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Susan Shrestha

# 1. Feature Analysis

## 1.1. Admin

Login

- The admin must login using their email address and password.

Logout

- The admin can logout from the web app.

Manage users (User and Driver)

- The admin has the authority to add, update and delete passengers and drivers.

Payment Management

- The admin manages overall payment transactions.

## 1.2. Passenger

Registration

- The passenger must register providing the necessary credentials requested by the web app.

Login

- The passenger must login using their registered email address and password.

Logout

- The passenger can logout from the web app.

Ride History

- The passenger can view their ride history.

Rating

- The passenger can rate the driver according to the service provided.

Ride

- The passenger can request or cancel a ride.
- The passenger has the options of paying their ride fares digitally.

## 1.3. Driver

Registration

- The driver must register providing the necessary credentials requested by the web app.

Login

- The driver must login using their registered email address and password.

Logout

- The user driver logout from the web app.

Ride History

- The driver can view their ride history.

Withdraw Earning

- The driver can withdraw their earnings.

KYC Verification

- The driver must provide the KYC details to be a verified driver.

Manage Ride

- The driver can accept, decline or complete a ride.

## 2. Use Case Diagram

A UML use case diagram is the principal form of system/software specifications for an undeveloped software program. Use cases define the intended behavior (what) rather than the exact technique of achieving it (how). A key concept of use case modelling is that it allows us to build a system from the perspective of the end user. It is an effective technique for explaining system behavior in user terms. It is made up of use cases, individuals, or other objects that call the actor features, and the sections that are responsible for putting the use cases into action. It illustrates how an outside entity interacts with the system. It depicts external entities that interact with the system's component Walker, 23 April 2022).

The main purposes of use case diagrams are as follows:

- It is used to collect the requirements of a system.
- It is used to determine the external and internal influences on the system.
- It is used to show how the requirements interact with each other.
- It is used to represent the goals of system-user interaction.

### 2.1. Use Cases and their Actors List with Description

| S.N. | Use Cases | Actors | Description |
|---|---|---|---|
| **1.** | Registration | Passenger, Driver | Passenger and driver provides necessary credentials requested by the web app to register into the web app. |
| **2.** | Login | Admin, Passenger, Driver | Admin, Passenger, and Driver must login with their registered email address and password. |
| **3.** | Logout | Admin, Passenger, Driver | Admin, Passenger, and Driver can logout from the web app. |
| **4.** | Manage Users | Admin | Admin can add, update and delete passengers and drivers. |
| **5.** | Payment Management | Admin | Admin manages the overall payment transaction. |
| **6.** | Ride (Accept, Cancel and Online Payment) | Passenger | Passenger can request or cancel a ride and has the option to pay their ride fares digitally. |

| | | | |
|---|---|---|---|
| **7.** | Rating | Passenger | Passenger can rate the driver according to the service provided. |
| **8.** | Ride History | Passenger, Driver | Passenger and Driver both can view their ride history. |
| **9.** | Withdraw Earnings | Driver | Driver can withdraw their earnings. |
| **10.** | Manage Ride (Accept, Decline, and Complete) | Driver | Driver can accept, decline or complete a ride. |
| **11.** | KYC Verification | Driver | Driver must provide the KYC details to be a verified driver. |

## 2.2. Individual Use Case Diagram

### 2.2.1. Admin

i. Login

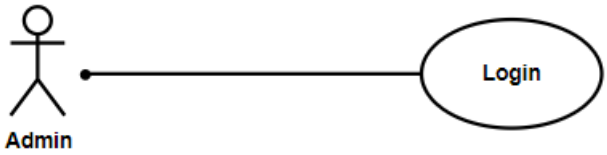


*Figure 1: Use Case of Admin Login*

ii. Logout

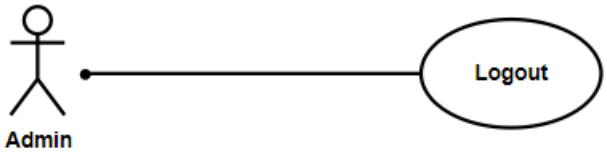


*Figure 2: Use Case of Admin Logout*

iii. Manage Users

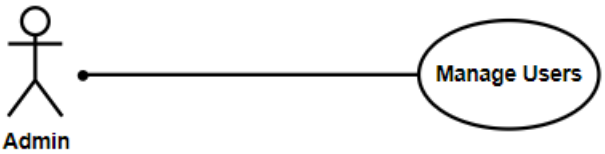


*Figure 3: Use Case of Admin Manage Users*

iv. Payment Management

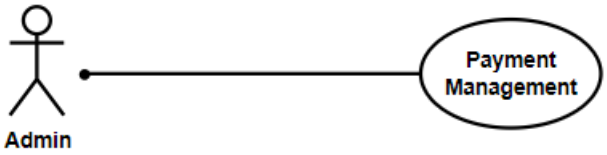


*Figure 4: Use Case of Admin Payment Management*

### 2.2.2. Passenger

i. Registration

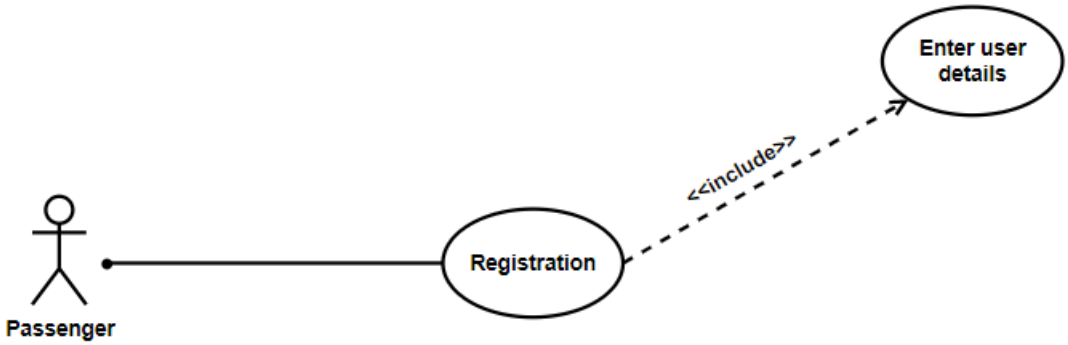


*Figure 5: Use Case of Passenger Registration*

ii. Logout

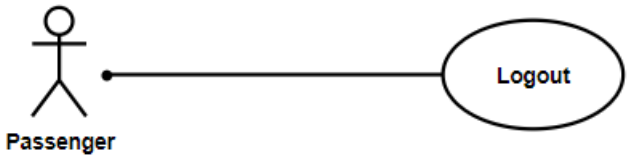


*Figure 6: Use Case of Passenger Logout*

iii. Login

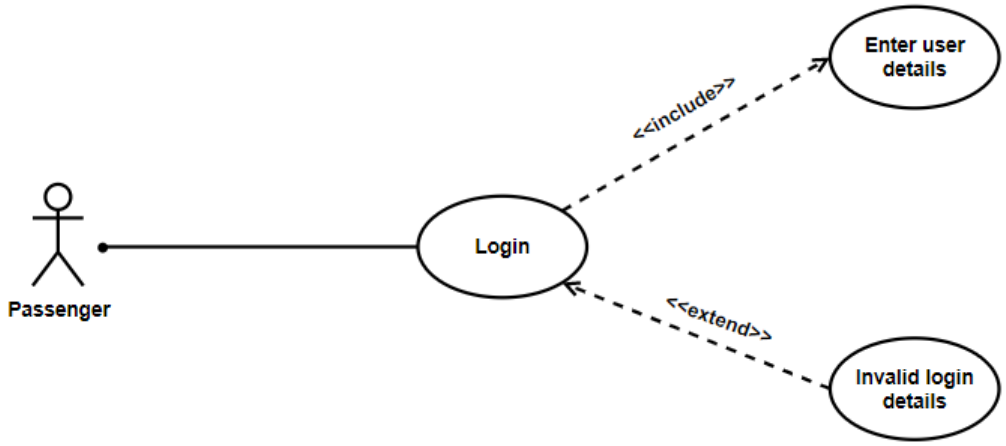


*Figure 7: Use Case of Passenger Login*

iv. Ride

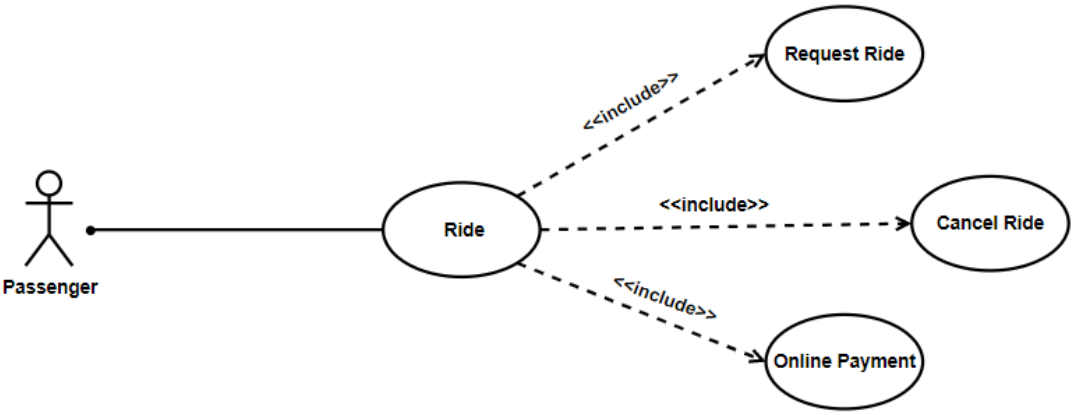


*Figure 8: Use Case of Passenger Ride*

v. Ride History

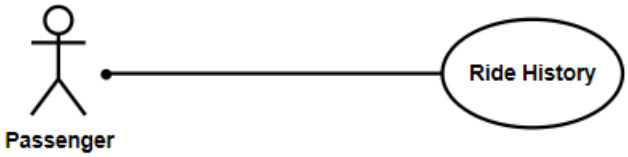


*Figure 9: Use Case of Passenger Ride History*

### 2.2.3. Driver

i. Registration

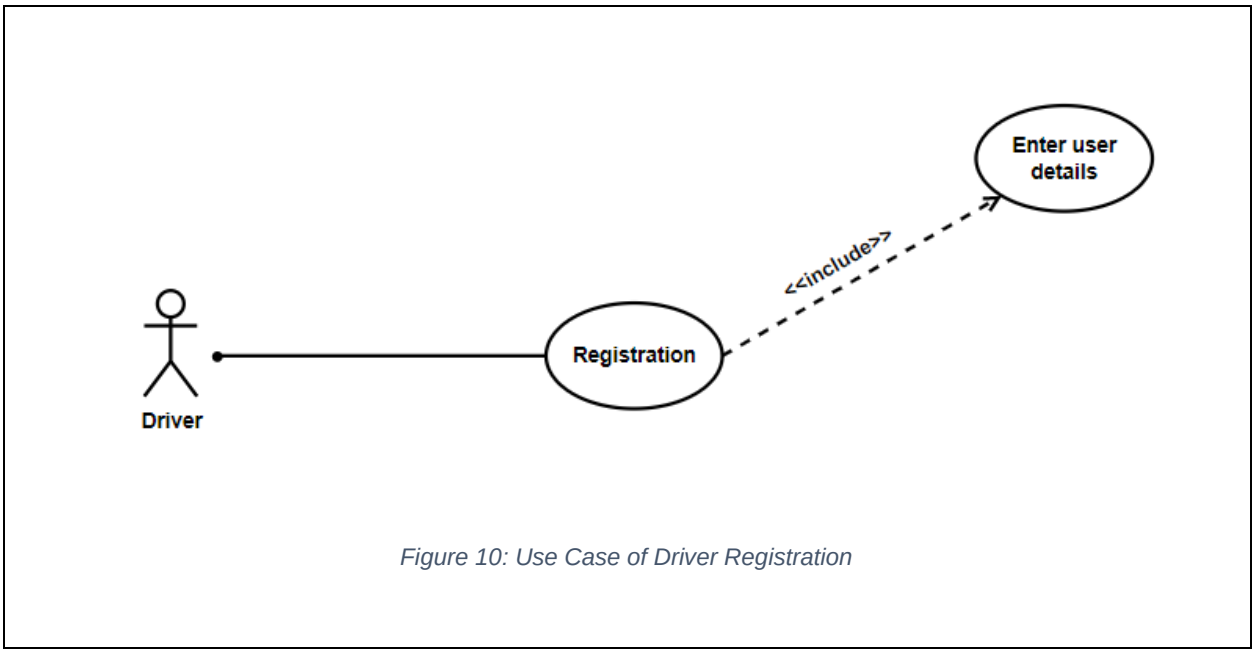


*Figure 10: Use Case of Driver Registration*

ii. Login

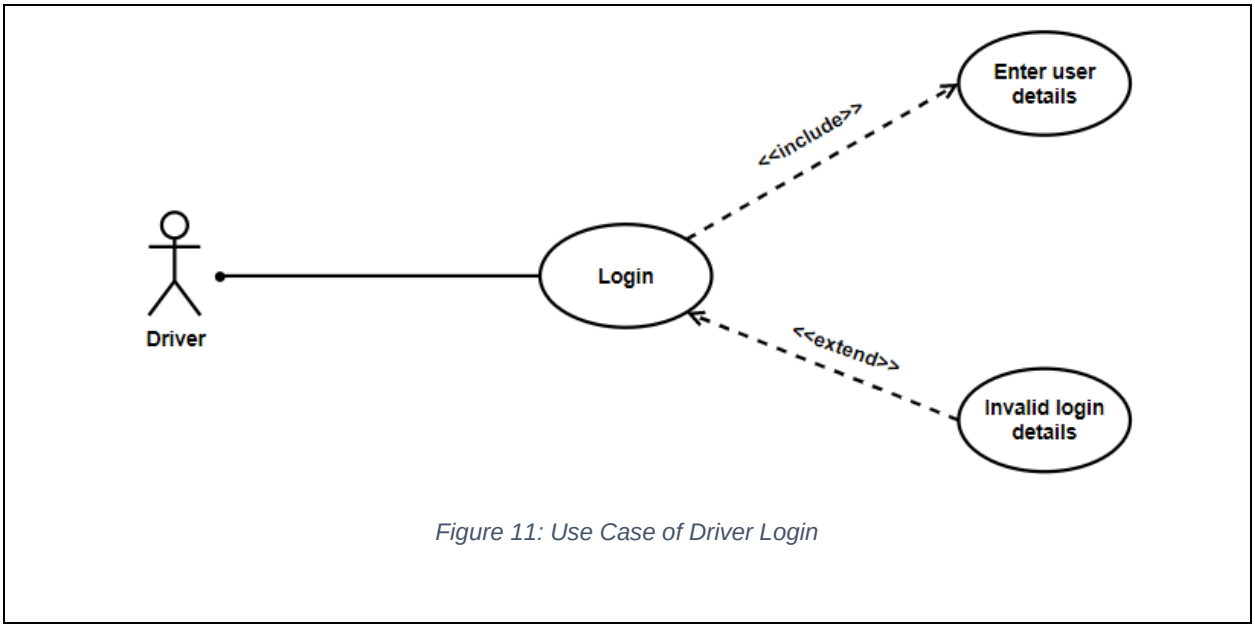


*Figure 11: Use Case of Driver Login*

iii. KYC Verification

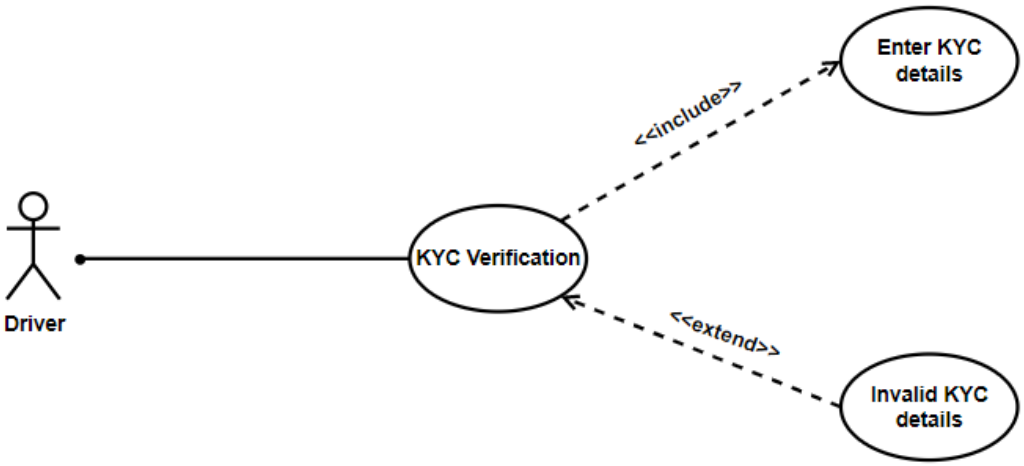


*Figure 12: Use Case of Driver KYC*

iv. Manage Ride

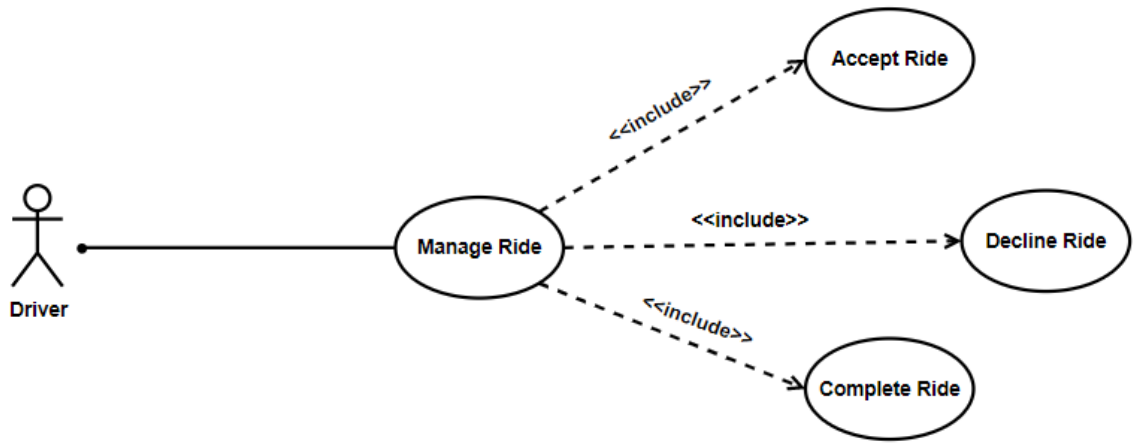


*Figure 13: Use Case of Driver Manage Ride*

v. Ride History

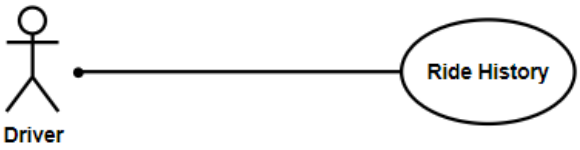


*Figure 14: Use Case of Driver Ride History*

vi. Logout

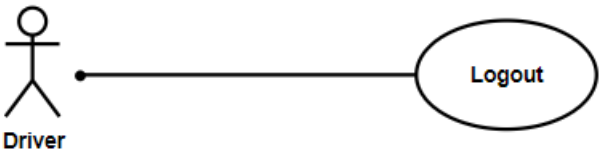


*Figure 15: Use Case of Driver Logout*

## 2.3. System Use Case Diagram

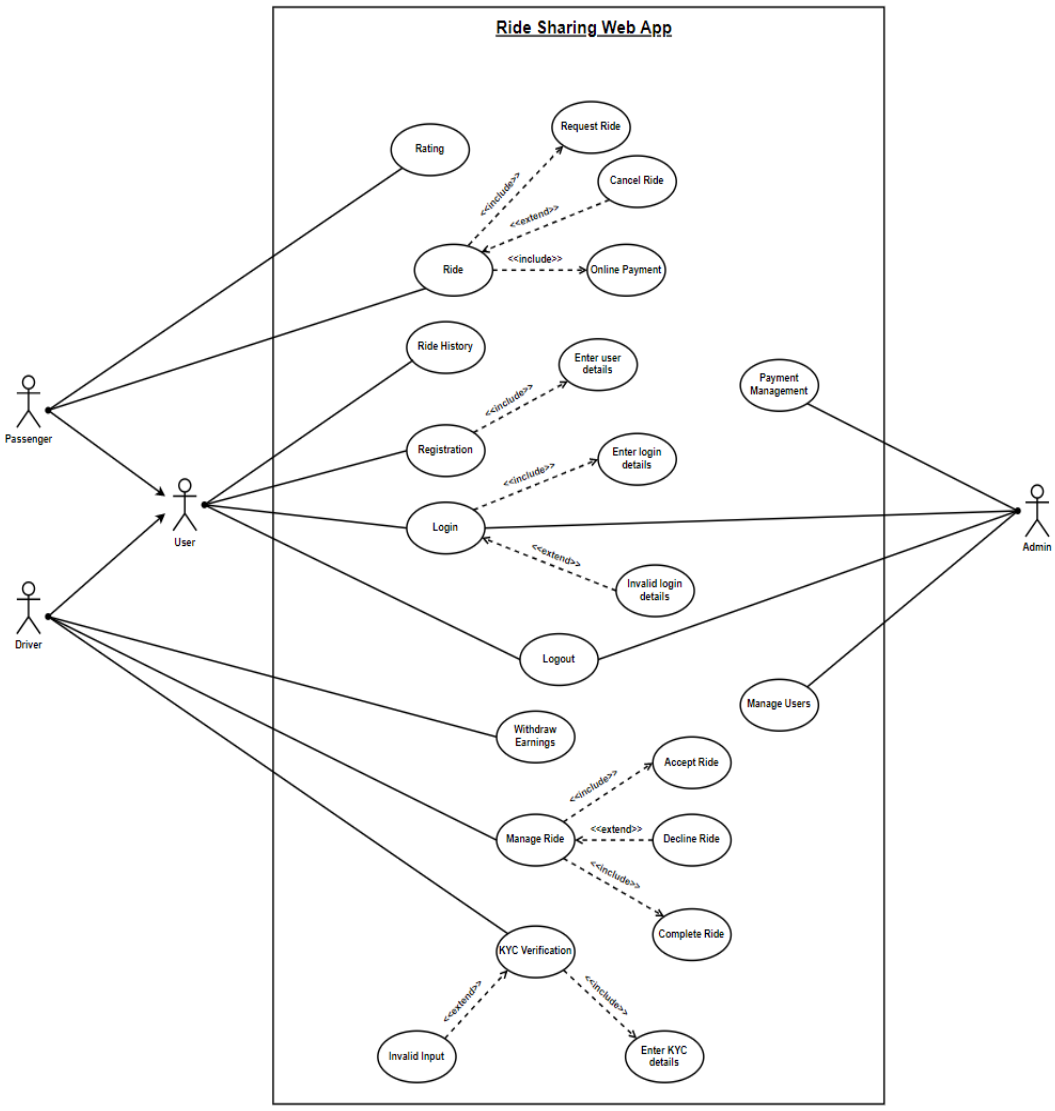


*Figure 16: Use case diagram*

# 3. Activity Diagram

An activity diagram is generally a flowchart that depicts the flow of one action to the next. The activity is a system operation. The control flow is drawn from one operation to the next. This flow can be either sequential, branching, or simultaneous. Activity diagrams handle all types of flow control by employing various elements such as fork, join, and so on. An activity is a specific system operation. Activity diagrams are used not just to illustrate the dynamic nature of a system, but also to build the operational system utilizing forward and reverse engineering approaches.

## 3.1. Passenger Activity Diagram

### 3.1.1. Passenger Register Activity Diagram

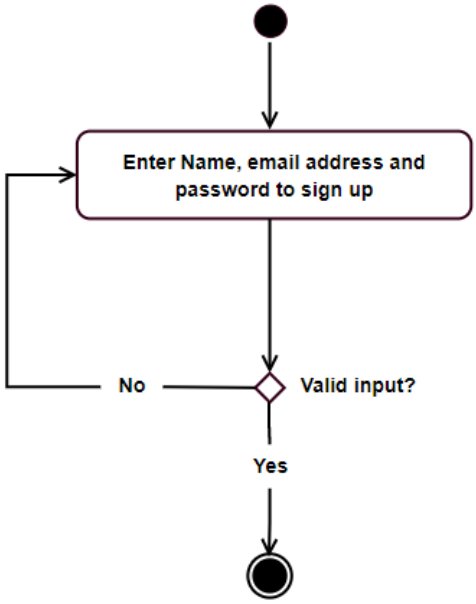


*Figure 17: Passenger Register Activity Diagram*

### 3.1.2. Passenger Login Activity Diagram

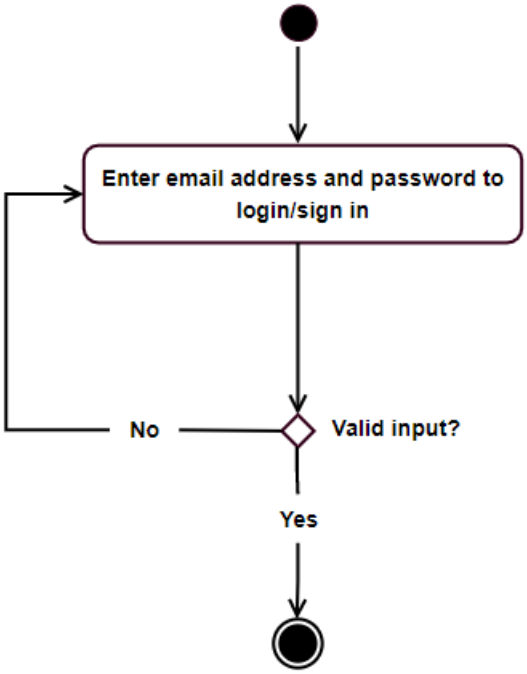


*Figure 18: Passenger Login Activity Diagram*

### 3.1.3. Passenger Location Detection Activity Diagram

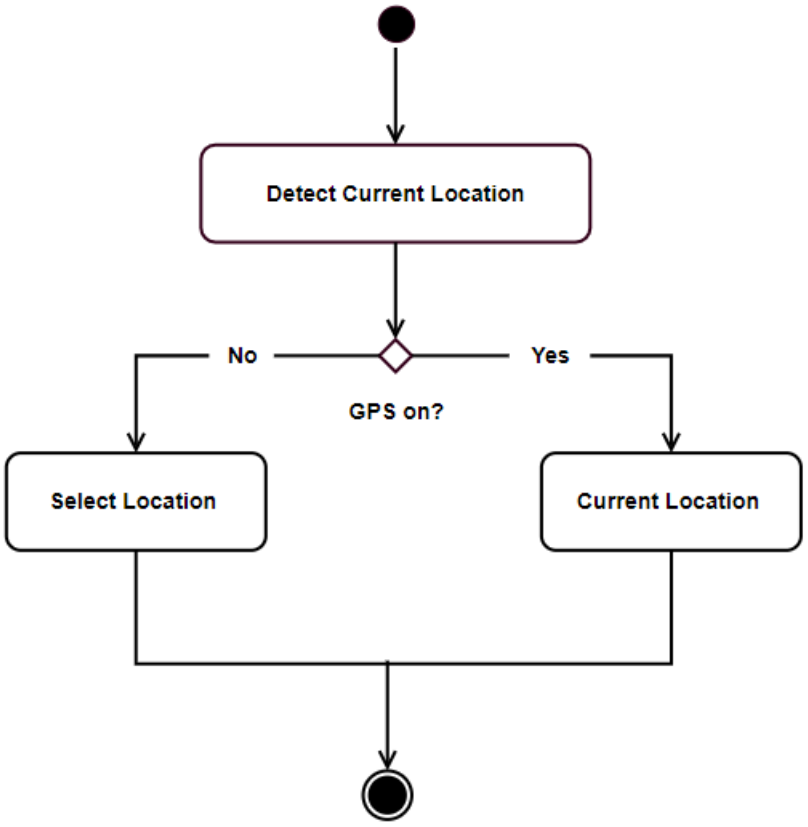


*Figure 19: Passenger Location Detection Activity Diagram*

### 3.1.4. Passenger Ride Request Activity Diagram

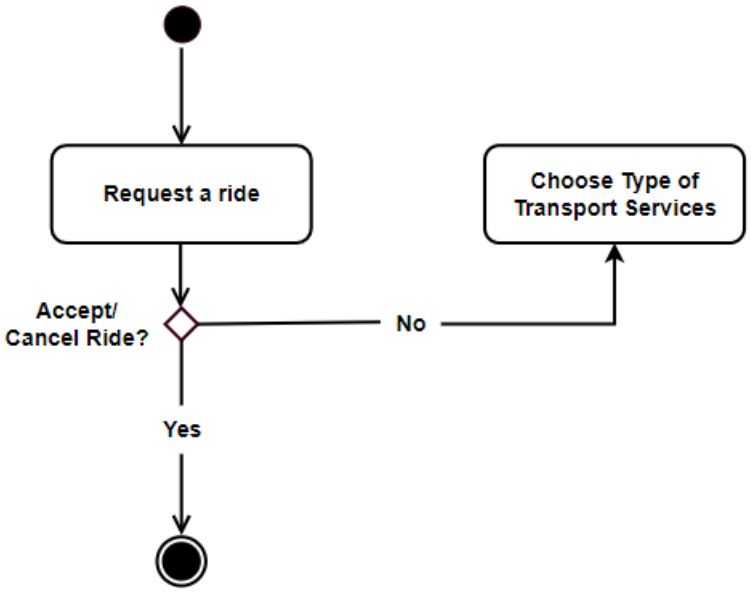


*Figure 20: Passenger Ride Request Activity Diagram*

### 3.1.5. Final Passenger Activity Diagram

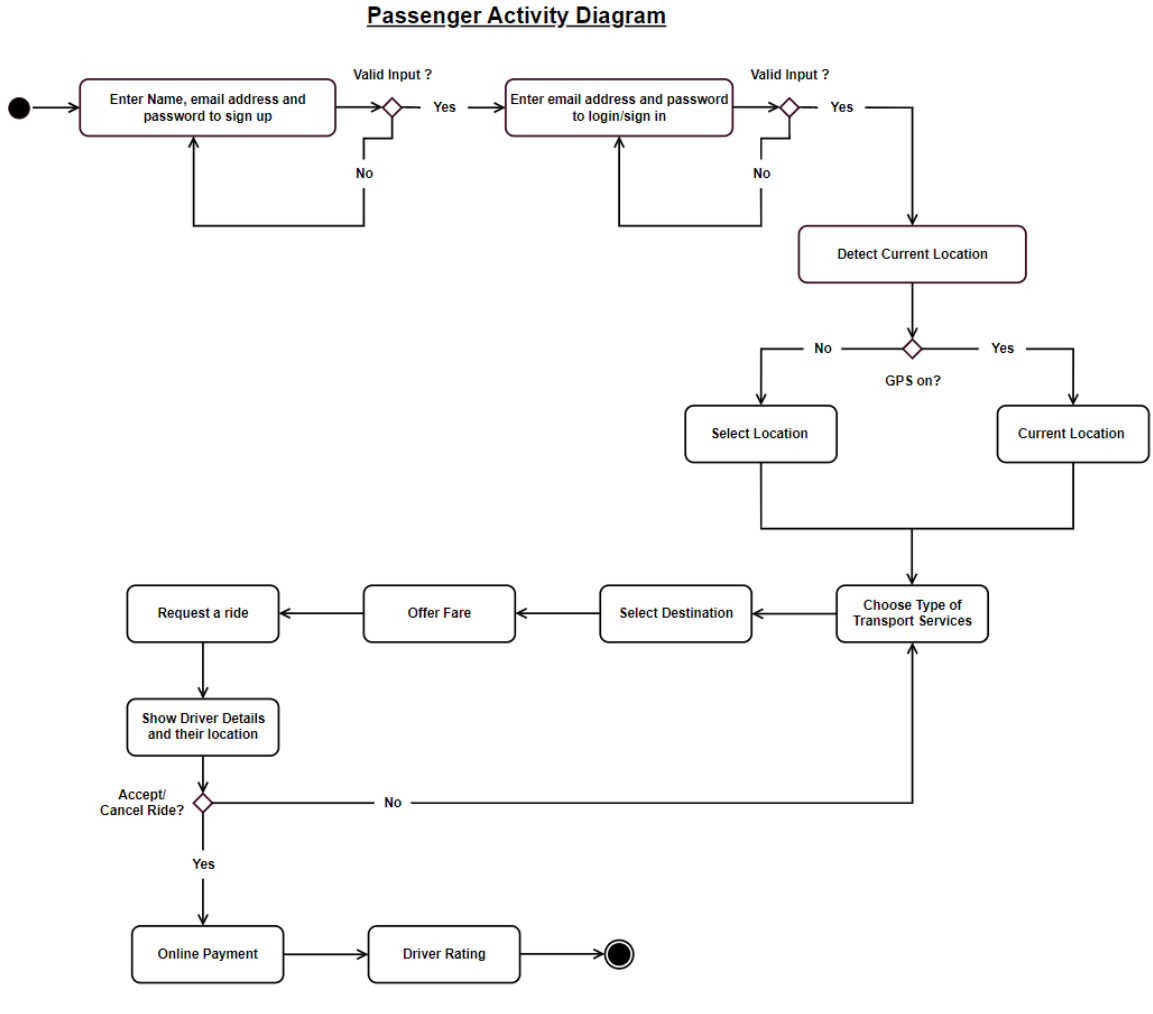


*Figure 21: Final Passenger Activity Diagram*

## 3.2. Driver Activity Diagram

### 3.2.1. Driver Register Activity Diagram

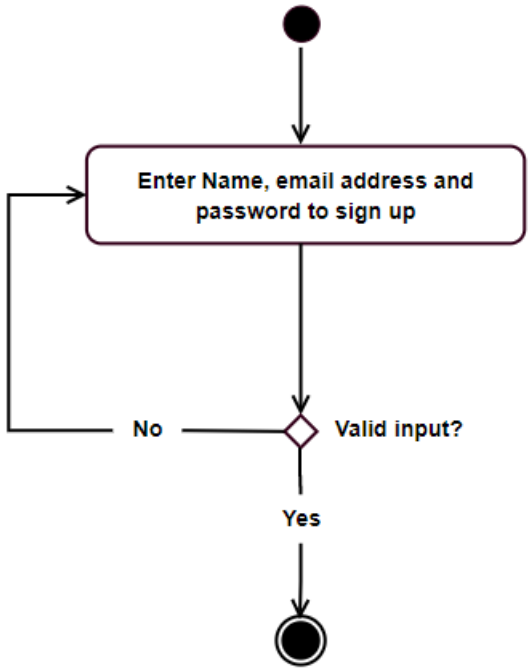


*Figure 22: Driver Register Activity Diagram*

### 3.2.2. Driver Login Activity Diagram

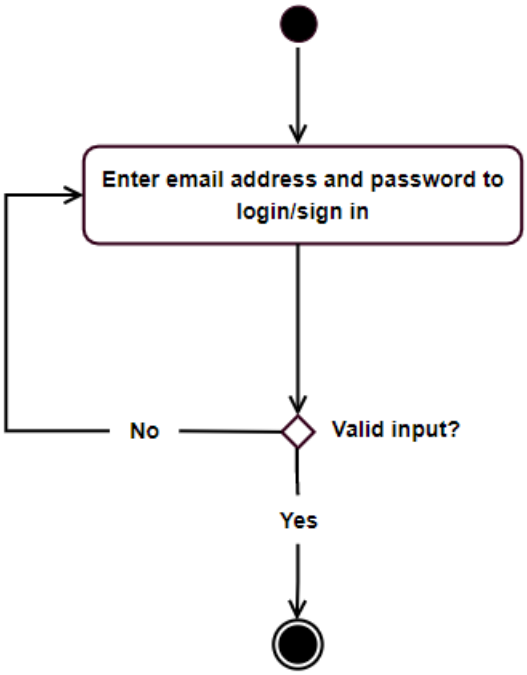


*Figure 23: Driver Login Activity Diagram*

### 3.2.3. Driver KYC Verification Activity Diagram

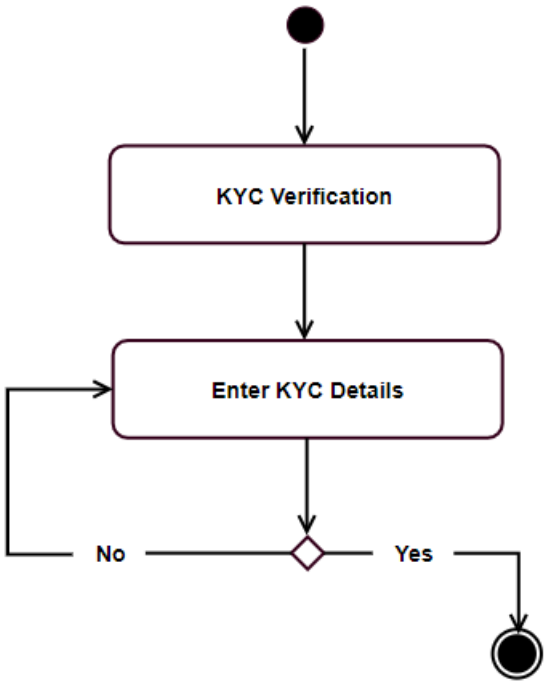


*Figure 24: Driver KYC Verification Activity Diagram*

### 3.2.4. Driver Manage Ride Activity Diagram

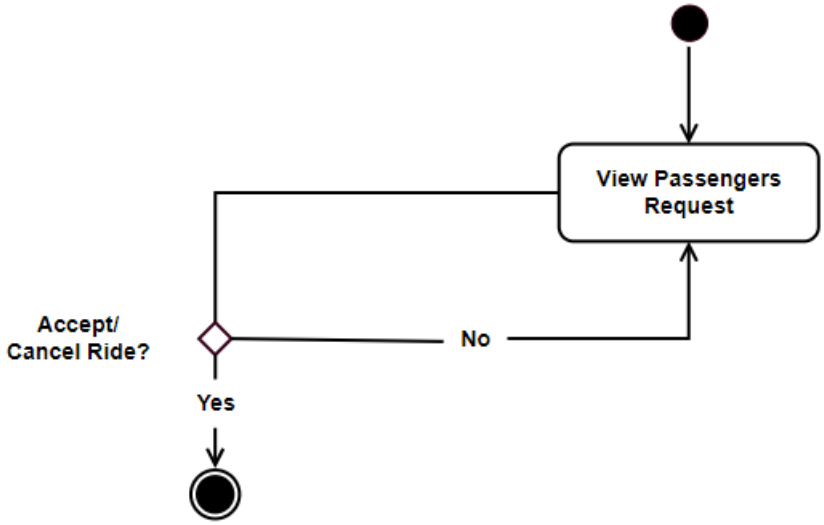


*Figure 25: Driver Manage Ride Activity Diagram*

### 3.2.5. Final Driver Activity Diagram

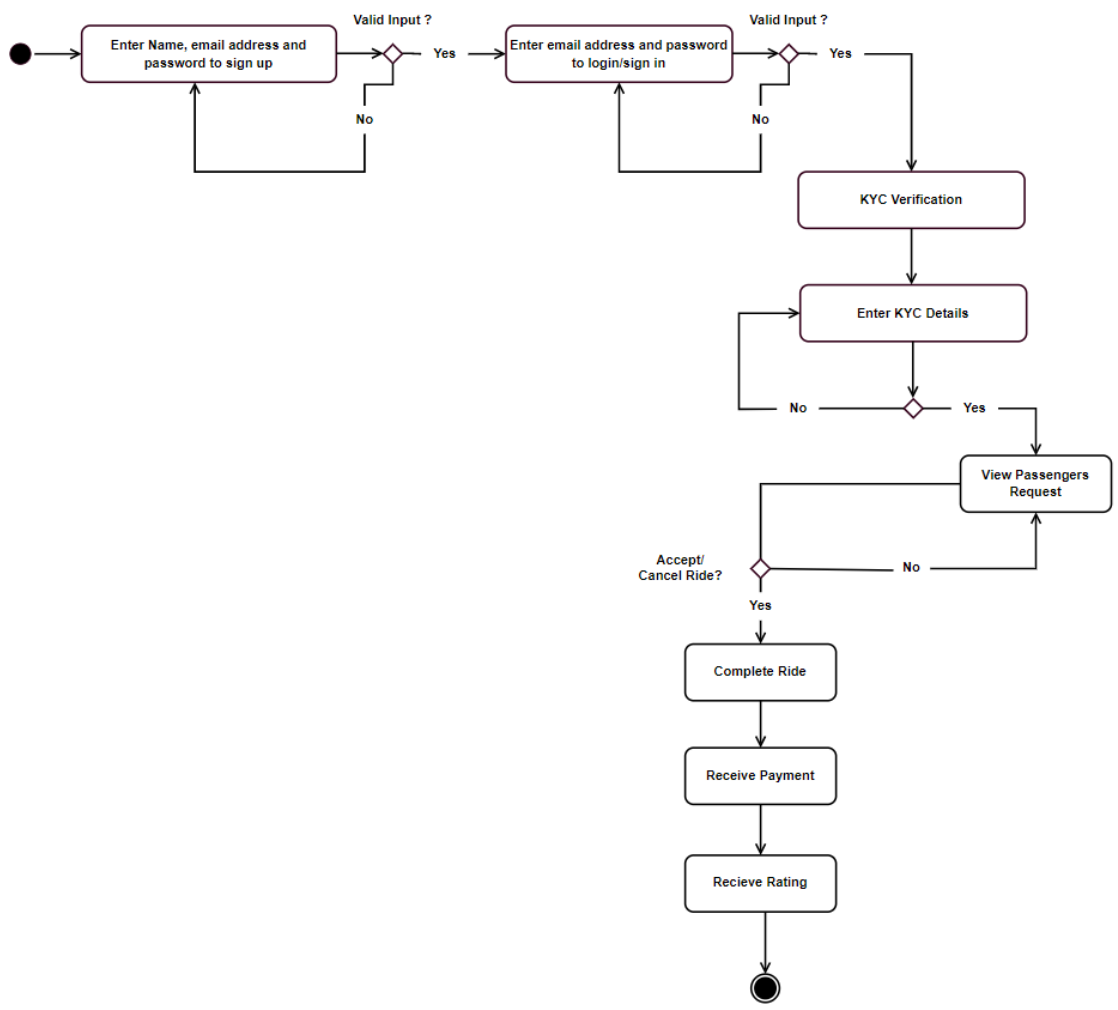


*Figure 26: Final Driver Activity Diagram*