

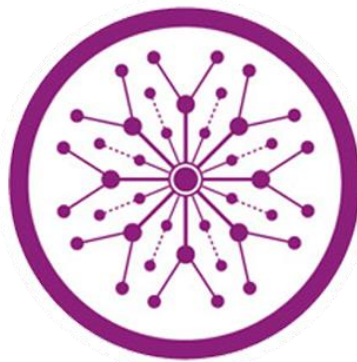
# **Pick and Drop**

**Final Year Project**

**Session 2018-2022**

A project submitted in partial fulfillment of the degree of

BS in Computer Science



Department of Computer Science

Faculty of Computer Science & Information Technology

Superior University, Lahore

FALL 2018

Type (Nature of project)	[ <input checked="" type="checkbox"/> ] Development    [ <input type="checkbox"/> ] Research    [ <input type="checkbox"/> ] R&D			
Area of specialization				
FYP ID	<b>FYP-BCSM-F21-077</b>			
<b>Project Group Members</b>				
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Designation: Lecturer

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# Project Report

## Pick and Drop

### Change Record

Author(s)	Version	Date	Notes	Supervisor's Signature
	1.0		<Original Draft>	
			<Changes Based on Feedback from Supervisor>	
			<Changes Based on Feedback From Faculty>	
			<Added Project Plan>	
			<Changes Based on Feedback from Supervisor>	

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## APPROVAL

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### PROJECT SUPERVISOR

Comments: \_\_\_\_\_

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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### PROJECT MANAGER

Comments: \_\_\_\_\_

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Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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### HEAD OF THE DEPARTMENT

Comments: \_\_\_\_\_

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Date: \_\_\_\_\_

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Pick and Drop Final Year Project Session 2018-2022 A project submitted in partial fulfillment of the degree of BS in Computer Science Department of Computer Science Faculty of Computer Science & Information Technology Superior University, Lahore FALL 2018 Type (Nature of project) \_[  Development  Research  R&D \_Area of specialization \_\_ \_FYP ID \_FYP-BCSM-F21-077 \_Project Group Members \_\_Sr.# \_Reg. # \_Student Name \_Email ID \*\_Signature \_\_(i) \_BCSM-F18-413 \_Ali Hussnain Bcsm-f18-413@superior.edu.pk (ii) BCSM-F18-416 Sharieel Mehmood

## **Dedication**

I dedicate this project to Allah Almighty my creator, my strong pillar, and my source of wisdom, knowledge and understanding. Allah has been the source of my strength throughout this program. In addition, I dedicate this project to my supervisor my team who supported me throughout the process and I dedicate this project my family specially my parents how give me strength and motivate me when I become demotivated.

## **Acknowledgements**

I am Really thankful to my supervisor who has taught guide us how to take this project in right manner, then the credit goes to the project team with whom I become able to complete this project efficiently and accordingly to the need and the output the client is Imagining and I am very thankful to my teachers.

## **Executive Summary**

We develop an Android App with the name of Pick and Drop. This app gives a platform to contact between those persons who give Pick and Drop service in his selected area and who want to take Pick and Drop service in his selected area. People can search their Drivers easily who give pick and drop service in their selected area through this Android app. People can increase their business by giving pick and drop services by using our platform. We make this Android App by using Android Studio. We use Java language on backend and XML on frontend.

There is an admin panel in our project in which admin manages the whole app. User can update their data, show their registered driver and customer and can contact with each other.

The payment of this app scenario is monthly based. Actually, this app is made for the increase of the pick and drop business and shift them to an online platform.

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# Chapter 1

## Introduction

# Chapter 1: Introduction

We develop an Android App with the name of Pick and Drop, which provides a platform for contact between those who provide Pick and Drop services and those who want to use these services. People can search for drivers easily who provide pick and drop services in their selected area through this Android app. People can increase their business by providing pick and drop services using our platform.

## 1.1. Background

Parents often face problems in choosing the right person or right service for pick and drop of their children in school, colleges, or universities. A person who lives in an area for 10 years often knows about a person who provides pick and drop services in their area, but a person who is new in the area doesn't know which person provides these services or which person to contact in this regard. So many days are wasted in searching for this service, and there is also a loss of study due to this problem.

## 1.2. Motivations and Challenges

You can get everything in life you want if you will just help enough other people get what they want."

Here are some of my motivations why I learn to create mobile apps:

1. A drive to learn new things. I'm a software developer, it's in my nature to learn new programming languages, platform, etc.
2. Self-satisfaction. It's a great feeling to achieve something.
3. A drive to create something useful for other people.
4. Career advancement. The skills and knowledge I gain will be useful for my future career.
5. Financial. It would be great to get some money out of all of the above.

**Challenges:**

1. Development Approach. Just as the world is not small, same in the case of mobileapps
2. Device Compatibility and Screen Size
3. Attention
4. Funding
5. Customer Reviews & Experience
6. Performance

**1.3. Goals and Objectives**

An app developer is a computer software engineer whose primary responsibilities include creating, testing and programming apps for computers, mobile phones, and tablets. These developers typically work in teams, and think of ideas and concepts either for the general public, or for a specific customer need. For me personally, the goal of mobile development is to help clients meet their goals, scale their businesses, improve business processes, increase output and make a difference to people's lives. So, by making this app we can solve problem of people occur choosing pick and drop service.

**1.4. Literature Review/Existing Solutions**

They are many already exist Apps like this. For example, Uber, cream but they can give only one-time service. Next time when u use their services you can again select or call the drivers on regular bases but through us App you can register your driver services monthly bases and also give them their salary on monthly bases. Before this there is no specific plat form who made for pick and drop services. There are many platforms who give services within a city or country on regular bases but this platform is specially made for those who give pick and drop services.

**1.5. Gap Analysis**

A gap analysis is a method of assessing the performance of a business unit to determine whether business requirements or objectives are being met and, if not, what steps should be taken to meet them. A gap analysis may also be referred to as a needs analysis, needs assessment or need-gap analysis. Gap Analysis of our Project is not much. We are on

front end of our App. After this we move towards area implementation. The Problem we faced is the implementation of Map API. After area implementation we work on backend. The main problem we faced find the investor for our business. The main problem we faced is the increase the petrol prices. We face issue in budget in marketing of our idea and project.

## **1.6. Proposed Solution**

To solve this problem, we develop an app when you login in it or sign up if you are using it first time. If you forget your password Then you have an option to update your password through email. You select your area in the app. In your selected area all the available registered persons profile is shown in which their name, picture, phone number, monthly fair is available. user can contact the right or preferable person for pick and drop service of their children. Then customer booked their driver and save driver information. Next time they come to the app they will see their registered driver data on the current driver option. User can update their profile and logout form the app. There is also a check box remember me for the user. If it checkbox then he did not need login in to the app. Until user logout. To solve this problem, we develop an app for the driver panel. when you login in it. if you are using it first time. If you forget your password Then you have an option to update your password through email. You select your Id in the app. In your selected id all the available registered user profile is shown in which their name, picture, phone number. Driver can contact the right or registered user for pick and drop service. Then Driver save their current customer data. Next time they come to the app they will see their registered user data on the current customer data option. Driver can update their profile and logout form the app. There is also a check box remember me for the user. If it checks box then he did not need login in to the app. Until Driver logout.

## **1.7. Project Plan**

We are creating the Web based Application with name pick and drop. We divided our project in the phases Front End and Back End. Front End phase, will also divided in some steps, first we will design the admin page, admin can add driver data register also he can manage like crude operation Our Services page. In app: customer can sign up/login. After he can enter area the choose suitable driver and contact with booked driver at time.

In app: Driver can login and see his customer pickup point and pickup time also driver update his personal information. After Completing the design of the web based application, we move toward the Backed/Functionalities of the web application.

Project Plan Includes two things:

2. Work Break Down Structure.
3. Gantt Chart consisting of Timeline with milestone.

### 3.1.1. Work Breakdown Structure

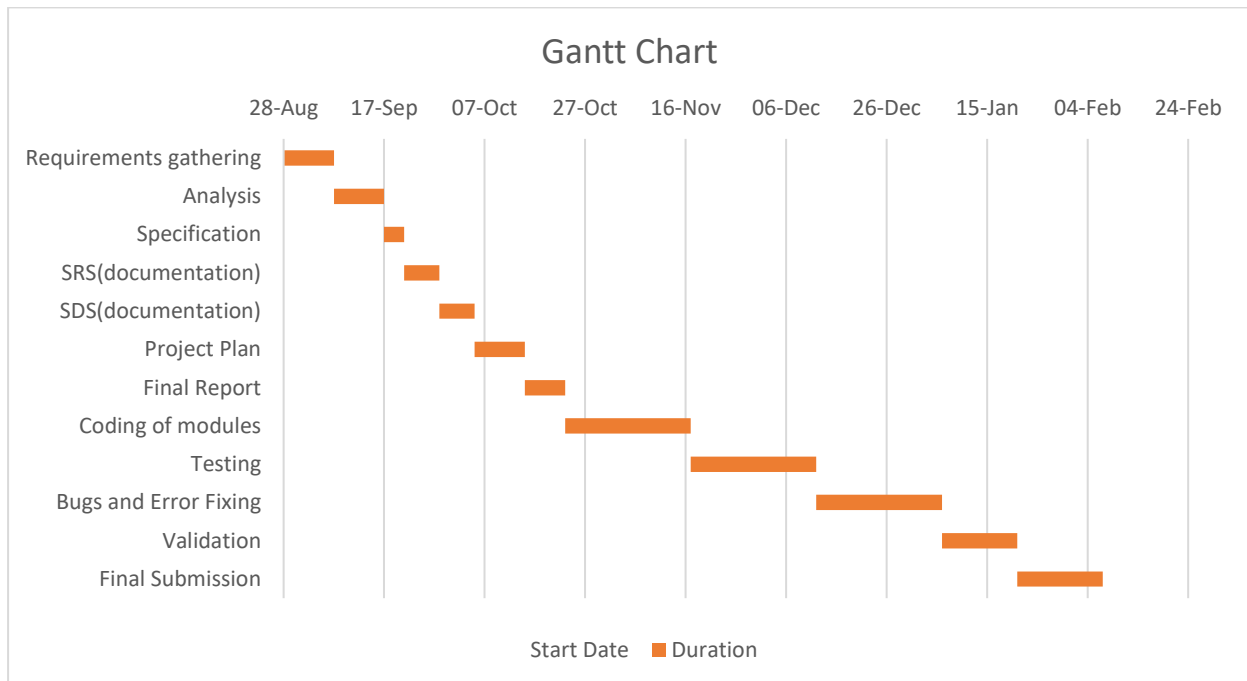
PROJECT	DURATION OF DAYS	ROLES AND RESPONSIBILITIES
Requirements Gathering	5	Ali Hussain
Analysis	5	All members
Specification	4	Ali, Sharjeel
SRS (Documentation)	7	All member
SDS (Documentation)	7	All member
Project Plan	10	Ali, Waqas
Final Report	8	All members
Coding of Modules	25	All members
Validation	15	All members
Final Submission	17	All members

### 3.1.2. Roles & Responsibility Matrix

WBS #	WBS Deliverable	Activity #	Activity to Complete the Deliverable	Duration (# of Days)	Starting Date	Responsible Team Member(s) & Role(s)
1	Requirement Gathering	1	<ul style="list-style-type: none"> <li>• Interview</li> <li>• Survey</li> </ul>	25	21 September, 2020	Ali Hussnain Muhammad WaqasSharjeel

						Mehmood
2	Refining	2	<ul style="list-style-type: none"> <li>• Reviews</li> <li>• Requirement analysis</li> </ul>	10	18 <sup>th</sup> October, 2020	Ali Hussnain Sharjeel Mehmood
3	Validation	3	<ul style="list-style-type: none"> <li>• Preliminary analysis</li> </ul>	5	20 <sup>th</sup> October, 2020	Ali Hussnain Muhammad Waqas Sharjeel Mehmood
4	Verification	4	<ul style="list-style-type: none"> <li>• Requirement Verification</li> </ul>	12	3 <sup>th</sup> November, 2020	Ali Hussnain Muhammad Waqas Sharjeel Mehmood
5	Requirement feasibility analysis	5	<ul style="list-style-type: none"> <li>• Risk analysis</li> <li>• Competitors Analysis</li> </ul>	14	12 <sup>th</sup> November, 2020	Ali Hussnain Sharjeel Mehmood
6	Documentation	6	<ul style="list-style-type: none"> <li>• Project Documentation</li> </ul>	22	24 <sup>th</sup> November, 2020	Ali Hussnain Muhammad Waqas Sharjeel Mehmood

### 3.1.3. Gantt Chart



### 3.2. Report Outline

- **Introduction**
  1. Document Conventions
  2. Intended Audience and Reading Suggestions
  3. Product scope
  4. References
- **Overall description**
  1. Product Perspective
  2. Product functions
  3. User Classes and Characteristics
  4. Operating Environment
  5. Design and Implementation Constraints
  6. User Documentation
- **External Interface requirements**
  1. User Interfaces
  2. Hardware Interfaces
  3. Software Interfaces
  4. Communications Interfaces

- **System features**
  1. System features 1
    - i. User and System requirements
    - ii. User Requirements
    - iii. Functional Requirements
- **Nonfunctional requirements**
  1. Reliability
  2. Security
  3. Useability
  4. Portability
  5. User-Friendly
- **Other Requirements**
- **System Functional Requirements**

# Chapter 2

## Software Requirement Specifications

## Chapter 2: Software Requirement Specifications

### 4.1. Introduction

#### 4.1.1. Purpose

The main objective of this document is to illustrate the requirements of the project Pick and Drop. The document gives the detailed description of the both functional and non-functional requirements proposed. The purpose of this project is to provide a friendly environment to maintain the details of drivers and client. The main purpose of this project is to maintain easy circulation system using computers and to provide different reports. The project describes the hardware and software interface requirements using ER diagram and UML diagram.

#### 4.1.2. Intended Audience and Reading Suggestions

The intended audiences for this document are:

- The team members of innovative solutions.
- The Project Supervisor Dr, Humaira Muqadas.

This document will be reviewed frequently by the above audiences to check if the different phases of the project completed by meeting the given requirements.

#### 4.1.3. Product Scope

We develop an Android App with the name of Pick and Drop which provides a platform to contact between those persons who give Pick and Drop service and who want to take Pick and Drop service. People can search their Drivers easily who give pick and drop service in their selected area through this Android app. People can increase their business by giving pick and drop services by using our platform. Parents often face problems in choosing the right person or right service for pick and drop of their children in school, colleges or universities. A person who lives in an area for 10 years often knows about a person who gives pick and drop service in their area but a person who is new in the area doesn't know which person gives this service or which person to contact in this regard so many days are wasted in searching for this service and there is also a loss of study due to this problem.

## 4.2. Overall Description

### 4.2.1. Product Perspective

They are many already exist Apps like this. For example, Uber, cream but they can give only one time service. Next time when u use their services u can again select or call the drivers on regular bases but through our app u can register your driver services monthly bases and also give them their salary on monthly bases. Before this there is no specific plat form who made for pick and drop services. There are many platforms who give services within a city or country on regular bases but this platform is specially made for those who give pick and drop services.

### 4.2.2. Product Functions

- The key goal of this initiative is to minimize the work done manually.
- Booking problems.
- Record-Keeping records according to the end-user criteria.

### 4.2.3. User Classes and Characteristics

Class	Characteristics
Admin	<ul style="list-style-type: none"> <li>• Login</li> <li>• Manage data</li> <li>• check driver data</li> <li>• add driver</li> <li>• delete driver</li> <li>• logout</li> </ul>
Customer	<ul style="list-style-type: none"> <li>• create account</li> <li>• Login,</li> <li>• Forget password</li> <li>• Update Profile,</li> <li>• Mention area,</li> <li>• Choose suitable driver</li> <li>• Booked driver</li> <li>• current driver detail</li> <li>• contact current driver</li> </ul>

	<ul style="list-style-type: none"> <li>• payment record</li> <li>• logout,</li> </ul>
Driver	<ul style="list-style-type: none"> <li>• Login,</li> <li>• Forget password</li> <li>• See and update profile</li> <li>• See current user/customer</li> <li>• Contact customer</li> <li>• Payment</li> <li>• logout</li> </ul>

#### 4.2.4. Operating Environment

- This product will be operating in windows environment.
- Platform PHP.
- Data Base: SQL.
- All the media files including images, content & cache data.

#### 4.2.5. Design and Implementation Constraints

- Specific Technology: Mobiles, Laptops, etc.,
- Tools: VS CODE, XAMPP, Adobe photoshop, android studio.
- Language requirements: php, java, xml.
- The product is developed using Java. The Backend database for this SQL Server. The product is accomplished with login facility so that specific function is available to specific user.

#### 4.2.6. User Documentation

This Product will include user manual. The user manual will include product overview, complete configuration of the used software such as Sql server, technical details, content information which will include email address. There will be no online help for the product at this moment.

#### 4.2.7. Assumptions and Dependencies

The **Assumptions** are:

- The coding should be error free.

- The system should be user-friendly so that it is easy to use for the users.
- The information of all users and drivers must be stored in database.
- The system should have more storage capacity and provide fast access to database.
- The system should provide search facility and support quick transactions.
- Users must have their correct username and password to enter into their online accounts and do actions.
- The **Dependencies** are:
- The specific hardware and software sue to which the product will be run.

### **4.3. External Interface Requirements**

#### **4.3.1. User Interfaces**

The Program offers a decent graphical interface for the user that can be run on the device by an administrator, performing the necessary tasks such as designing, reviewing.

- Allows users to access reports.

Based on various requirements, availability and search service.

#### **4.3.2. Hardware Interfaces**

- Operating System: Window
- Hard Disk: 500gb
- Ram: 16 mb

#### **4.3.3. Software Interfaces**

- Visual code, XAMPP, Adobe photoshop, android studio,
- Java, php and xml Language
- MS Sql Server

#### **4.3.4. Communications Interfaces**

- Skype
- WhatsApp

### **4.4. User and System Features**

This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section

by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.

#### **4.4.1. User Requirements**

The proposed system may contain the following set of user requirements.

##### **4.4.1.1. Functional Requirements**

The Customer requests for the whole system to be case sensitive.

The first page when you open the app should be of Sign-in/Signup containing the following functionalities;

##### **Registration:**

- The system should consist of a registration functionality so that visitors new to the site should be able to easily register themselves.

##### **Login:**

- A login functionality that varies differently between admin, driver and customer.

##### **Managing Profile:**

- Customers and Managers should be able to manage their profiles.

##### **Forgot Password:**

- A forget password option should be available allowing users to recover their accounts in case if they forget their passwords.

##### **Customers end:**

- On Customers end, the home page should have the following functionalities;

##### **Choose Area:**

- Choose your Area on
- All the drivers who give pick and drop service in your selected area profiles appear

##### **Select Driver:**

- You can select your driver according to your route or by seeing reviews you can contact your driver
- who give pick and drop service.
- All important information e.g name, phone number ,CNIC, picture and reviews etc show on a driver profile

#### **Contact with Driver:**

- After selecting u can contact your driver and also do chat with your driver
- **On Admins end**, the Home page should have the following functionalities;
- Admin has access to add ,delete ,update and search drivers information
- Admin has access to manage all data of drivers
- Admin records should be updated on basis of their ranks which would differ between three categories; Low, Medium, High.
- Admin has access to delete pick and drop service if the service is not suitable for your customer.
- Admin update the system if existing driver left or a new driver register in a system

#### **4.4.1.2. Non-Functional Requirements**

##### **Reliability:**

- It is necessary for the system to be online 24 hours per day and 7 days per week, regardless of any time-zone.
- The proposed system which the developer designs should be reliable so it efficiently interacts with user. Secure access of confidential data.

##### **Security:**

- All users must have significant logins and must login according to them.
- To avoid unauthorized access, logins should remain protected in times of system failure.
- No customer must have more than one account.

##### **Usability:**

- Getting registered must not take more than a minute or two.
- It should be easy to use for customer and manage for admin.
- People with no training shall be able to use the system.

**Portability:**

- The system should be portable to various operating environments.
- If current hosting is not suitable for system, it should be moved to another one in minimum amount of time.

**User-Friendly:**

- The system should be user friendly in all manners.
- It should take less time for customers to get registered and for all users to login.
- Admin update the system if existing driver left or a new driver register in a system.

**4.4.1.3. System Functional Requirements****1.0 Sign-in/Signup****1.1 Registration**

- 1.1.1 New customers should not be given direct access to the site.
- 1.1.2 Each new customer must have to first register themselves.
- 1.1.3 Each Customer is assigned a new Id upon registration.
- 1.1.4 Each customer should be assigned a security backup pin upon registration.

**1.2 Login**

- Customers should login to access the features of the system.
- Customers and managers should be allowed to view and update their login information.
- Login functionality should vary differently among customer and administrator.

**1.3 Forget Password**

If user forgets his/her password they would be directed to a page to enter a security pin assigned to them upon registration.

- .2. It may contain;

Variables	Constraints
-----------	-------------

Customer_id	Char/String length==13
Customer_name	Char/String (min>=3 && max <=25)
Customer_contact_number	Integer (length==11)
Customer_address	Char/String(min>=10 && max <=50)
CNIC	Integer (Length==13)
Password	Char/String(min>=3 && max <=15)
Admin_id	Char/String length==8
Password	Char/String(min>=3 && max <=15)
Security_Pin	eger (Length==5)

## 2.0 Add Drivers

2.1 Should contain an adding driver functionality so that manager may add drivers in asorted manner whenever new drivers are registered.

2.1.1 Admin should be able to view drivers information from drivers page afteradding.

2.1.2 It may contain

Variables	Constraints
Driver_Id	Char/String (min>=5 && max <=15)
Driver_Name	Char/String (min>=3 && max <=25)
Driver address	ar/String Char/String (min>=5 && max <=15)
Driver Phone Number	Integer
Driver Cnic	Integer
Driver Experience	Integer

## 3.0 Update/Delete Driver information

3.1 Should contain an updating and deleting drivers information functionality in a sorted manner so that admin may update or delete old data of drivers whenever needed.

### 3.2 Monthly Payment Method

After confirming pick and drop services, Customer is to select the payment method. They are of two types. Cash after completing one month of service online transaction of money through easypaisa or jazz cash number.

when driver get his salary successfully, he updates

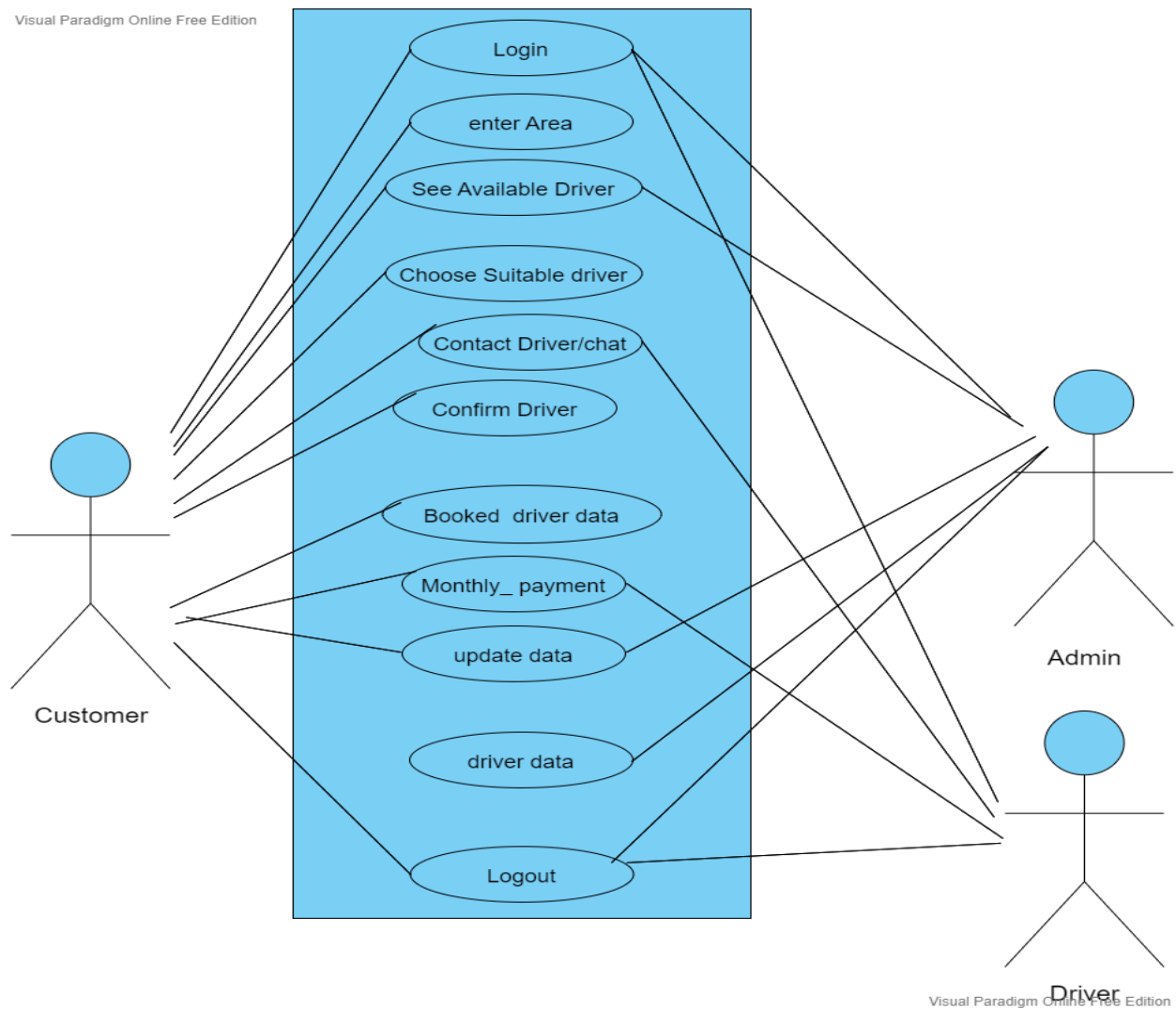
# Chapter 3

## Use Case Analysis

## Chapter 3: System Analysis

In use case form, this chapter is all about the system's roles and functionalities, as well as its actors. We created a use case diagram in which each functional and nonfunctional requirement was properly stated according to the appropriate id or tiers. The following use case explains the relationship between actors and their functions.

### 3.1. Use Case Diagram



### 3.2. Use Case Descriptions

<b>Name</b>	LogIn
<b>ID</b>	cust001
<b>Description</b>	Customer and Driver will login
<b>Actors</b>	User, Driver
<b>Preconditions</b>	User has an authenticated account , should sign up
<b>Postconditions</b>	After a successful login a notification mail is sent to the User mailid
<b>Main Course</b>	<ol style="list-style-type: none"><li>1. Enter Email</li><li>2. Enter Password</li><li>3. Validate Username and Password</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. Invalid Username System shows an error message</li><li>2. Invalid Password System shows an error message</li><li>3. Invalid Password for 4 timesApplication closed</li></ol>

<b>Name</b>	Select the area
<b>ID</b>	cust001
<b>Description</b>	Customer select the area where he want to go
<b>Actors</b>	User, Driver
<b>Preconditions</b>	Customer must be authenticate login
<b>Postconditions</b>	After mention the area , he can check all available drivers
<b>Main Course</b>	<ol style="list-style-type: none"><li>1. User mention the area for need</li><li>2. Check Available drivers profiles</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. data not found</li></ol>

<b>Name</b>	Available drivers Profile
<b>ID</b>	cust001
<b>Description</b>	User Can check all available drivers nearby to this location

<b>Actors</b>	User, Driver
<b>Preconditions</b>	User must be login and selected area
<b>Postconditions</b>	After mention area he can choose suitable driver
<b>Main Course</b>	<ol style="list-style-type: none"><li>1. mention area</li><li>2. See all available drivers nearby</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. Not shown available drivers</li><li>2. Session expired</li></ol>

<b>Name</b>	Choose Suitable Driver
<b>ID</b>	cust001
<b>Description</b>	Customer choose suitable driver
<b>Actors</b>	User, Driver
<b>Preconditions</b>	User must be login and selected location and then check profiles of available drivers
<b>Postconditions</b>	After choose then user can book that driver

<b>Main Course</b>	<ol style="list-style-type: none"><li>1. Choose the suitable driver</li><li>2. Driver must be rated high</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. Not selected location</li><li>2. Not login</li><li>3. Session expired</li></ol>

<b>Name</b>	Book Driver
<b>ID</b>	cust001
<b>Description</b>	Customer booked that suitable driver
<b>Actors</b>	User, Driver
<b>Preconditions</b>	User must be login and selected location and then choose that suitable driver
<b>Postconditions</b>	After choose then user can make deal of payment with thatdriver
<b>Main Course</b>	<ol style="list-style-type: none"><li>1. Booked the suitable driver</li><li>2. Driver must be rated high</li><li>3. Driver must be experienced</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. Driver may be not experienced</li><li>2. Not login</li></ol>
	<ol style="list-style-type: none"><li>3. Session expired</li></ol>

<b>Name</b>	Logout
<b>ID</b>	cust001
<b>Description</b>	Customer can logout now
<b>Actors</b>	User
<b>Preconditions</b>	User must be login
<b>Postconditions</b>	After choose then user redirect to home page or login page
<b>Main Course</b>	<ol style="list-style-type: none"><li>1. Payment Deal must be done</li><li>2. Driver must be rated high</li><li>3. Driver must be experienced</li></ol>
<b>Exceptions</b>	<ol style="list-style-type: none"><li>1. Not login</li><li>2. Session expired</li></ol>

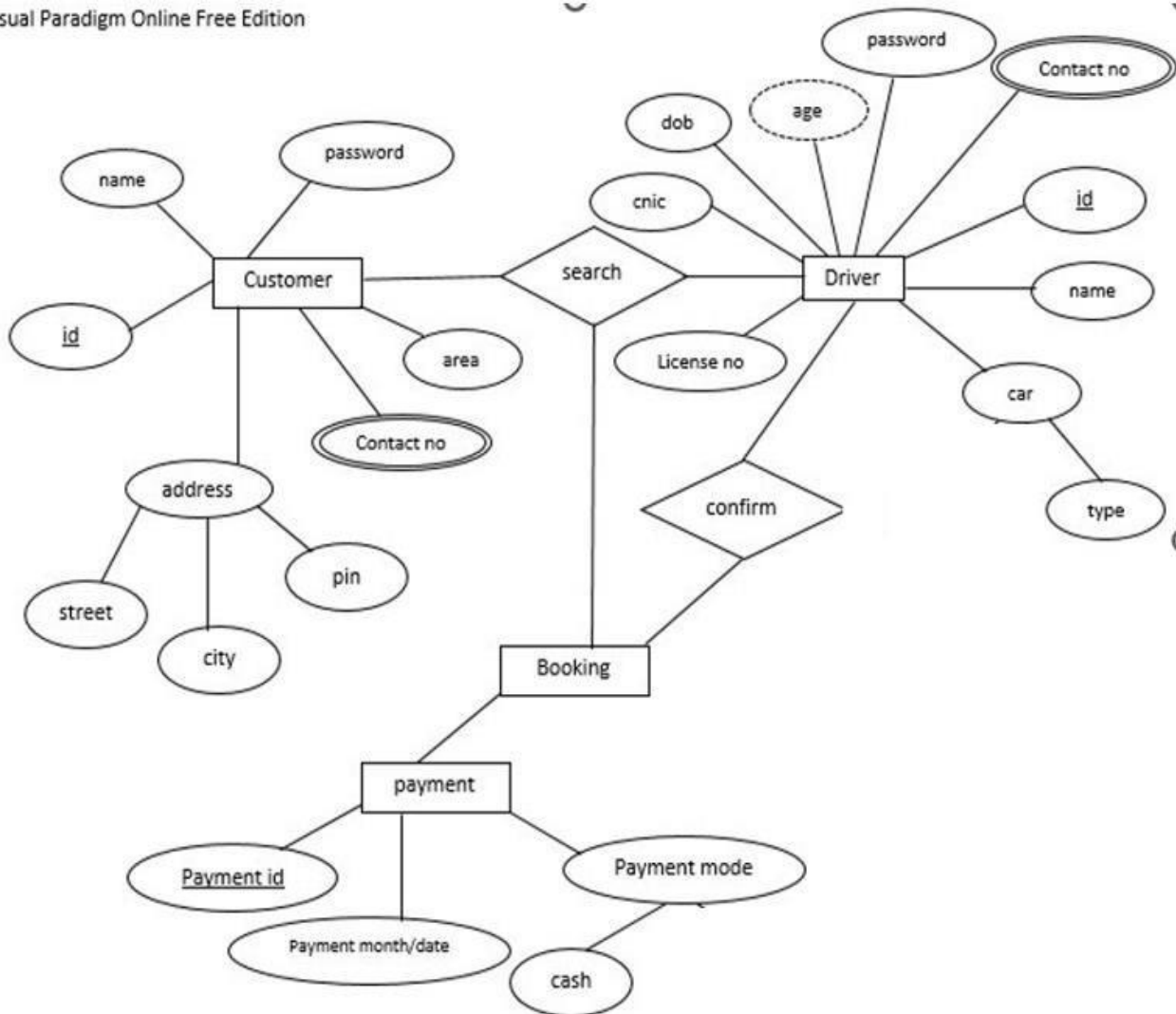
# Chapter 4

## System Design

## Chapter 4: System Design

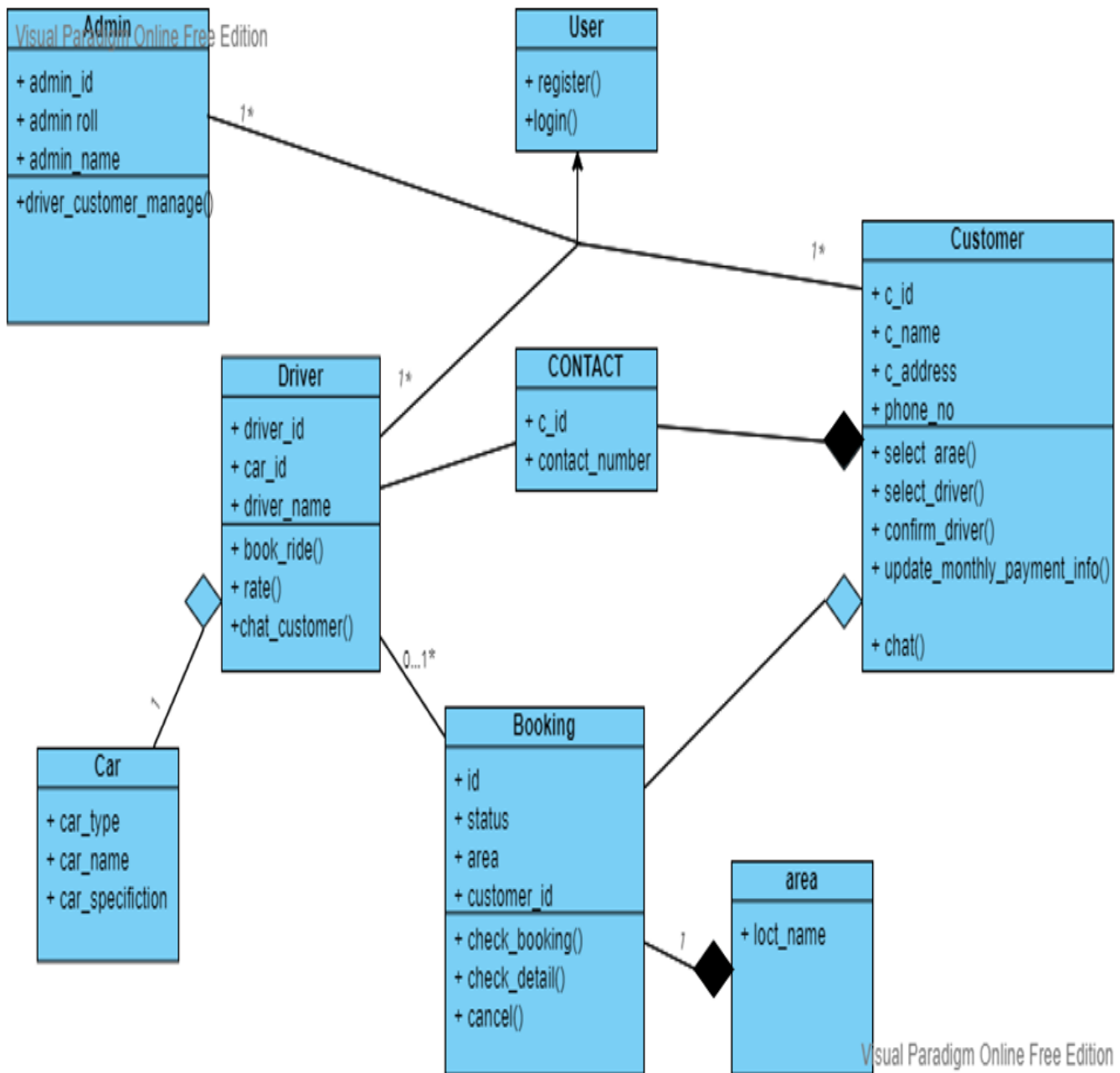
### 4.1. Erd Diagram

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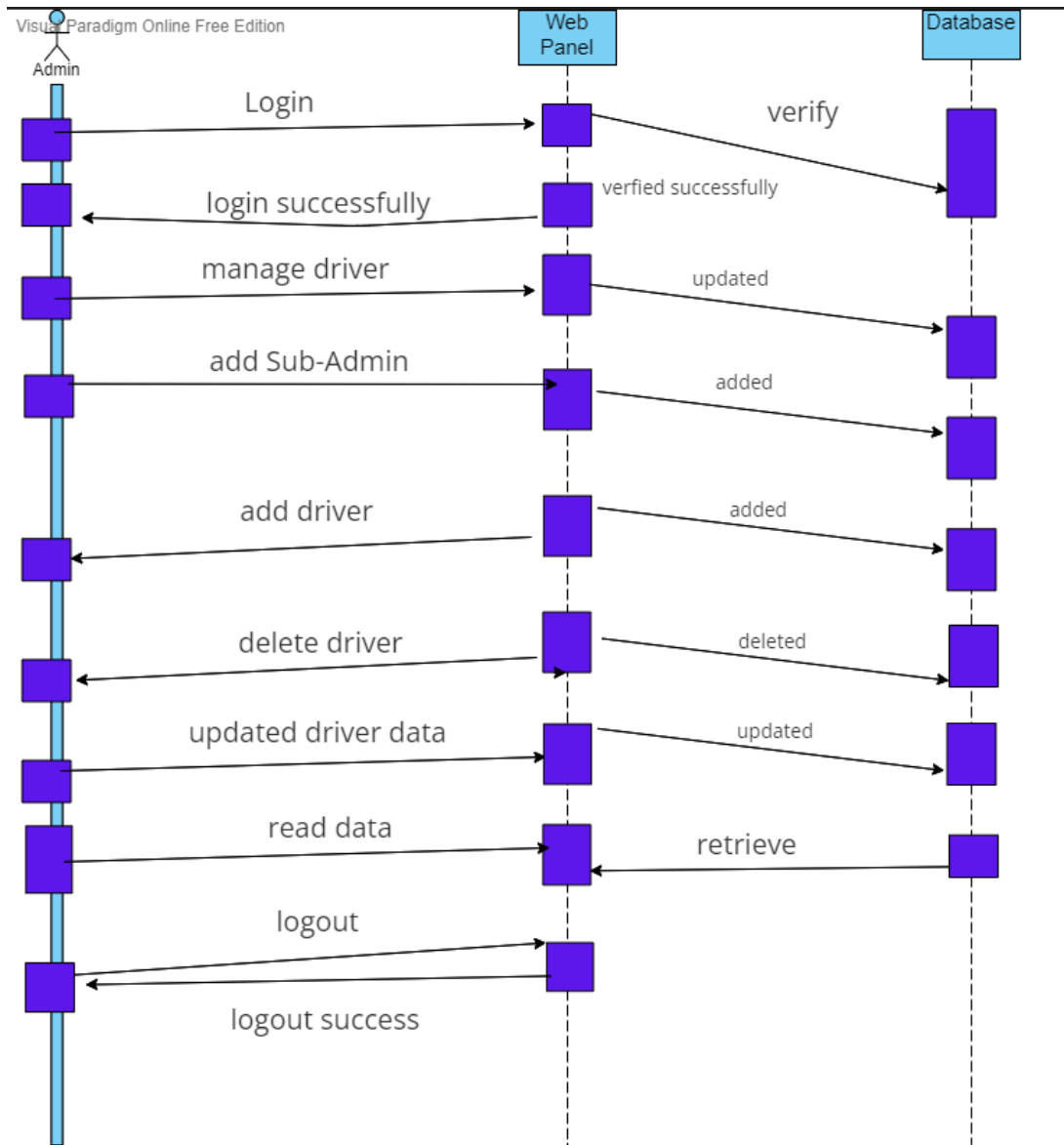
Visual Paradigm Online Free Edition

## 4.2. Class Diagram

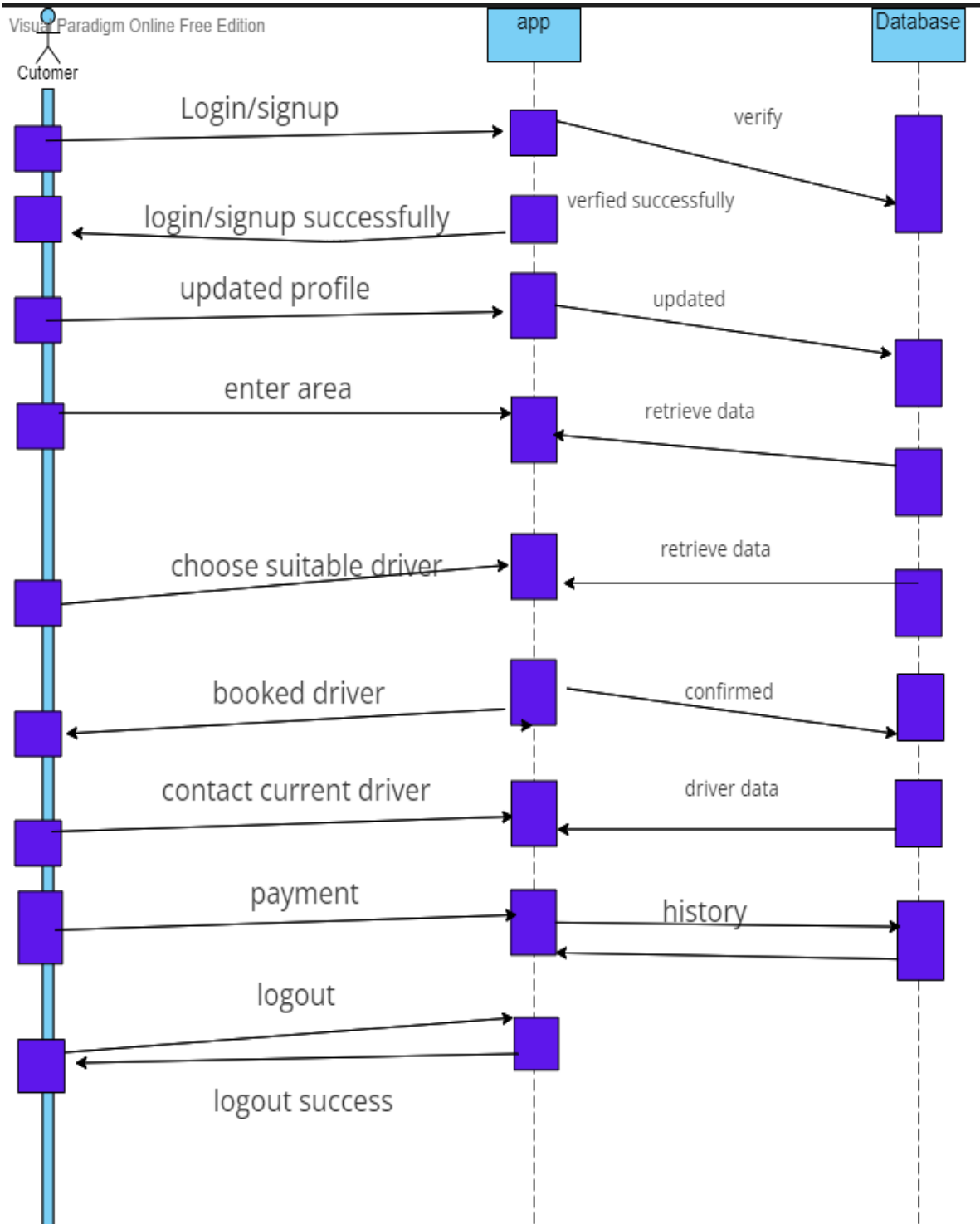


### 4.3. Sequence Diagram

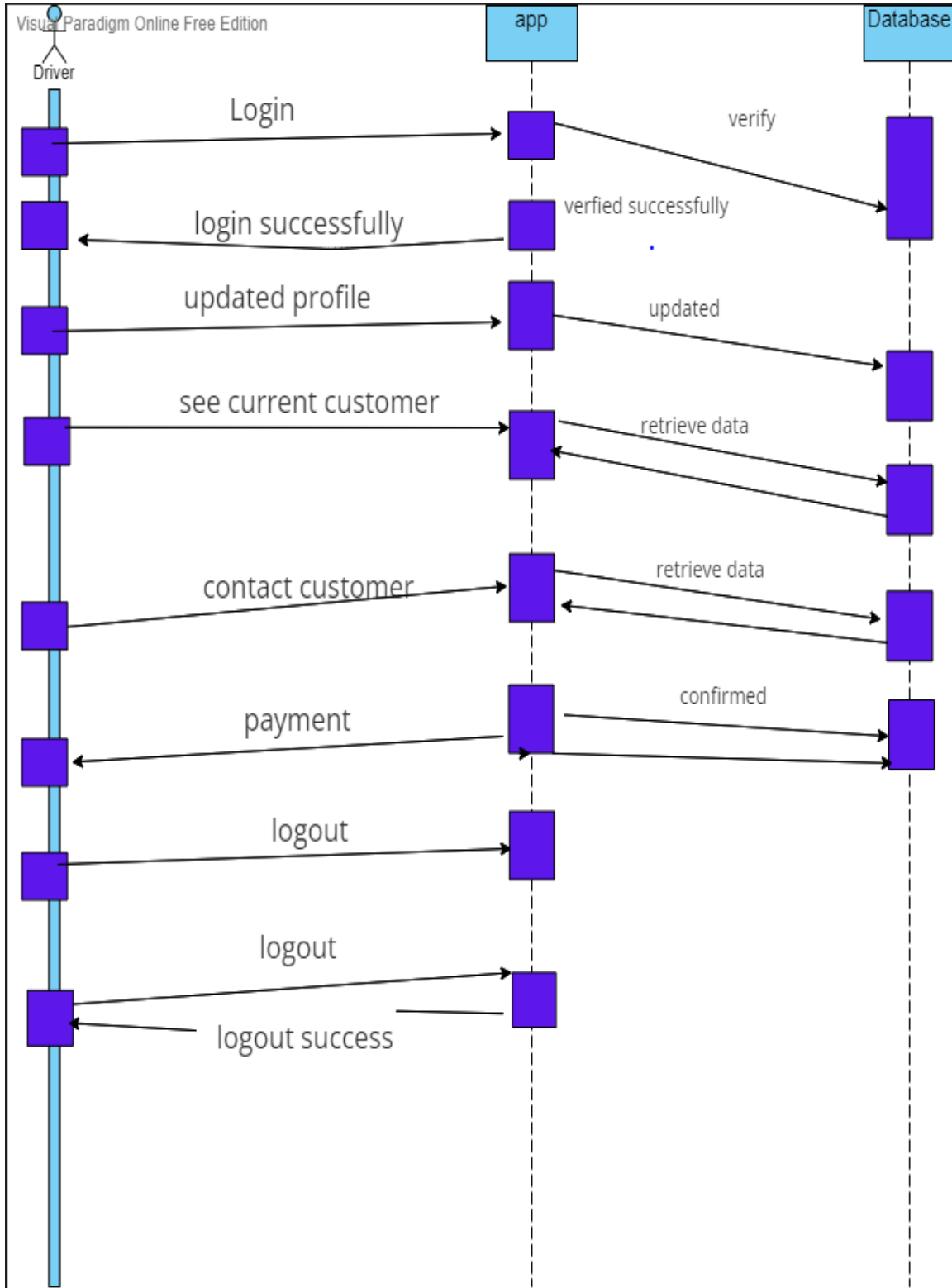
Admin end:



Customer end:

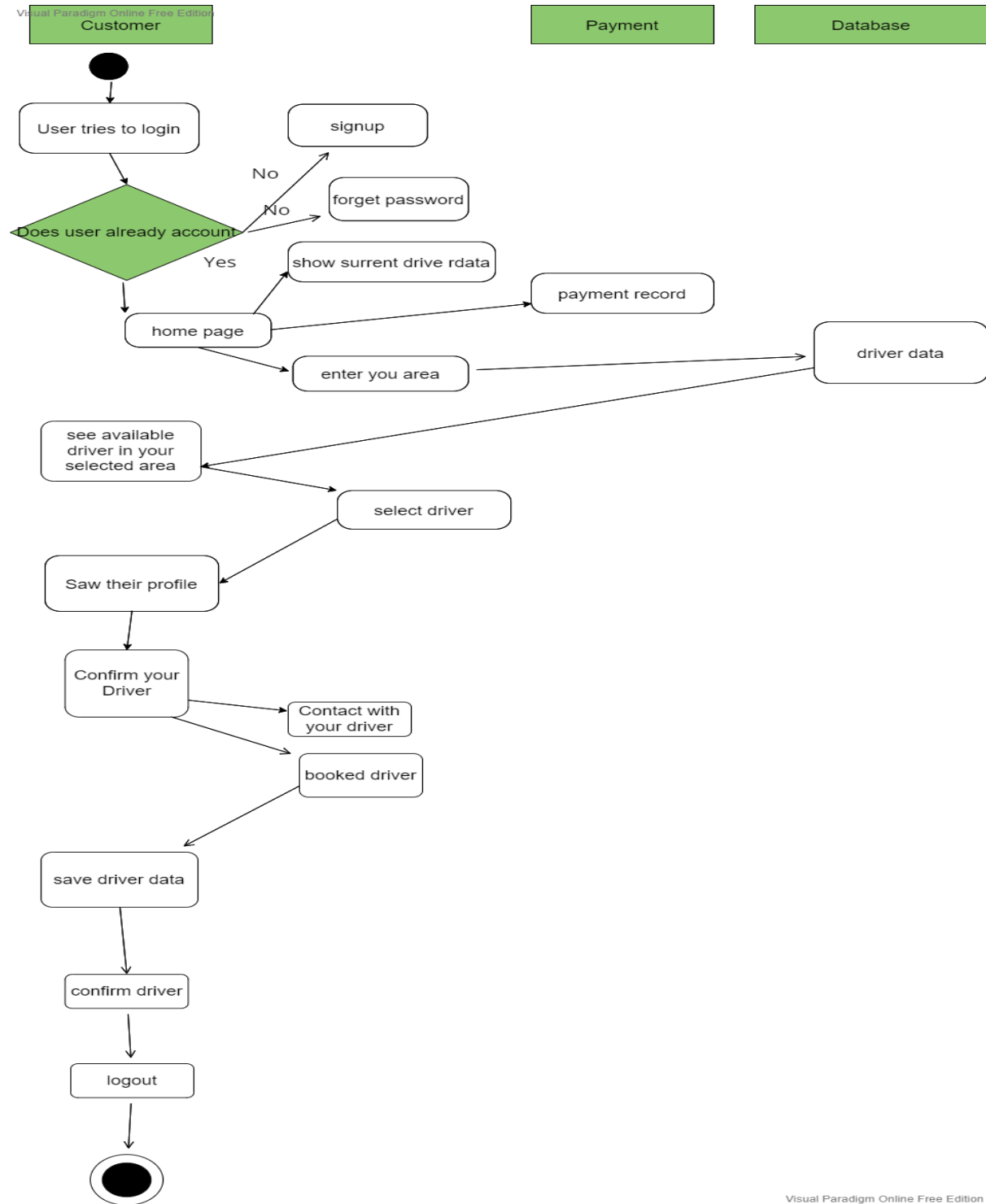


Driver end:



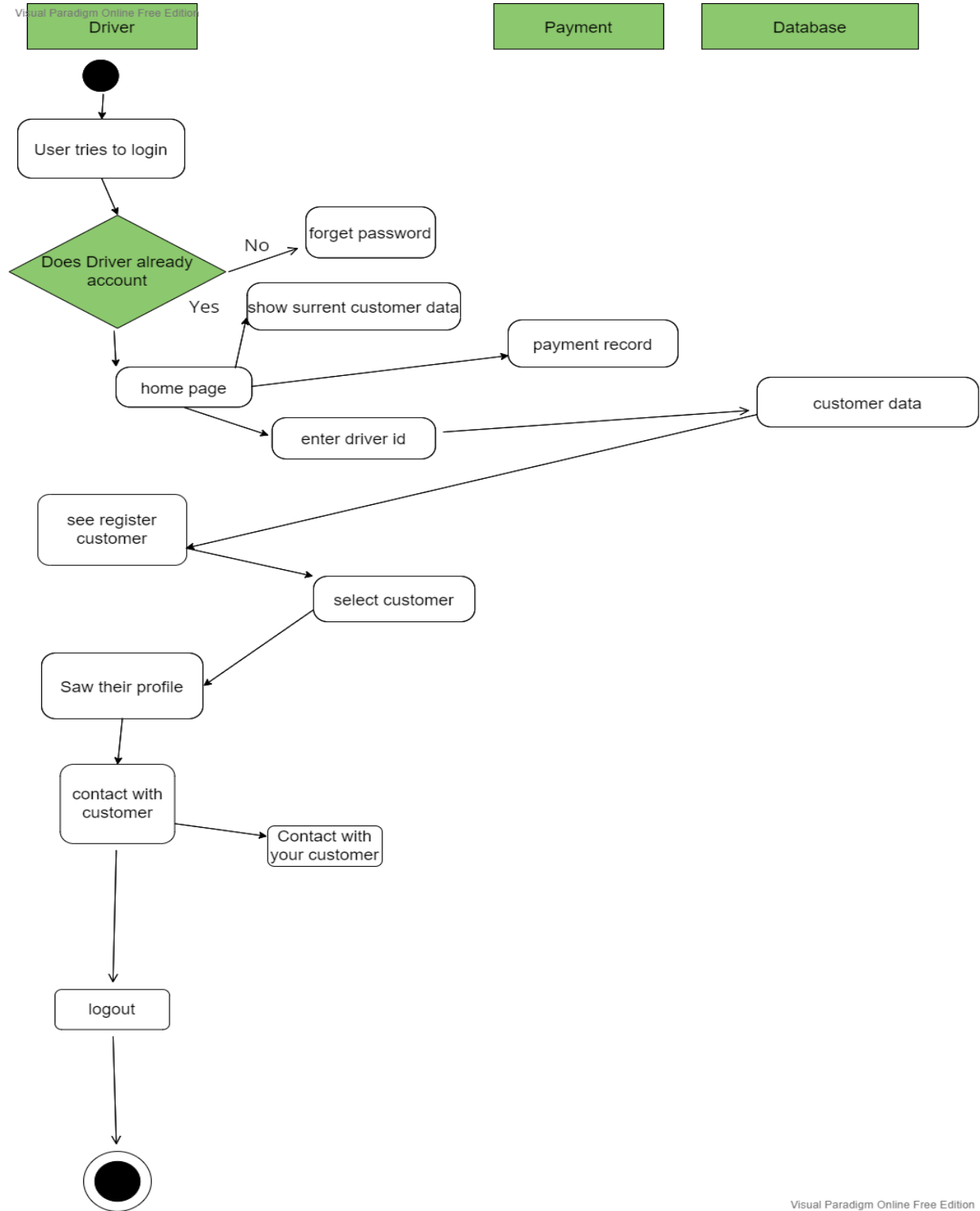
### 4.4. Activity Diagram

Customer end:



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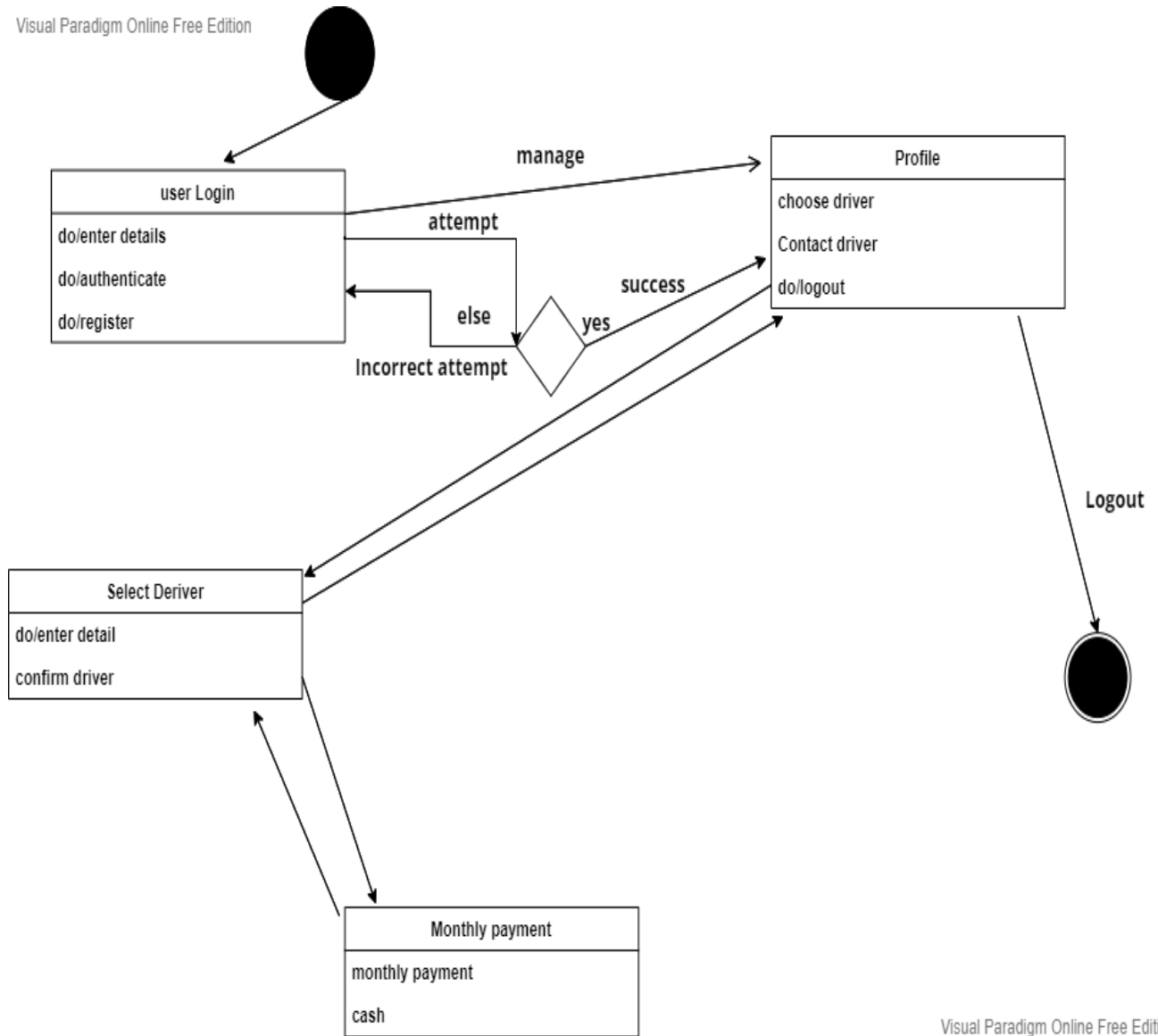
Driver end:



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### 4.5. State Chart Diagram

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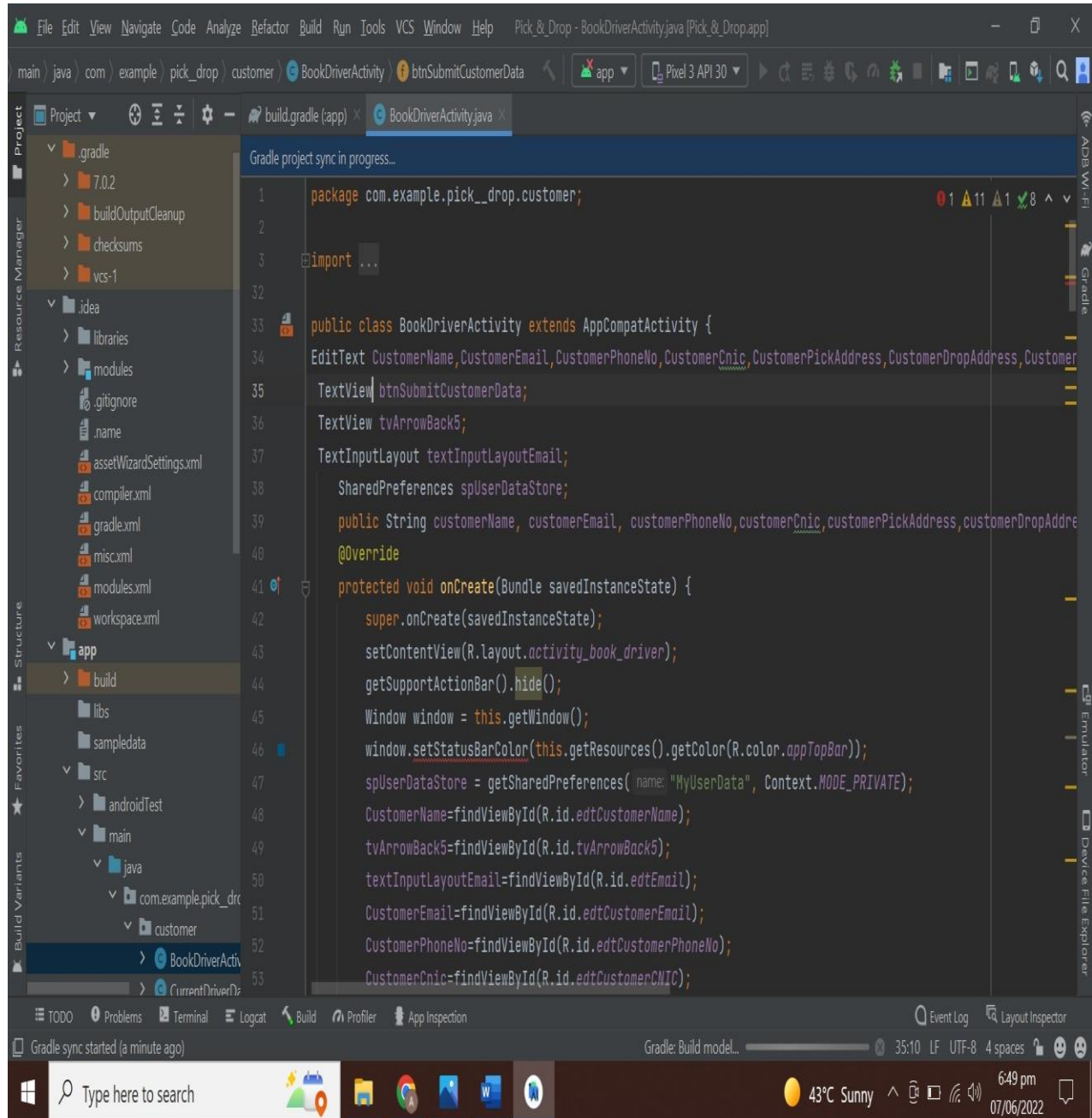
Visual Paradigm Online Free Edition

# Chapter 5

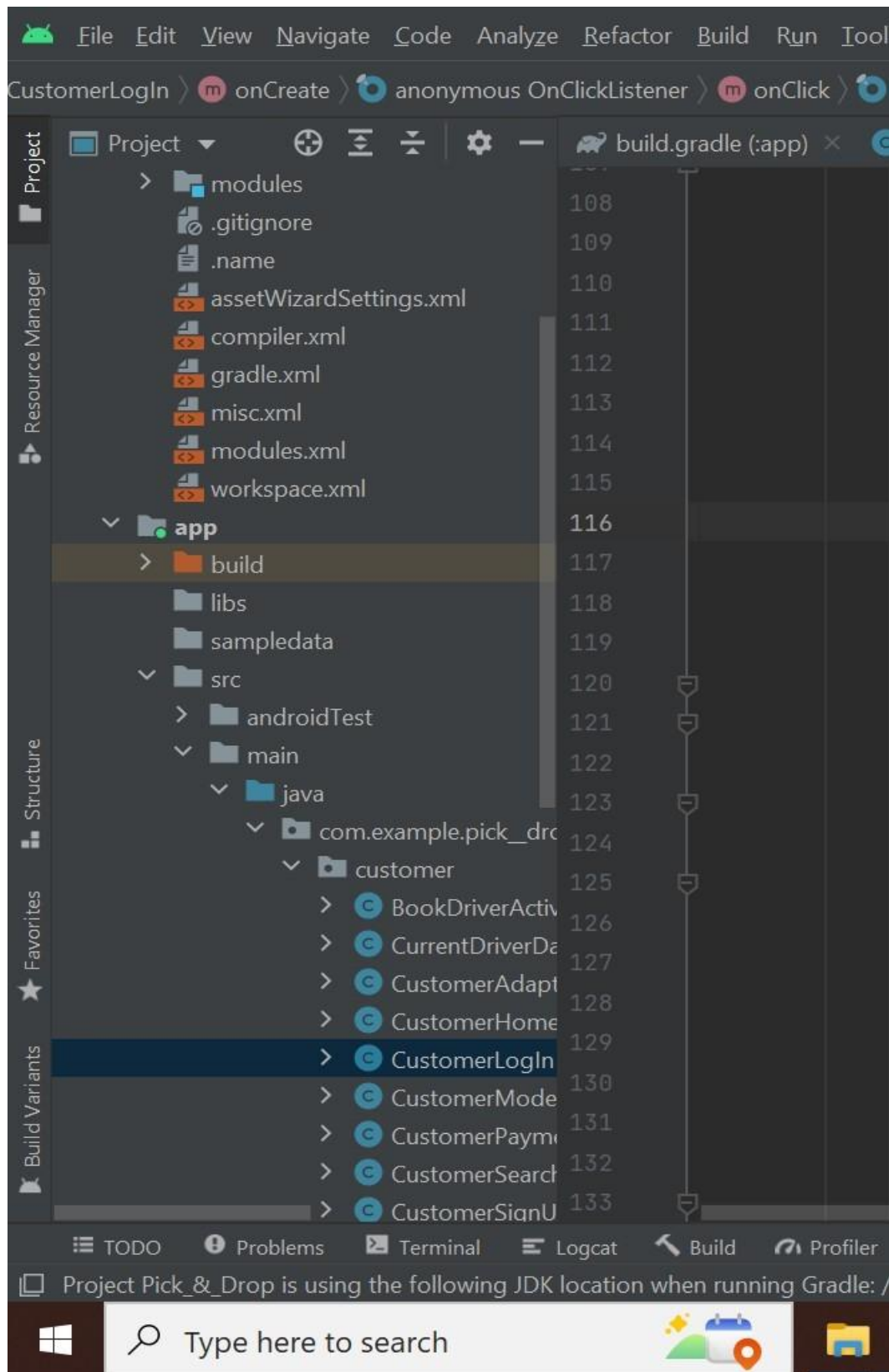
## Implementation

# Chapter 5: Implementation

## 5.1 Pseudo codes



```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help Pick & Drop - BookDriverActivity.java [Pick & Drop.app]
main java com example pick_drop customer BookDriverActivity btnSubmitCustomerData app Pixel 3 API 30
Project build.gradle (app) BookDriverActivity.java
Resource Manager
Structure
Favorites
Build Variants
Gradle project sync in progress...
1 package com.example.pick_drop.customer;
2
3 import ...
32
33 public class BookDriverActivity extends AppCompatActivity {
34     EditText CustomerName, CustomerEmail, CustomerPhoneNo, CustomerCnic, CustomerPickAddress, CustomerDropAddress, Customer
35     TextView btnSubmitCustomerData;
36     TextView tvArrowBack5;
37     TextInputLayout textInputLayoutEmail;
38     SharedPreferences spUserDataStore;
39     public String customerName, customerEmail, customerPhoneNo, customerCnic, customerPickAddress, customerDropAddress;
40     @Override
41     protected void onCreate(Bundle savedInstanceState) {
42         super.onCreate(savedInstanceState);
43         setContentView(R.layout.activity_book_driver);
44         getSupportActionBar().hide();
45         Window window = this.getWindow();
46         window.setStatusBarColor(this.getResources().getColor(R.color.appTopBar));
47         spUserDataStore = getSharedPreferences("MyUserData", Context.MODE_PRIVATE);
48         CustomerName=findViewById(R.id.edtCustomerName);
49         tvArrowBack5=findViewById(R.id.tvArrowBack5);
50         textInputLayoutEmail=findViewById(R.id.edtEmail);
51         CustomerEmail=findViewById(R.id.edtCustomerEmail);
52         CustomerPhoneNo=findViewById(R.id.edtCustomerPhoneNo);
53         CustomerCnic=findViewById(R.id.edtCustomerCnic);
```



## 5.2 Libraries

- Voleey
- Material design
- Gsun
- Drawable
- Recycleeview
- Cardview
- Appcompt
- Circleimageview and much more.

## 5.3 Tools and Techniques

- Android Studio
- XAMPP, VS code
- Java Language
- Using online platform for understand and solution for criticle problem related project

## 5.4 Best Practices / Coding Standards

- Secure
- Reliable
- Testable
- Maintainable

# Chapter 6

## Testing and Evaluation

## 6.1. Use Case Testing

# 4. Test Case's:

TC:1.0 Registration/Login/Forget Password

TC:1.1 Registration

Description	Sample Data		Expected Result	Actual Result	Status
Registering a profile	Name/ CN/Address/CNIC/Pw				
Checking Limitations					
min>=3 && max <=25 length==11 min>=3 && max <=50 length==13 min>=3 && max <=15	Danish Shakeel 03354108371 55 K2 Wapda Town,Lahore35202- 2784412-0 Jelly12345	Valid	Customer should be directed towards the home page of our pick and drop service system.		
Min<3 Length<11 Min<10 Length<13 Min<3	Dan 0335410 83 55 K2 Wap 35202-278441-0 Me	Invalid	As entries were invalid, user shall again be directed to registration page.		
Min>25 Length>11 Min>50 Length>13 max>15	Danishsakfafaahasfhasfhsaddgf ahfhsf 033541083712 55 K2 Wapda town lahoregdgfgfgfgf g 35202-278441-01 elly1234555555	Invalid	As entries were invalid, user shall again be directed to registration page.		
Failure Situation Select Registration Option			Opens up link to another page		

TC:1.2 Login1.2.2 Admin

Description	Sample Data		Expected Result	Actual Result	Status
Logging in	ID/Password		Login/Home		
Checking Limitations					
Length==8 min>=3 && max <=15	Adm-1234 Jelly12345	Valid	Admin will be granted access to the site an error message will be displayed.		
Length<8 Min<3	A1fs adJe	Invalid	Admin will not be granted access to the site.		
Length>8max >15	Adm-1234567897 Jelly1234555555	Invalid	Admin will not be granted access to the site.		
Failure Situation Select Login Option			Opens up link to another page		

1.2.3 Customer

Description	Sample Data		Expected Result	Actual Result	Status
Logging in	ID/Password		Login/Home		
Checking Limitations					
Length==13 min>=3 && max <=15	Customer- 0001 Jelly12345	Valid	Customer will be granted access to the site.		
Length <13 Min< 3	Customer erJe	Invalid	Customer will not be granted access to the site an error message will be displayed.		
Length >13 max >15	Customer- 1234567897 Jelly1234555555	Invalid	Customer will not be granted access to the site an error message will be displayed.		
Failure Situation Select Login Option			Opens up link to another page		

TC:1.3 Forget Password

Description	Sample Data		Expected Result	Actual Result	Status
Forget Password	Security Pin		Login/Home		
Checking Limitations					
Integer(Length==5)	12345	Valid	Site Access will be granted.		
<5	1234	Invalid	Site Access will not be granted.		
>5	123456	Invalid	Site Access will not be granted.		
Char	C1234	Invalid	Site Access will not be granted.		
Failure Situation Select Forget Password Option			Opens up link to another page		

## TC:1.4 View/Update-Login

Description	Sample Data		Expected Result	Actual Result	Status
View Profile	Click Profile Option Click View Profile Option		Profile		
Failure Situation View Profile	Click Profile Option		Opens link to another page		
Update Profile	Click Profile Option Click View Profile Option Click Update Option		Update Profile Page		
For Customer	Name/ CN/Address/CNIC/Pw				
Checking Limitations	Updating data from	Updating data to			
min>=3 && max <=25 length==11 min>=3 && max <=50 length==13 min>=3 && max <=15	Danish Shakeel 03354108371 55 K2 Wapda Town,Lahore 35202- 2784412-0 Jelly12345	Ali Was eem 033 541 083 71 56 K2 Wapda Town,Lahore 35202-2784412-0 Mango12345	Valid	Customer profile will be updated.	
Min<3 Length <11 Min<10 Length <13 Min<3	Danish Shakeel 03354108371 55 K2 Wapda Town,Lahore 35202- 2784412-0 Jelly12345	A l 0 3 3 2 1 3 1 55 K2 35202- Je	Invalid	Customer profile will not be updated, an error message will be displayed.	

## TC:2.0 Add Driver

Description	Sample Data	Expected Result	Actual Result	Status
Adding a Drivers	Id/Name/ phone number/cnic/address/experience	Drivers Management Page		
Checking Limitations				
min>=5 && max <=15 min>=3 && max <=25 min>=5 && max <=15 Float Integer	driver-001 waqas akhter 03213455 66 35200547339030 H#677 awan town lahore 2 years driving experience	Valid	Admin shall be directed towards the Drivers management page of our Pick and drop service system.	
min<5 min<3 min<5 Char Char Char	L a L a C h E2y8y88888 lahore Hundred years	Invalid	Admin shall not be directed towards the Drivers management page of our Pick and drop system, an error message will be displayed.	
max >15 max >25 max >15 Char Char Char	S1-00102312 sherjeel 8277282829 92 Eight Ten Hundred days	Invalid	Admin shall not be directed towards the Drivers management page of our pick and drop management system, an error message will be displayed.	
Failure Situation Select Add ProductOption			Opens up link to another page	

## TC:2.1 View Drivers

Description	Sample Data	Expected Result	Actual Result	Status
Viewing a Drivers info				
Click View Drivers Option		Products Page		
Failure Situation Click View drivers Option		Opens up link to another page		
Failure Situation Click View Drivers Option		Displays an error		
Failure Situation Select View Drivers Option		Opens up link to another page		

## TC:3.0 Update/Delete Drivers

## TC:3.1 Update

Description	Sample Data			Expected Result	Actual Result	Status
Updating a Drivers	Id/Name/ add/cnic/p num/experience			Drivers Management Page		
Checking Limitations	Updating Drivers from	Updating Drivers to				
min>=5 && max <=15 min>=3 && max <=25 min>=5 && max <=15Float Float Integer	D-001 Waqas akhter H#2 awan town 345678902122 0 2 034242424 7 1 years	D-001 Waqas Ali H#2 hassan town,l ahore 34567890212 202 0342424276 2 years	Val i d	Drivers Record willbe updated.		
min<5 min<3 min<5 Char Char Char	D-001 hamza awan town 34569 42424247 1	D-001 hamza awan town 3456 9 42424247878 1 years	Inval id	admin shall not beable to update Drivers record, an error message will be displayed.		
max >15 max >25 max >15 Char Char Char	D-001 Abu bakar sheikhupura 34569878 9 42424247 1	D-001 Abu bakar sheikh 34569 8789 42424247 1 years	Inval id	admin shall not beable to update Drivers record, an error message will be displayed.		
Failure Situation Select Update driverOption				Opens up link to another page		

TC:3.2 Delete

Description	Sample Data	Expected Result	Actual Result	Status
Deleting a driver via ID	Id	driver Management Page		
Checking Limitations				
min>=5 && max <=15	driver-001	Valid	driver Record will be deleted.	
min<5	Driver	Invalid	driver Record will not be deleted, an error message will be displayed.	
Max>15	driver-001dfasfa	Invalid	driver Record will not be deleted, an error message will be displayed.	
Failure Situation Select Delete driverOption			Opens up link to another page	

## TC: 4.1 View Drivers

Description	Sample Data		Expected Result	Actual Result	Status
driver list	Id/Name/P-num/address		driver list Page		
view Available driver by selecting driver option	driver-001 waqas akhter 03456543 36 H#34 awan town lahore		driver shall be displayed as shown in sample data.		
Select drivers Option			Opens up link to another page		

## TC: 4.2 Search Drivers

Description	Sample Data		Expected Result	Actual Result	Status
Search for driver	Id/Name		Search driver option.		
Search for driver for convenience and ease of use.					
a will search by id min>=5 && max <=15	Drivers-001	Valid	The searched driver will be displayed along with its data		
Min<5	Waqas	Invalid	The searched driver will not be displayed, an error message will appear.		
Max>15	waqas-001123121	Invalid	The searched driver will not be displayed, an error message will appear.		

Customer will search by Name min>=3 && max <=25	waqas-Masala	Valid	The searched driver will be displayed along with its price.		
Min<3	La	Invalid	The searched driver will not be displayed, an error message will appear.		
Max>25	Waqas Cheese & Salted	Invalid	The searched driver will not be displayed, an error message will appear.		
Select Search Option in drivers option			Opens up link to another page		

TC: 5.4 Confirm Driver

Description	Sample Data	Expected Result	Actual Result	Status
Confirming an driver services				
Click Confirm driverservices option		driver Confirmed		
Failure situation Click Confirm driver option		Displays error driver is not confirmed		

# Chapter 7

## Summary and Conclusion

## 7.1. Project Summary

We develop an Android App with the name of Pick and Drop. This app gives a platform to contact between those persons who give Pick and Drop service in his selected area and who want to take Pick and Drop service in his selected area. People can search their Drivers easily who give pick and drop service in their selected area through this Android app. People can increase their business by giving pick and drop services by using our platform. We make this Android App by using Android Studio. We use Java language on the backend and XML on the frontend.

## 7.2. Achievements and Improvements

In the beginning we develop an app for all ages of people for daily basis use.

The goal of mobile development is to help clients meet their goals, scale their businesses, improve business processes, increase output and make a difference to people's lives. So, by making this app we can solve the problem of people occurring choosing pick and drop service.

In Improvement:

- Efficiency
- Zero wait time
- Feedback
- In future Discount

## 7.4. Lessons Learnt

Install and configure Android application development tools. Design and develop user Interfaces for the Android platform. Save state information across important operating system events. Apply Java programming concepts to Android application development

An extensive look at the Java programming language.

Learn Android development with Java for the frontend, XML for the backend and PHP MySQL for the database.