Saudi Arabia

Ministry of Education

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College of Computer Engineering and Science

المملكة العربية السعودية

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PROJECT APP UBER

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FEASIBILITY STUDY & PROJECT PROPOSAL

Mobility is very essential in our lives. It helps us explore the world and expand our horizons. We can move around for work, study, shopping and entertainment. Thanks to transportation. Statistics on transportation have reached that more than 1.4 billion people are transported around the world every day using public transportation

There are many problems in transportation and mobility, sometimes it is difficult to find a quick car, and you have to wait in taxi queues that can take a long time. There are few transportation options available, and in addition, there have been some challenges regarding safety and trust in taxi drivers.

Uber is a global technology company that provides transportation and mobility services via a mobile application. It was founded in 2009 in the USA and has become one of the largest transportation companies in the world. It allows users to order taxis and travel easily and comfortably in more than 900 cities around the world.

FEASIBILITY STUDY & PROJECT PROPOSAL

The Uber application provides an innovative solution to the transportation problem. The application can be used to request a car at any time and from anywhere with ease. Through the application, you can request a car and specify the starting place and desired destination. You'll see driver information and ratings, and you can track the car during the trip. After completing the trip, you will be able to pay the cost through the application in different ways.

Work plan :Using the modern development model known as "Agile Development". This model focuses on continuous collaboration between teams and continuous improvement of the application.

The process includes the following steps:

- Determine requirements: Understand the needs of drivers and passengers and determine the features and functions required.

- Interface design: Design an easy and convenient user interface for drivers and passengers to facilitate the booking and communication process.

- Application development: Build the application and implement specific features, such as reservation system, navigation and secure payment.

- Test and improve: Test the application to ensure its safety and stability, and collect user feedback to improve application performance.

- Application launch: Publish the application in digital stores and advertise it to potential drivers and passengers.

- Support and Updates: Providing technical support and regular updates to ensure continuity and improvement of the user experience.

Uber

PROJECT REQUIREMENTS

Uber

Functional requirements:

- Create an Account: Users must have the ability to create and log in to an account.

- Booking trips: Users should be able to easily book their trips and specify the start and destination location.

- Location tracking: Drivers and users should be able to track each other's locations to find each other easily.

- Rating and Review: Users should have the ability to rate and review drivers and rides to improve quality.

- Secure Payment: The application must support safe and reliable payment methods to ensure ease and security of payments.

- Customer Service: A customer support system should be available to users to answer their inquiries and help them solve problems.

- Cost estimation system: The application should allow users to calculate the expected cost of a trip before booking it.

- Car options: The application should allow users to choose their preferred type of car (such as luxury cars or family cars).
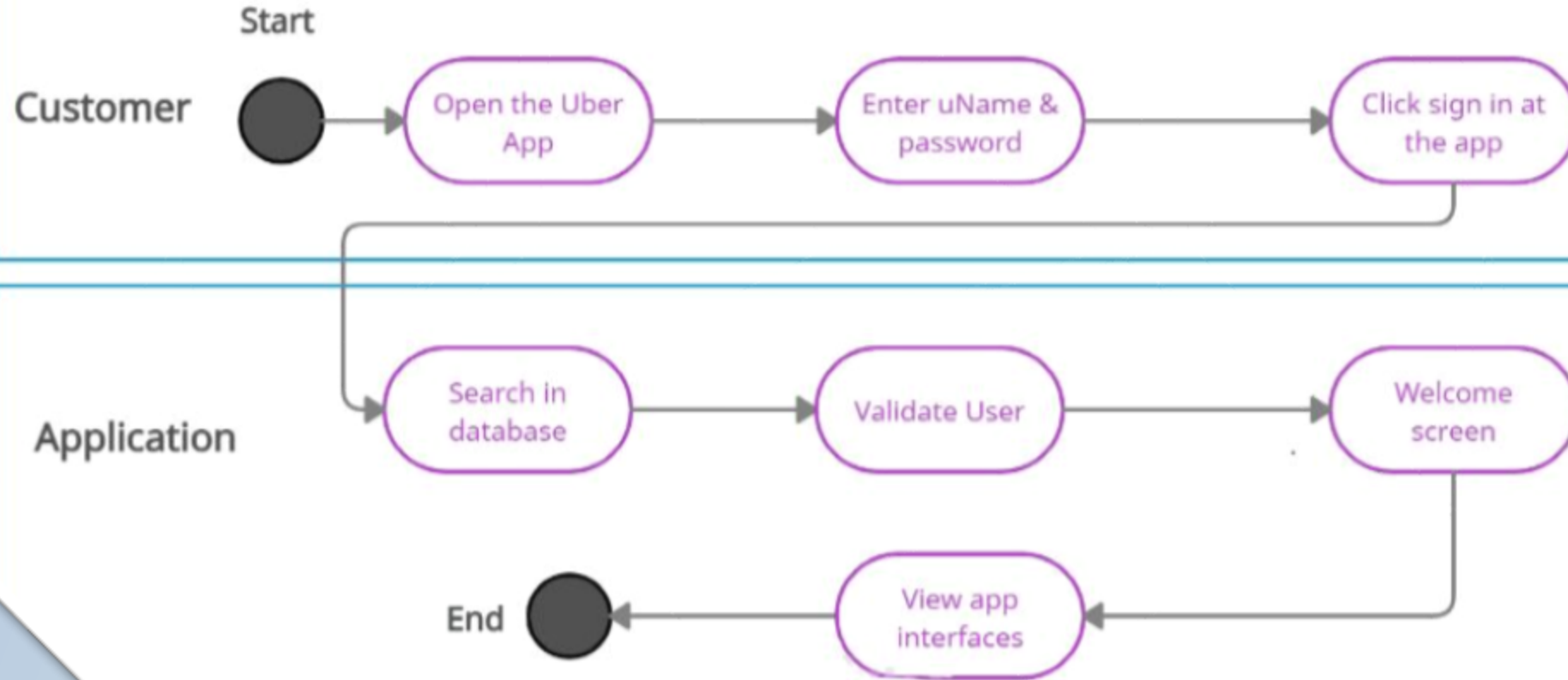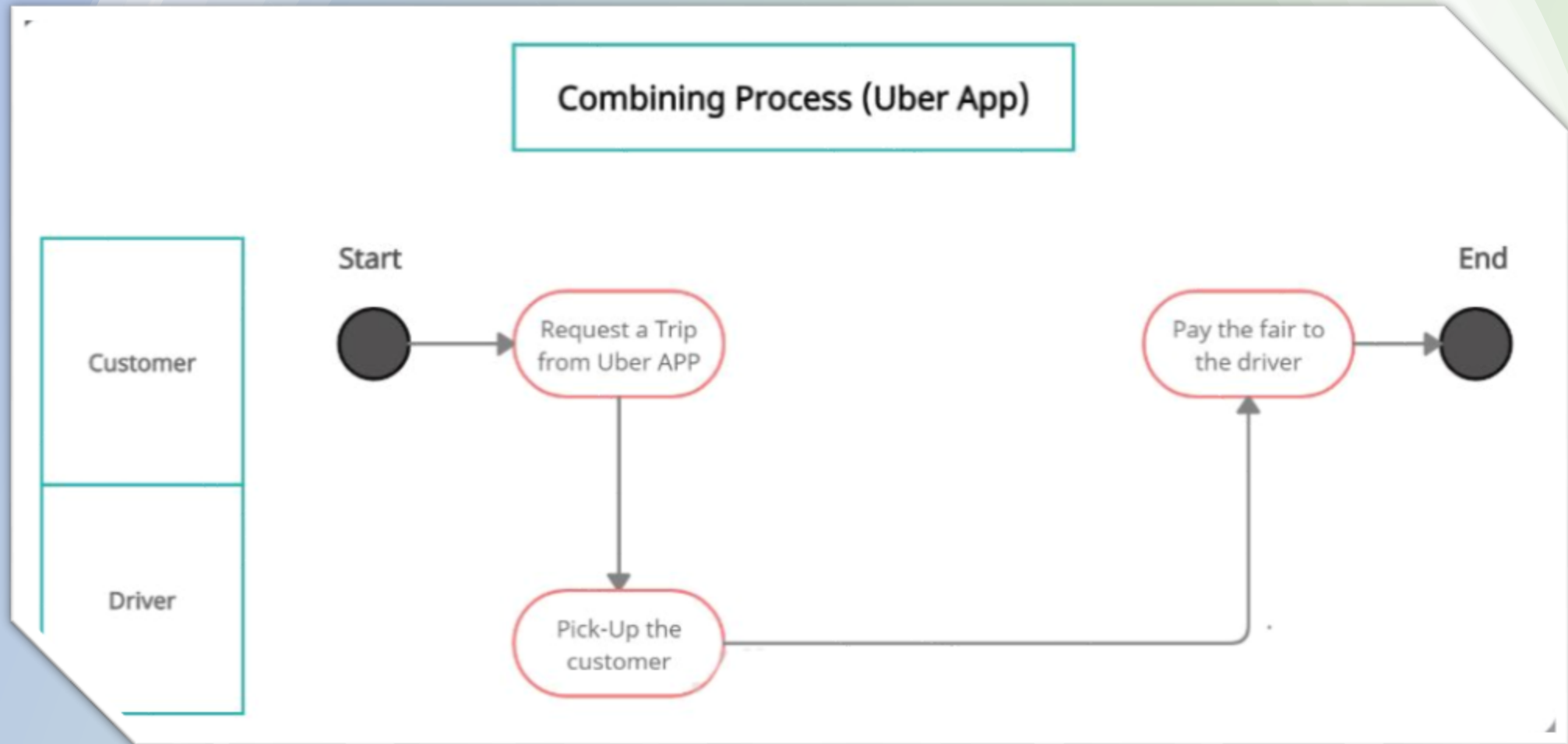
PROJECT REQUIREMENTS

Non-functional requirements:

- Security and Privacy: The application must be secure and protect the user's information and payment details.

- User experience: The application should be easy to use and provide a comfortable experience to users while booking trips and car rides.

- Support and Customer Service: There should be 24-hour customer support and service available to users to answer their inquiries and help them solve any problems they encounter.

- Availability and Responsiveness: The app should be available in different regions and respond quickly to ride requests and reservations.

- Diversity and Inclusion: The application should be accessible to everyone regardless of gender, age or physical abilities.

ACTIVITY DIAGRAM

Sign in Process (Uber App)

Customer

Start

Open the Uber App → Enter uName & password → Click sign in at the app

Application

Search in database → Validate User → Welcome screen

End ← View app interfaces

ACTIVITY DIAGRAM

PROJECT USE CASE MODELLING

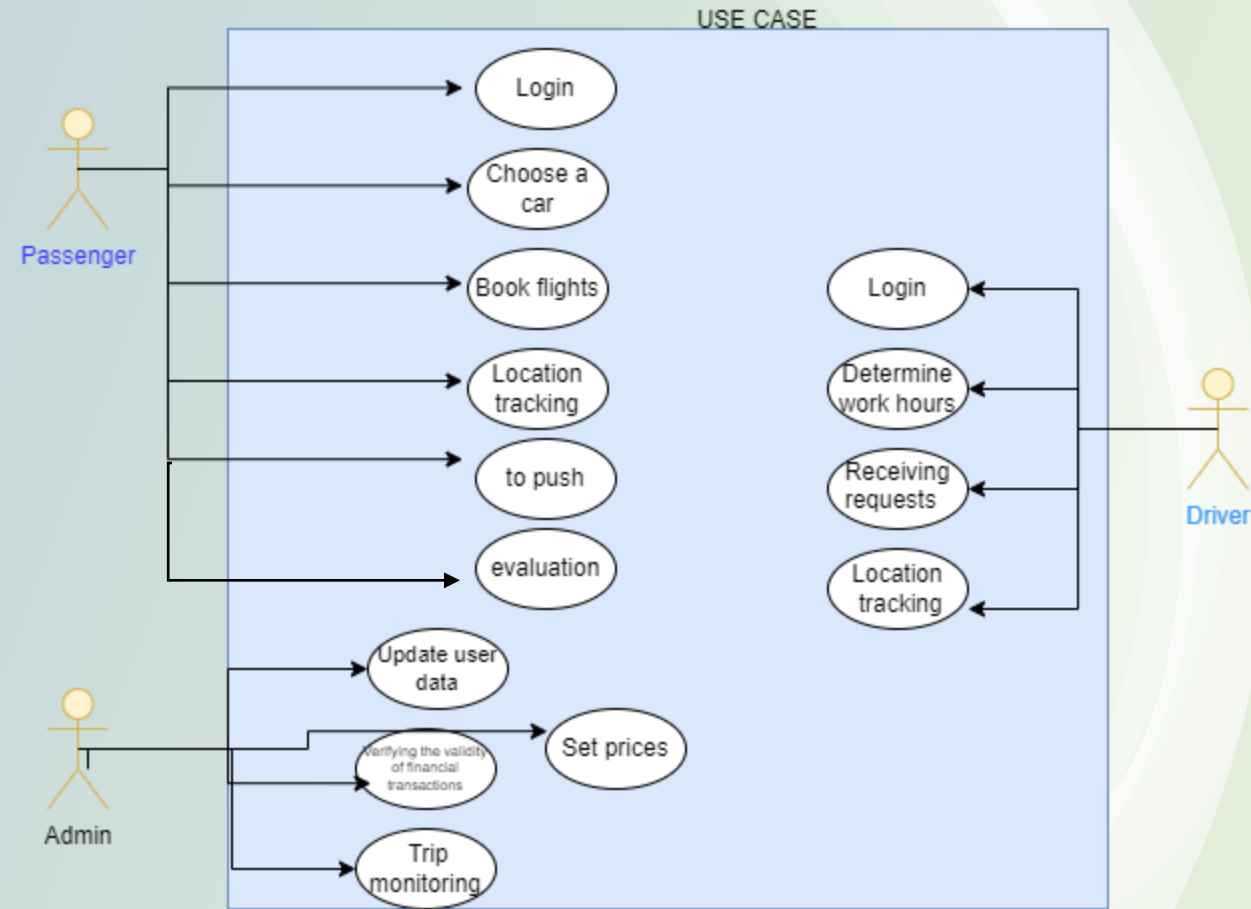| ACTOR	ROLES
Passenger	Login Choose a car Book flights Location tracking to push evaluation
Driver	Login Determine work hours Receiving requests Location tracking
Admin	Update user data Verifying the validity of financial transactions Trip monitoring Set prices

Table 1:

Table 2:

Uber

PASSENGER: LOGIN	
Actors	Passenger and Database
Description	The user enters his email and password and then clicks Log in
Data	Email, password
Stimulus	The passenger wants to benefit from the application services
Response	Benefit from services such as requesting a car

DRIVER: LOGIN	
Actors	Driver and Database
Description	The user enters his email and password and then clicks Log in
Data	Email, password
Stimulus	The driver wants to benefit from the application services
Response	Benefit from services such as Accepting applications

CREATING SEQUENCE DIAGRAMS
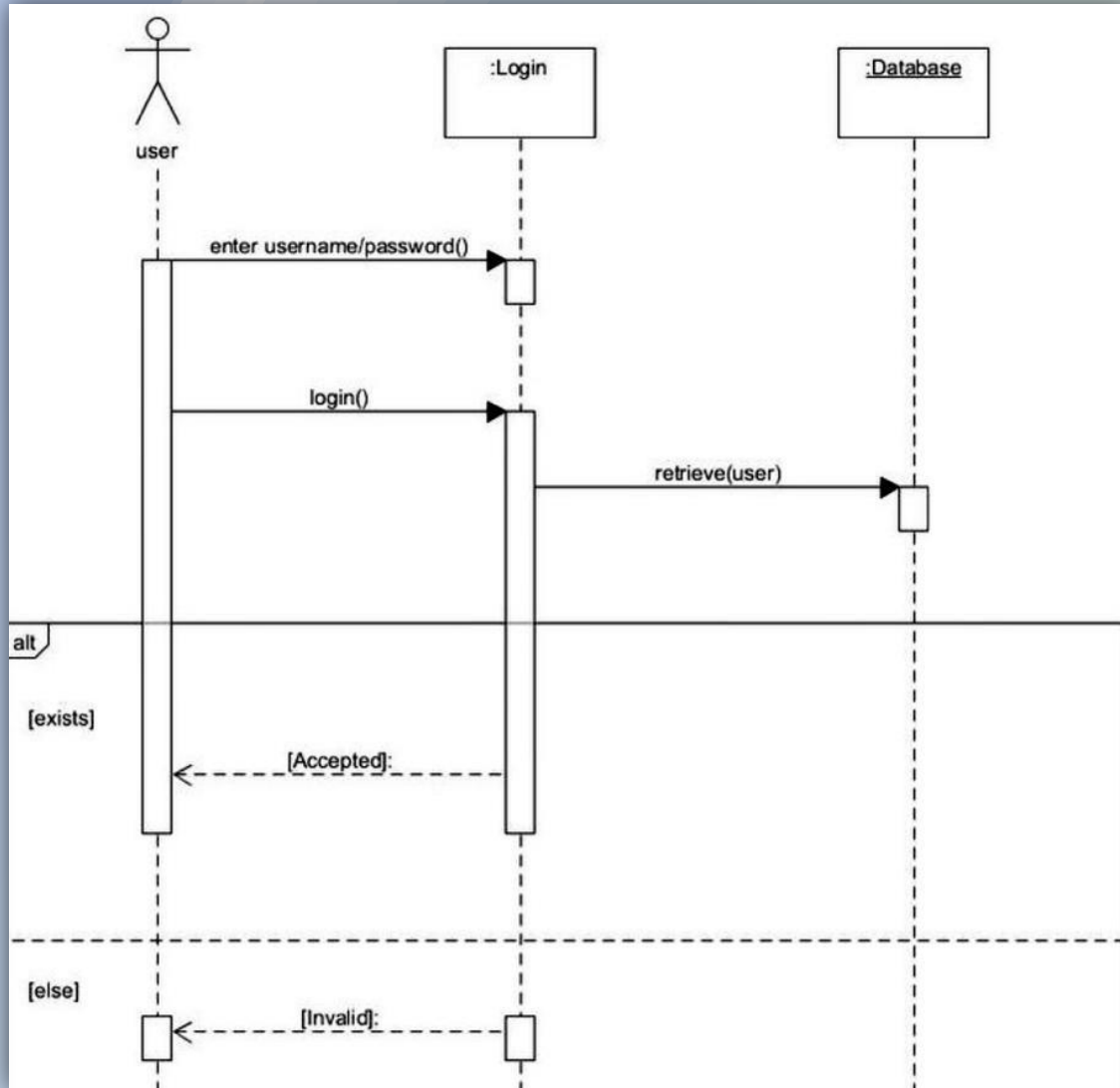
CREATING A CLASS DIAGRAM

Uber

User

UserID: integer
UserName: string
UserAdd: string
UserEmail: string
UserContactNo: double

Register()
Login()
Book()
Payment()
Feedback()

Driver

DriverID: integer
Driver Name: string
DriverAdd: string
DriverEmail: string
DriverContactNo: double

Driver Details()
BookingDetails()
RideDetails()

Payment

PaymentID: integer
PaymentType: string
PaymentDetails: string
Rewards: string

PaymentID()
PaymentInfo()
Rewards()

Vehicle

VehicleType: string
VehicleID: string

VehicleType()
VehicleID()