE TO CHANGE SEATS.

OPERATIONAL SCENARIO:

User will be redirected to another page that contains the list of available vans with their time of arrival and departure. The user can choose between these options to access its real-time locations. Hence, the real-time locations of the vans are accessible to all users.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 4: CREATE A WEBSITE, MOBILE, AND DESKTOP APPLICATION THAT ALLOWS REGISTERED USERS TO EDIT AND VIEW THEIR PERSONAL DETAILS AND ALSO BE ABLE TO CHANGE SEATS.

OPERATIONAL SCENARIO:

After the user has successfully booked his ride but entered incorrect information, or the **user wishes to change some of his details** (Phone number, seat, address, etc.), as long as it is not later than the time of the agreement in the terms of conditions, **it is still possible to change the incorrect information simply by navigating to the edit button.**

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 4: CREATE A WEBSITE, MOBILE, AND DESKTOP APPLICATION THAT ALLOWS REGISTERED USERS TO EDIT AND VIEW THEIR PERSONAL DETAILS AND ALSO BE ABLE TO CHANGE SEATS.

OPERATIONAL SCENARIO:

Also, if the user wants to change seats, a button “Change Seats” will be presented to them. This will allow the users to pick their desired seat for their comfort. The user won’t have to worry because they can change or update their details and information whenever they want.

CONCEPTUAL FUNCTIONAL MODEL OF VAN TRACKING AND SCHEDULING MANAGEMENT SYSTEM

TECHNICAL OBJECTIVE 5: CREATE A RIDE HISTORY

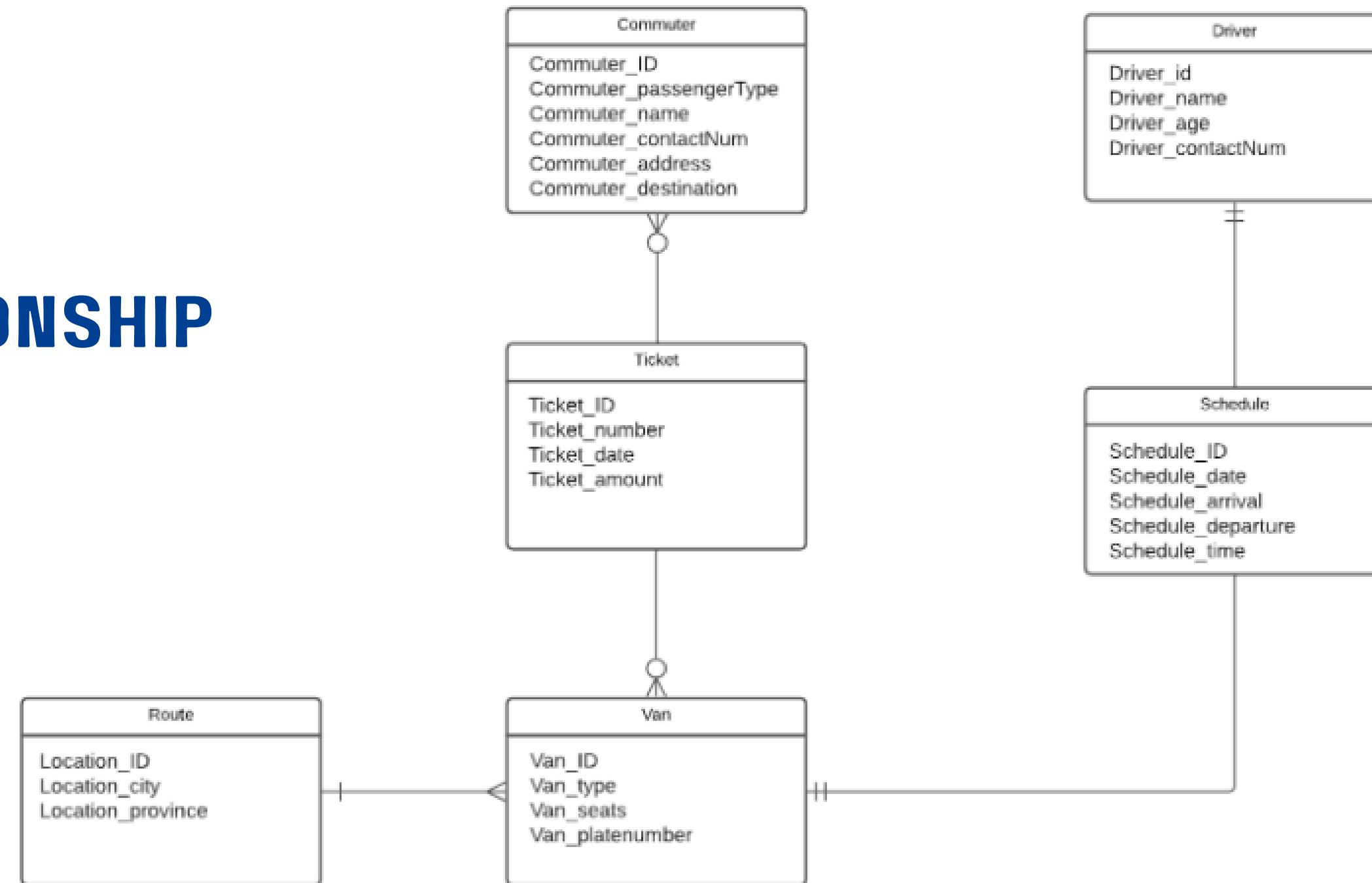
OPERATIONAL SCENARIO:

The **user may see their ride history in the top left navigation bar** if they decide to view it. To **access the list, navigate the "Ride History" button.**

Each ride in the **list includes an "info" symbol**. Clicking on this **will display information about the van, including the time it departed, their seat number, the date it was booked, the location, and the identity of the driver**. Also the **user cannot delete or edit the information in the ride history**.

SYSTEM ACTIVITY DIAGRAM

ENTITY-RELATIONSHIP DIAGRAM



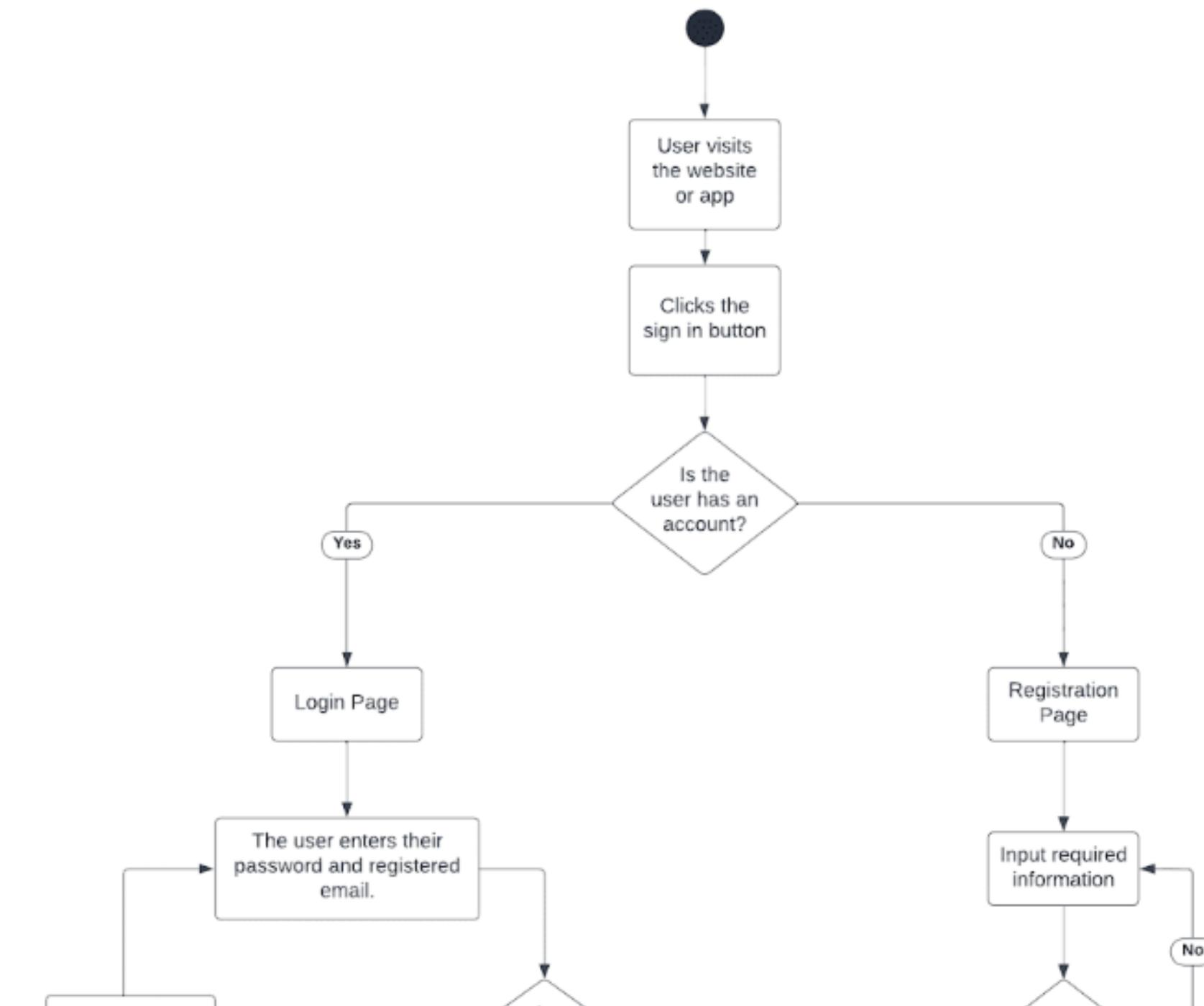
SYSTEM ACTIVITY DIAGRAM

USE-CASE DIAGRAM



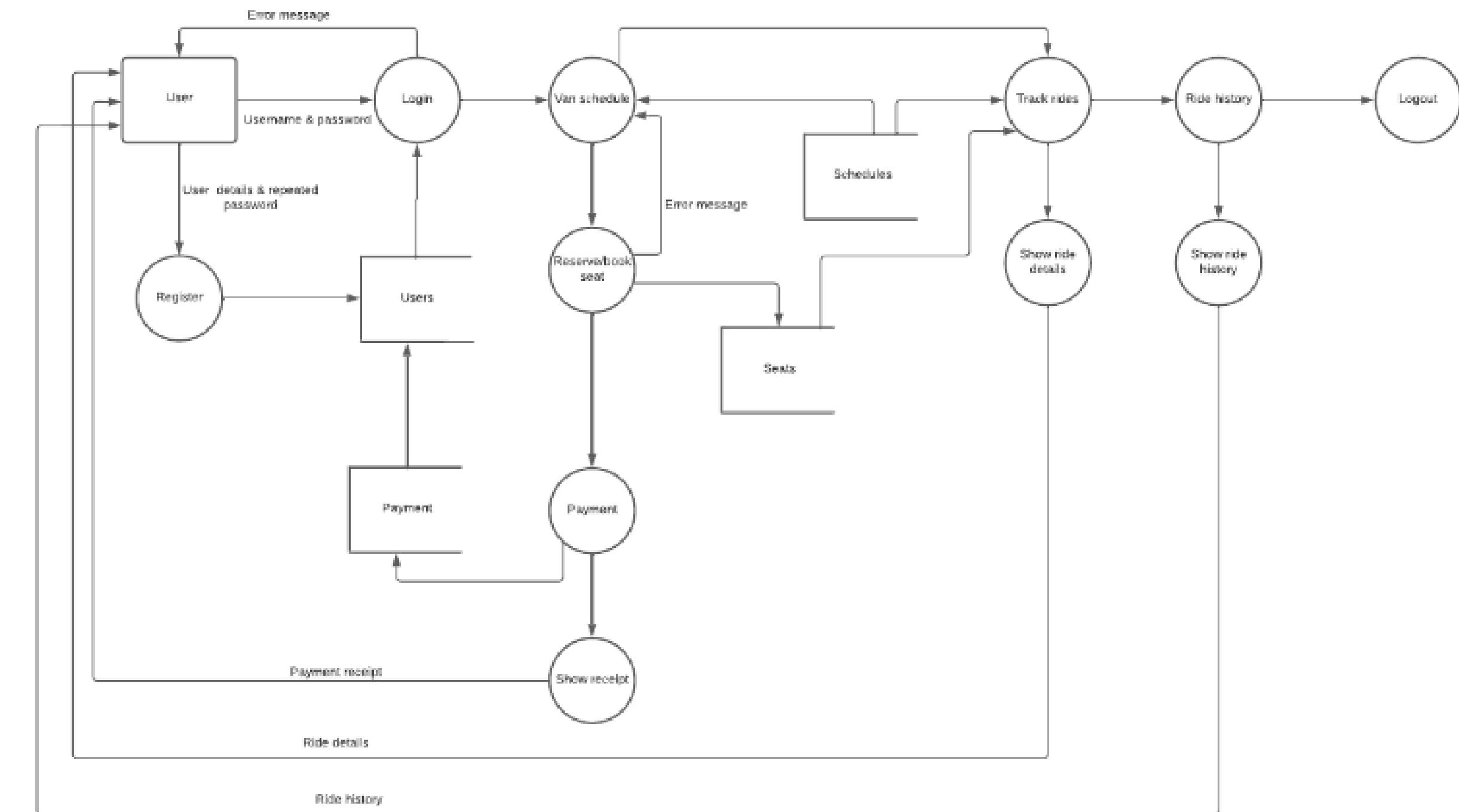
SYSTEM ACTIVITY DIAGRAM

SWIMLANE DIAGRAM



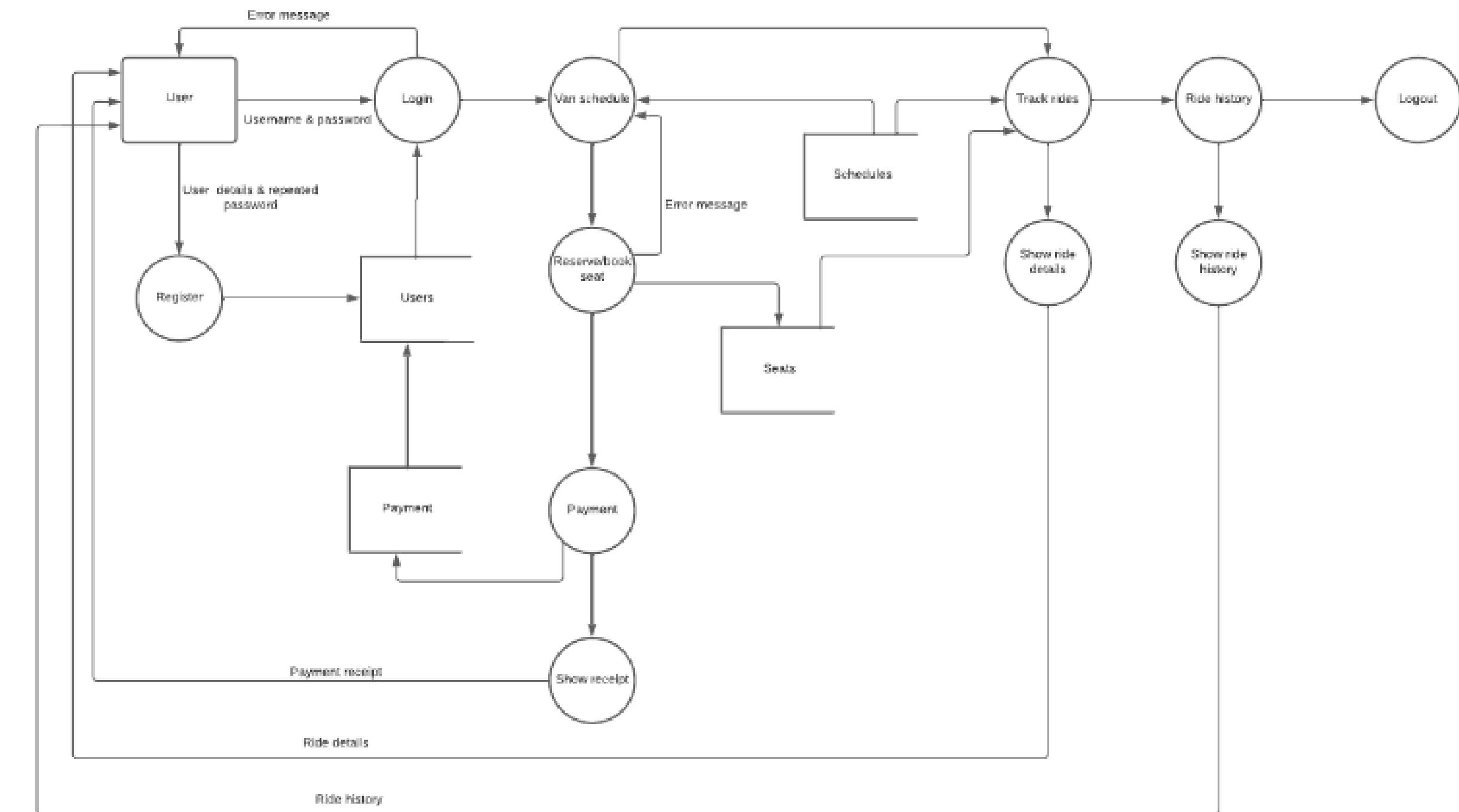
SYSTEM ACTIVITY DIAGRAM

DATA FLOW DIAGRAM



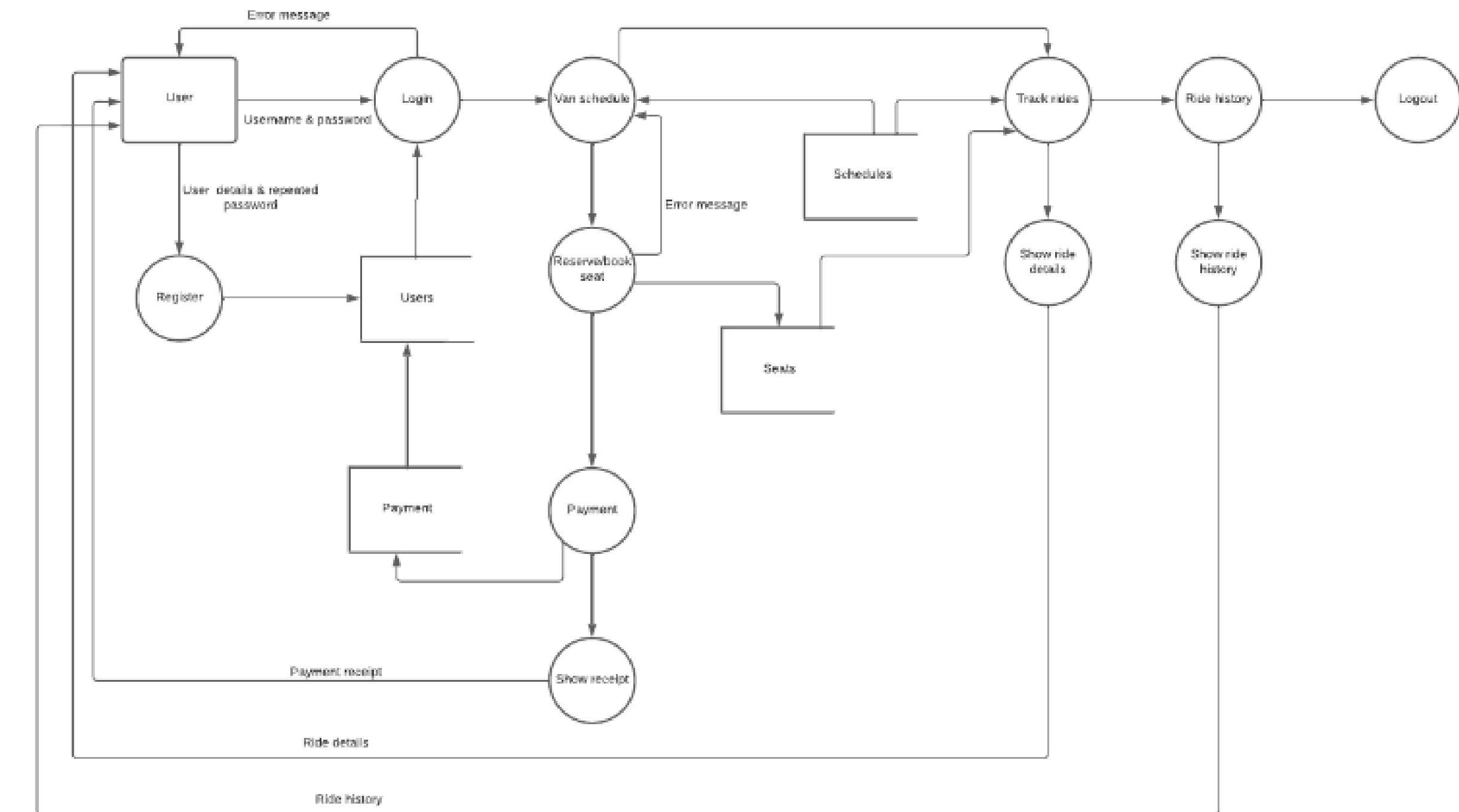
SYSTEM ACTIVITY DIAGRAM

DATA FLOW DIAGRAM



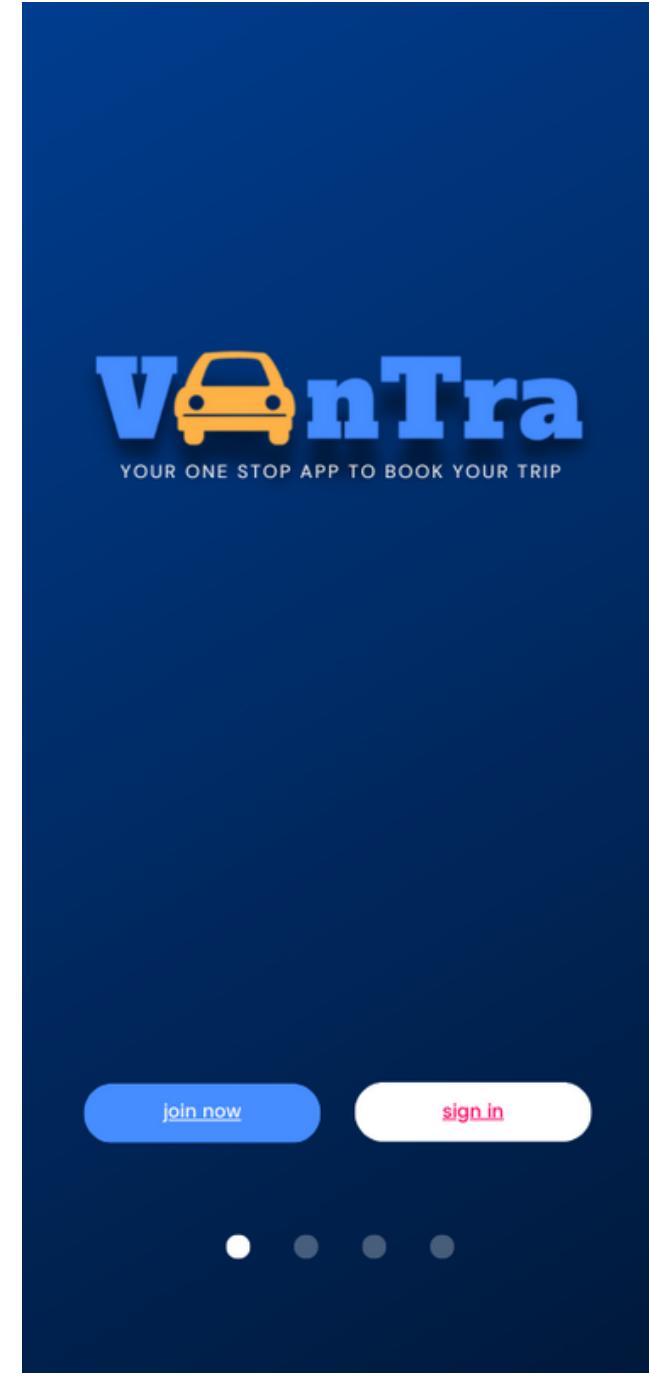
SYSTEM ACTIVITY DIAGRAM

DATA FLOW DIAGRAM



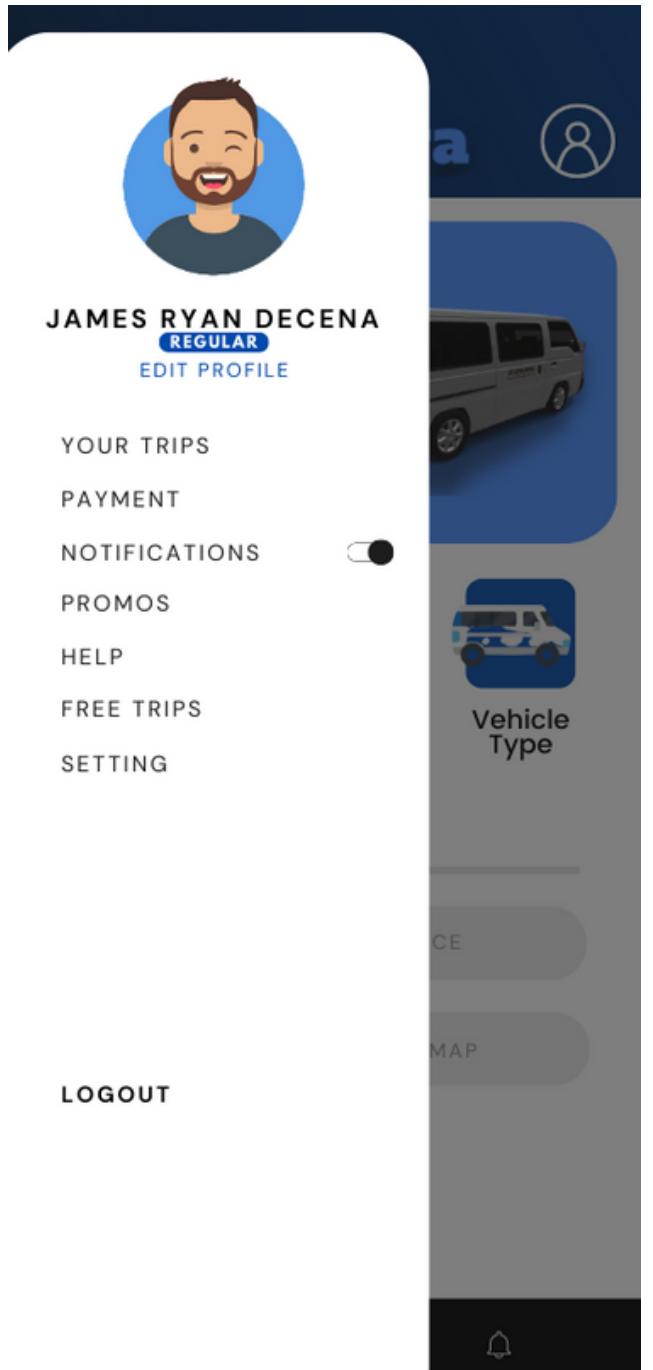
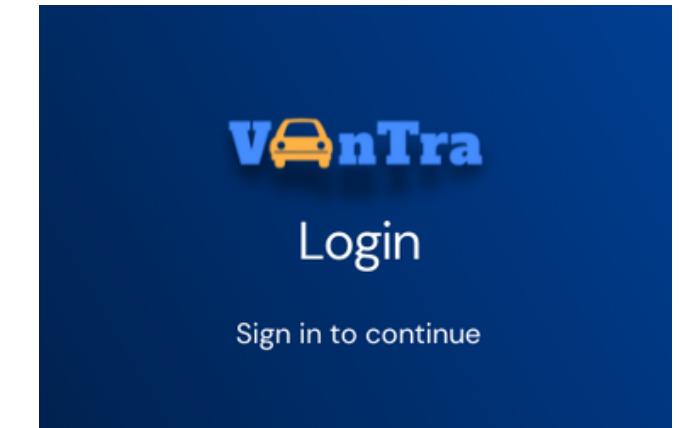
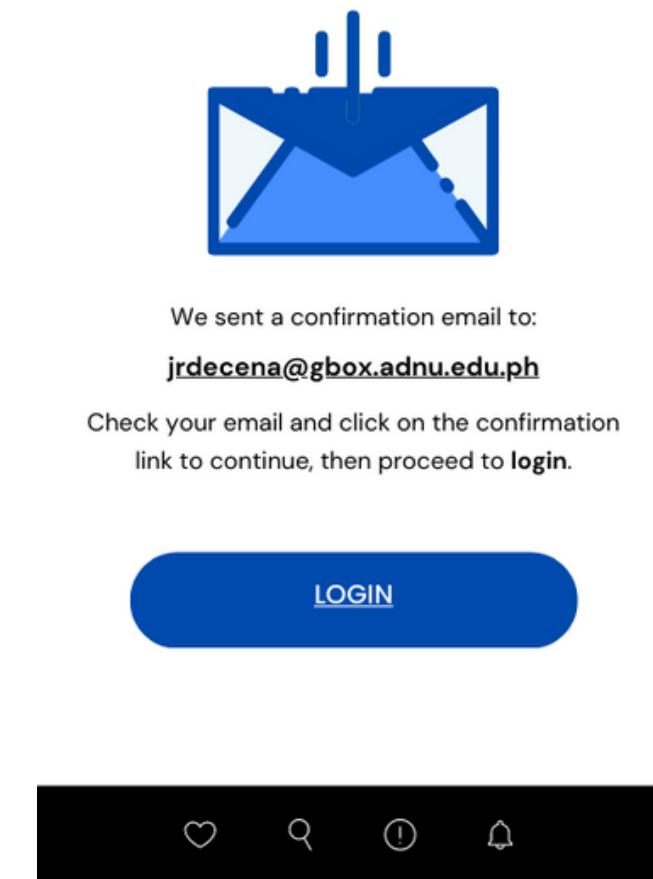
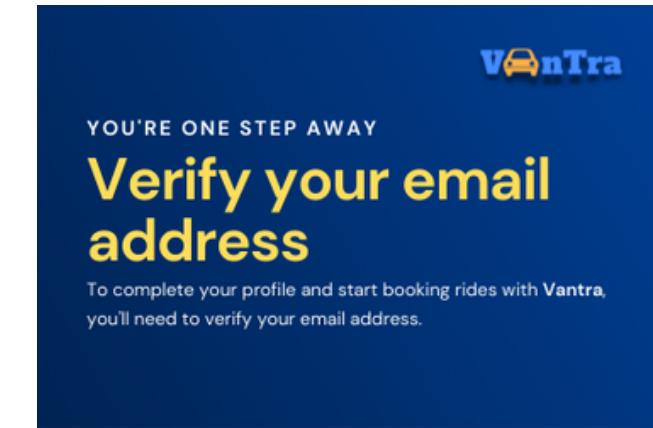
SYSTEM ACTIVITY DIAGRAM

MOCK SCREENSHOTS

A dark blue mobile application screen titled "Create new Account" at the top. It includes a "Login" link. Below the title, there are four input fields with placeholder text: "PLEASE ENTER YOUR NAME" (containing "JAMES RYAN DECENA"), "PLEASE ENTER YOUR EMAIL" (containing "jrdecena@gbox.adnu.edu.ph"), "PLEASE ENTER YOUR PASSWORD" (containing "*****"), and "PLEASE ENTER YOUR DATE OF BIRTH" (containing "05/23/2000"). At the bottom right is a large blue rounded rectangular button labeled "SIGN UP".

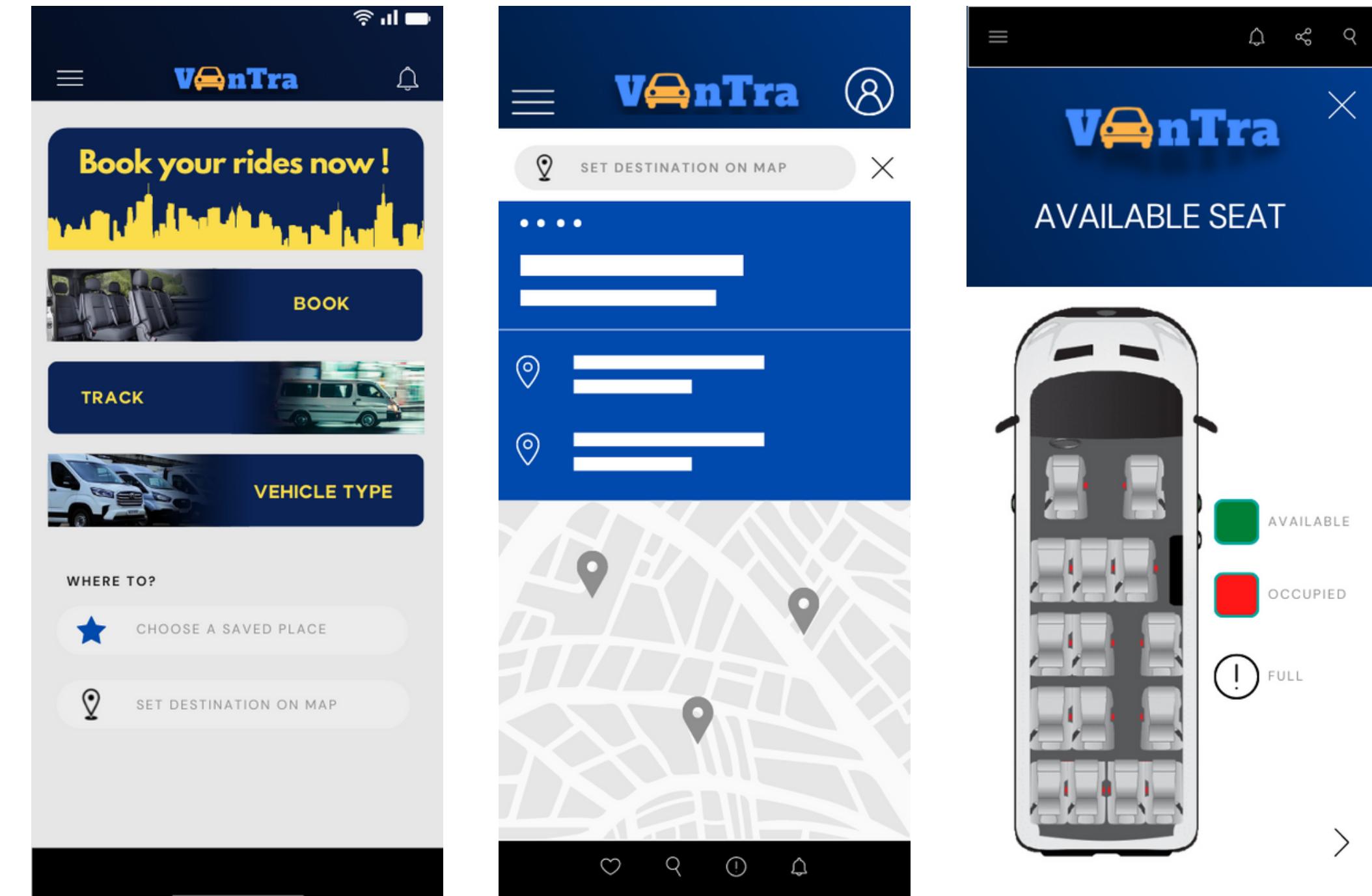
SYSTEM ACTIVITY DIAGRAM

MOCK SCREENSHOTS



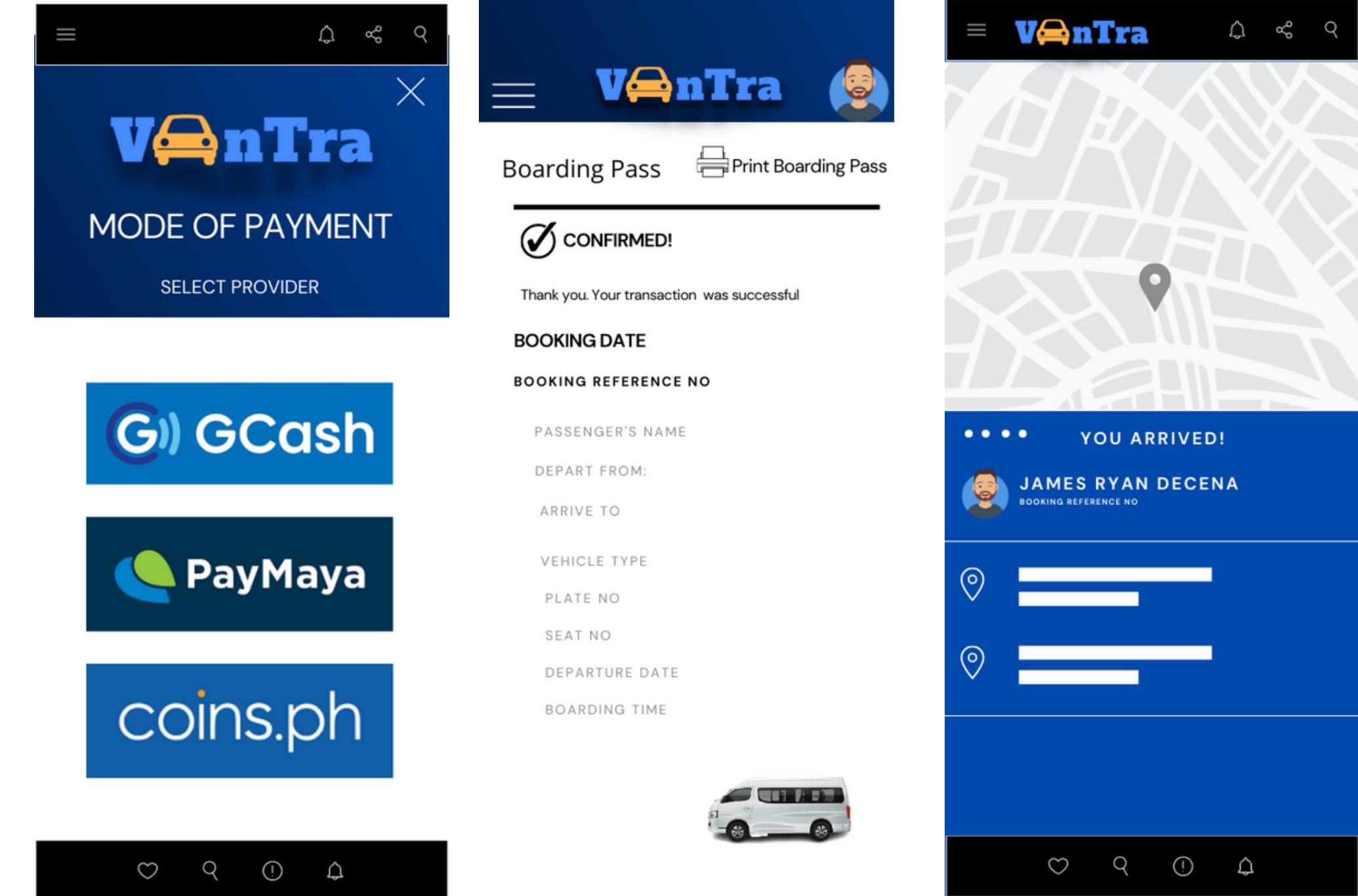
SYSTEM ACTIVITY DIAGRAM

MOCK SCREENSHOTS



SYSTEM ACTIVITY DIAGRAM

MOCK SCREENSHOTS



PHYSICAL ALLOCATION MODEL

<u>ALLOCATED TIME</u>	<u>ASSIGNED TASK</u>	<u>ALLOCATED PERSON</u>
2 DAYS	INSTALL MYSQL AND RAILS	JUANABELL
2 DAYS	CONVERT RAILS TO MYSQL	KRISTINE
2 DAYS	CREATE HTML FOR DATABASE	JAMES
2 DAYS	CREATE HTML CODE FOR INDEX	ROI
2 DAYS	CREATE HTML CODE FOR LOGIN PAGE	JUANABELL

PHYSICAL ALLOCATION MODEL

2 DAYS	CREATE HTML FOR RIDE BOOKING PAGE	KRISTINE
2 DAYS	CREATE HTML FOR TRACKING PAGE	JAMES
2 DAYS	CREATE HTML FOR EDIT PAGE	ROI
2 DAYS	CREATE HTML FOR RIDE HISTORY PAGE	JUANABELL
1 WEEK	DESIGN THE HTML CODES	ALL MEMBERS
2 WEEKS	FRONT END CODE	KRISTINE & ROI

GANTT CHART

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
LEGENDS:						Completed	Roi		All members					
						In Progress	J		James Ryan & J					
						No Progress	James Ryan		Kristine & Roi					
						No Classes/Holiday	Kristine							
OBJECTIVES	Month 1													
	Week 1							Week 2						
	Oct 4	Oct 5	Oct 6	Oct 7	Oct 8	Oct 9	Oct 10	Oct 11	Oct 12	Oct 13	Oct 14	Oct 15	Oct 16	
Set up the database														
Deploy the data models														
Install MySQL and Rails														
Convert Rails to MySQL														
Create HTML for Database														
Create HTML code for index														
Create HTML code for Login page														
Create HTML for ride booking page														
Create HTML for Tracking page														
Create HTML for Edit page														
Create HTML for Ride history page														
Design the HTML codes														

FABIES ANGELS