# Sample of SRS - The Online driver booking system is a user-friendly website to book drivers

Project (Aligarh Muslim University)

**(CSM-4471)**

**MINI PROJECT**

# FINAL REPORT

**ON**

# ONLINE DRIVER BOOKING SYSTEM

**Submitted To:**

**(Teachers Name)**

**Submitted By:**

**(Students Name & roll no.)**

**ACKNOWLEDGEMENT**

# ABSTRACT

The Online driver booking system is a web-based application where customers can easily search for driver profiles and book drivers as per their requirements and at their convenience. Also, it provides a platform for drivers to get registered on the website and get booked by customers. In simple terms, this software acts as a bridge between customers and drivers.

Admin in this Online driver booking system will log in with the default username and password and only admin has authority to edit or delete the driver's profile. Admin can also add the driver's profile and can view bookings.

In the system, customers need to register themselves first. After that, they can easily find and book drivers and save their time as well as money. On this platform, drivers can upload their profiles and customers can find drivers' profiles based on city, date, and type of vehicle just by clicking on the search drivers button. After clicking on the button customers will get a list of driver profiles from which customers can choose and book drivers by clicking on the book now button. After clicking that button the customer's request will be sent to that driver and he can view that request and will call the customer for final confirmation.

# CONTENTS

## Chapter – 5: Result and Discussion



## Chapter – 6: Conclusion



## Appendix:

# 1. INTRODUCTION

## 1.1 Introduction

Finding drivers temporarily is a matter of headache for those people who do have their transport in the city but don't want to drive instead need to sit back and enjoy their ride. On occasions like going for their weekly grocery shopping trips, picking kids from school, or are looking for a relaxed ride back home or to a business meeting, and on many other situations they feel the necessity of a driver to sort out the problems. So if it is possible to design or develop a web-based application for availing drivers whenever and wherever possible, then it will be beneficial for customers. Nowadays, with some clicks only, we can get whatever we want at home. We already know about online shopping, e-banking, etc. Similarly, The Online driver booking system is a user-friendly website to book drivers online within few clicks only.

## 1.2 Literature Survey

As the current system is the conventional way of booking drivers that is book drivers temporarily, usually by asking someone or going to some agency. This process is time-consuming and not a convenient job. This project is aimed to develop a driver booking web-based application that is user-friendly.

## 1.3 Present state of the art and its shortcoming

The present state of the art is manual. Some of the drawbacks of the existing system are:

- This existing system process is time-consuming.
- It is not a convenient job.
- It is also cost-ineffective.
- It is difficult to find the comparison between the charges offered by different drivers.
- The bookings were manually recorded which was also not reliable.

After realizing above mentioned problems, the main aim is to develop an application that will ease the stress associated with the existing manual system. This application enables you to book drivers at your convenience and keeps a record of booking in a computerized form which saves a lot of energy, time, and money.

## 1.4 Realization of the problem

We must know what the problem is before it can be solved. In this phase, we identified the need for a new system for enabling us to book drivers online which is meant for replacing the old manual system.

## 1.5 Introduction of the problem to be taken up

After realizing above mentioned problems, the main aim was to develop an application that will ease the stress associated with the existing manual system. This application enables users to end the shortcomings of the existing system.

# 2. Problem Formulation

## 2.1 Proposed System

The main goal of the application is to provide a platform for customers to choose from a list of available drivers and book easily from the comfort of home or office. The system consists of three main modules:

- Admin :

The admin has the right to add, edit and delete the driver's account.

- Customer :

The customer can search, view, choose and book drivers per their convenience.

- Driver:

The driver can view bookings and change their working status.

## 2.2 Objectives of the proposed system

This application has the following objectives covered:

- To book drivers in the city.
- To get drivers available with reasonable charges.
- Can view booking history.
- Admin has the right to edit or delete the driver's account.
- To maintain booking records.
- This proposed system will help to reduce manual work and complete work in a short time.

# 3. SYSTEM ANALYSIS AND DESIGN

Requirements analysis is a software engineering task that bridges the gap between system-level requirements engineering and software design. The most commonly used requirements technique is to conduct a meeting or interview. The first meeting between a system analyst and the customer can be likened to the awkwardness of the first date between two adolescents. Neither person knows what to say or ask; both are worried that they do say will be misinterpreted; both are thinking about where it might lead (both likely have radically different expectations here); both want to get the thing over with, but at the same time, both want it to be a success.

Gause and Weinberg suggest that the analyst starts by asking CONTEXT-FREE QUESTIONS. That is a set of questions that will lead to a basic understanding of the problem, the people who want a solution, the nature of the solution that is desired, and the effectiveness of the first encounter itself.

The goal of the requirements gathering activity is to collect all relevant information from the customer regarding the product to be developed to clearly understand the customer requirements and weed out the incompleteness and inconsistencies in these requirements. The requirements analysis activity is begun by collecting all relevant data regarding the product to be developed from the users of the product and from the customer through interviews and discussions. Data collection is done by taking the copies of the documents involved in its work from the organization.

## 3.1 System Development Tools

As mentioned earlier that one of the most important tasks is to understand users' requirements. There are two aspects in this understanding:

a) Understanding the flow of documents in an organization. (Documents incorporate the basic data available in the organization and hence it is essential to know where they originate and how they flow).

b) Understanding the rules to process data (very often the rules are complex and orally stated, leading to misunderstanding).

Two important System Development tools are used to assist the above tasks:

(i) Data flow diagrams that specify the origin of data and how they flow through a system and where they are processed.

(ii) Decision tables that are used to specify complex processing rules in a concise and easily understood form.

Besides these tools used in specifying users' requirements, there are also other tools used in a system design. These are database management system and associated languages which allow rapid prototyping of systems. Quickly obtaining a prototype is very useful to get user feedback. Tools such as spreadsheets are very useful in answering any questions. Further, report generators and graphics systems are used in visualizing information. A system analyst would be conversant with all these tools and know-how to effectively use them.

## 3.2 Information Collection

Gathering information for a large and complex organization is difficult and takes time. All relevant personnel should be consulted and no information should be overlooked. A clear strategy should be evolved to gather information. I have tried to make my strategy such that it gathers all the necessary information just by communicating with different people about how they book drivers temporarily which was needed to make my web-based application a success.

- Interviewing Technique was a helpful step in gathering information. After the interviewing with different people, soon I concluded what problems they faced and their requirements.
- The problem that people are facing:
    - Difficult to find drivers temporarily.
    - Time-consuming.
    - Difficult to compare charges offered by drivers.
    - Inconvenience in booking drivers.
    - It should be simple and user-friendly. So that the common person can operate it.

## 3.3 Analysis and Development of Actual Solution

- This project is developed for enabling the customers to easily book drivers temporarily thus saving their time and also it provides more opportunities to the drivers who due to their location constraints don't get much exploration.

**Development of actual solution**

After analyzing all the above-mentioned details this phase of the system development cycle includes the actual implementation of the making of the project. Proper paperwork is done, pages are designed, the database is designed and coding is performed along with the connectivity.

The development of the actual solution takes the following steps:

1) Designing

Web-based forms satisfying all the requirements are designed. This web-based application includes all the relevant dynamic pages that are required to take information from the user and storing information in the database. Also, all the pages are designed with a security point of view.

2) Database Creation

The database is created to hold the details of the application and to store the data securely entered by the user.

## 3.4 Description of various modules

This project contains the following modules:

### Admin:

- Admin can log in to the system.
- Verify the driver information database.
- Add/delete driver profile
- Admin can log out of the system.

### Customer:

- Customers can log in to the system.
- Visit the website.
- Search the driver
- View and book the driver.
- Customers can log out of the system.

**Driver**

- The driver can log in to the system.
- Visit the website.
- View bookings.
- Can change his /her working status.
- The driver can log out of the system.

## 3.5 Choice of language

Front End: Html,CSS,Bootstrap,Javascript

BackEnd: PHP and MYSQL

## 3.6 Non-functional Requirements

- **Performance Requirement**

The system shall minimize errors and a clear error message should be displayed that guides the user to handle it.

The product shall be based on the web and has to be run from a web server. The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run. The performance shall depend upon hardware components of the client/customer

- **Security Requirement**

The system provides a username and password to prevent the system from unauthorized access. Password will be saved in encrypted form in a database for security purposes. The system must automatically log out all customers after a period of inactivity. The system should not leave any cookies on the customer's computer containing the user's password. The system should provide a high level of security and integrity of the data held by the system, only the admin has the right to delete the driver's account from the system if found something suspicious about him.

- **Availability**

The system should be available at all times (i.e. 24 X 7 availability), meaning the user can access it using a web browser, only restricted by the downtime of the server on which the system runs.

- **Portability**

The application is HTML and scripting language-based. So the end-user part is fully portable and any system using any web browser should be able to use the features of the system, including any hardware platform that is available or will be available in the future.

An end-user is using this system on any OS; either it is Windows or Linux.

The system shall run on PC, Laptops, etc.

- **Usability**

The system should satisfy the maximum number of user's needs. The system provides a help and support menu in all interfaces for the user to interact with the system. The user can use the system by reading help and support.

# 4. SYSTEM IMPLEMENTATION

## 4.1 Software Development Models:

There are many software development models which are used, such as:

### a) Incremental model:

The development process based on the **Incremental model** is split into several iterations. New software modules are added in each iteration with no or little change in earlier added modules. The development process can go either sequentially or in parallel.

### b) Iterative model:

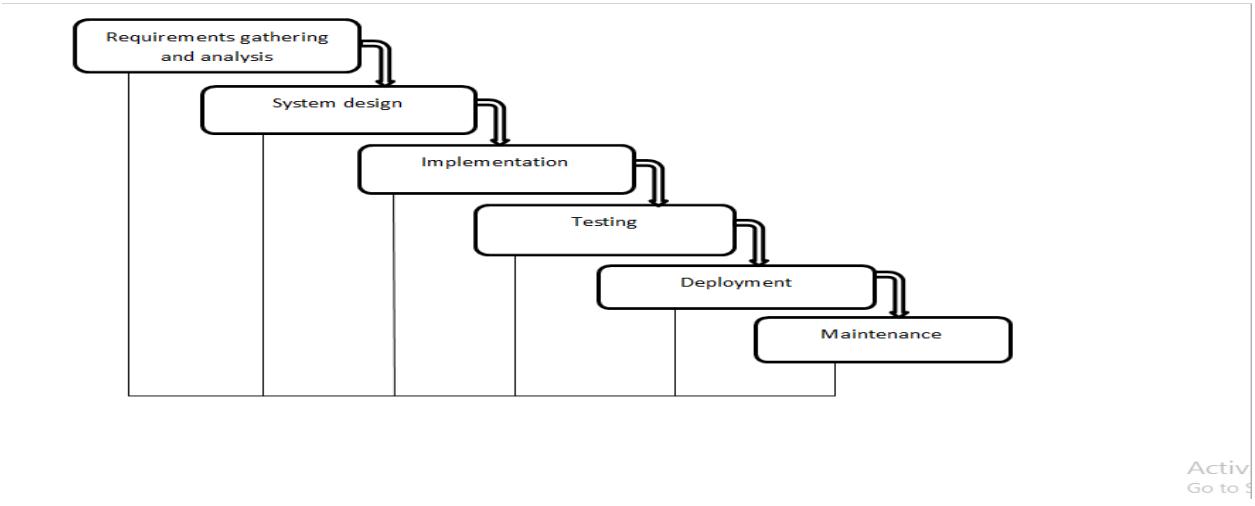
With Iterative development software changes on each iteration, evolves, and grows. As each iteration builds on the previous one, software design remains consistent.

### c) Spiral model:

The Spiral model puts focuses on thorough risk assessment. Thus, to reap the benefits of the model to the fullest, you'll need to engage people with a strong background in risk evaluation.

### d) Waterfall model (Model Used)

In this project, I am using the **Waterfall model**, as my project is small and all the requirements are known in advance. The waterfall approach was the first SDLC Model to be used widely in Software Engineering to ensure the success of the project. In "The Waterfall" approach, the whole process of software development is divided into separate phases. In the Waterfall model, typically, the outcome of one phase acts as the input for the next phase sequentially.



The sequential phases in the Waterfall model are:

1. **Requirement Gathering and analysis:** All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification doc.

2. **System Design:** The requirement specifications from the first phase are studied in this phase and system design is prepared. System Design helps in specifying hardware and system requirements and also helps in defining overall system architecture.

3. **Implementation:** With inputs from system design, the system is first developed in small programs called units, which are integrated into the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing.

4. **Integration and Testing:** All the units developed in the implementation phase are integrated into a system after testing each unit. Post integration the entire system is tested for any faults and failures.

5. **Deployment of the system:** Once the functional and non-functional testing is done, the product is deployed in the customer environment or released into the market.

6. **Maintenance:** Some issues come up in the client environment. To fix those issues patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

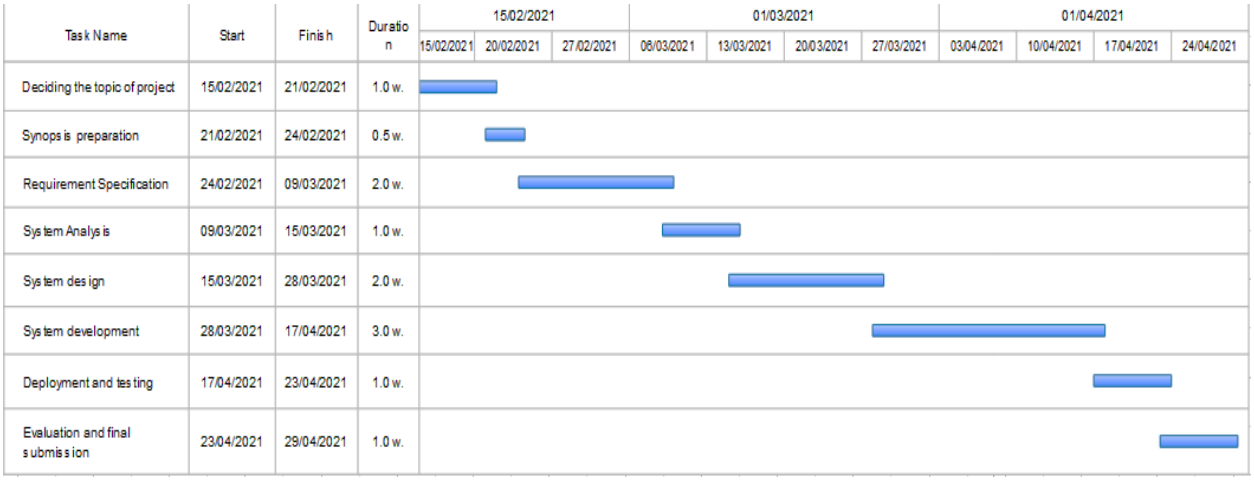



**Fig:- Gantt Chart**

## 4.2 Feasibility Study

**A feasibility study** is a study to evaluate the feasibility of a proposed project or system. As the name suggests feasibility study is a feasibility analysis or it is a measure of the software product in terms of how beneficial product development will be for the organization from a practical point of view. A feasibility study is carried out based on many purposes to analyze whether software products will be right in terms of development, implantation, the contribution of the project to the organization, etc.

### Need of Feasibility Study :

A feasibility study is important as after completion of a feasibility study it gives a conclusion of whether to go ahead with the proposed project as it is practically feasible or to stop the proposed project here as it is not right/feasible to develop or to think/analyze about the proposed project again. Along with this Feasibility study helps in identifying risk factors involved in developing and deploying systems and planning for risk analysis also narrows the business alternatives and enhance success rate analyzing different parameters associated with proposed project development.

**Types of Feasibility Study :**

The feasibility study mainly concentrates on the below-mentioned areas:

**Technical Feasibility**

In Technical Feasibility current resources both hardware and software along with required technology are analyzed/assessed to develop the project. This technical feasibility study reports whether there exists correct required resources and technologies which will be used for project development. Along with this, the feasibility study also analyzes technical skills and capabilities of the technical team, existing technology can be used or not, maintenance and up-gradation is easy or not for chosen technology, etc.

The Online driver Booking System is technically feasible since there will not be much difficulty in getting the required resources for the development as well as maintaining the system. All the resources needed for the development of the software as well as the maintenance of the same are available in the organization as here we are utilizing the resources which are available already.

**Operational Feasibility**

In Operational Feasibility degree of providing service to requirements is analyzed along with how much easy the product will be to operate and maintenance after deployment. Along with

this other operational scopes are determining the usability of the product, Determining suggested solution by the software development team is acceptable or not, etc.

The Online driver Booking System is operationally feasible as it is very easy for the end-users to operate it. Also, the usability of the system will be high as this system helps the customers to book drivers as per their requirements and at their convenience.

### Economic Feasibility

In the Economic Feasibility study cost and benefit of the project are analyzed. Means under this feasibility study a detailed analysis is carried out what will be cost of the project for development which includes all required cost for final development like hardware and software resource required, design and development cost and operational cost and so on. After that, it is analyzed whether the project will be beneficial in terms of finance for the organization or not.

The Online driver Booking System does not require an enormous amount of money to be developed. This can be done economically if planned judicially, so it is economically feasible.

## 4.3 Hardware Requirements

| Hardware | Description / Purpose |
|---|---|
| Processor | Intel Pentium 3 or above |
| Random Access Memory (RAM) | Minimum 4 GB |
| Operating system | Windows 7 or above |

## 4.4 Software Requirements

Software used for the development of the project:

| Software | Description / Purpose |
|---|---|
| WAMP | Server to run the localhost |
| Internet Browser | Google chrome or any other compatible browser |

# 5. Result and Discussion

## 5.1 Interpretation of the result

The online driver booking system will show the driver's profile on the selection of city, type of vehicle, and the date the customer chooses. After selection of all these details, customers can book their drivers.

## 5.2 Application Areas

This project will help the customers to find and book drivers temporarily. By making it a general project we can sell this project to any agency which provides drivers temporarily.

## 5.3 Scope of the project

- As current system is manual and is very time-consuming.

This project is aimed is to develop an application that will ease the stress associated with the existing manual system. This application enables you to book drivers at your convenience and keeps a record of booking in a computerized form which saves a lot of energy, time, and money. This application has the following objectives covered:

- To book drivers in the city.
- To get drivers available with reasonable charges.
- Can view booking history.
- Admin has the right to edit or delete the driver's account.
- To maintain booking records.
- This proposed system will help to reduce manual work and complete work in a short time.

# 6. Conclusion

This project will meet the requirements of the Online Driver booking system keeping in mind the specifications of the system.

a) It will help to develop skills for system analysis and designing techniques like data flow diagrams in designing the system.

b) Also help in understanding the database handling and query processing.

## 6.1 Advantage and special feature of the system

This project is aimed is to develop an application that will ease the stress associated with the existing manual system. This is a well-designed and easy-to-use communication system.

The problem of finding drivers conventionally is not easy. Hence we need a computerized application for this purpose so that we can make our bookings in a better way. This system will surely be going to help the users in saving time and money.

## 6.2 Future Extensions

For future enhancement there are the following things which could be done:

- Online payment methods could be integrated into this application.
- Notification through SMS to both drivers and customers.
- Try to Implement GPS which could track the driver.

**References**

1)krazytech.com

2) www.1000projects.com

## References/ Bibliography

## Appendix:

## A-1: ER Diagram

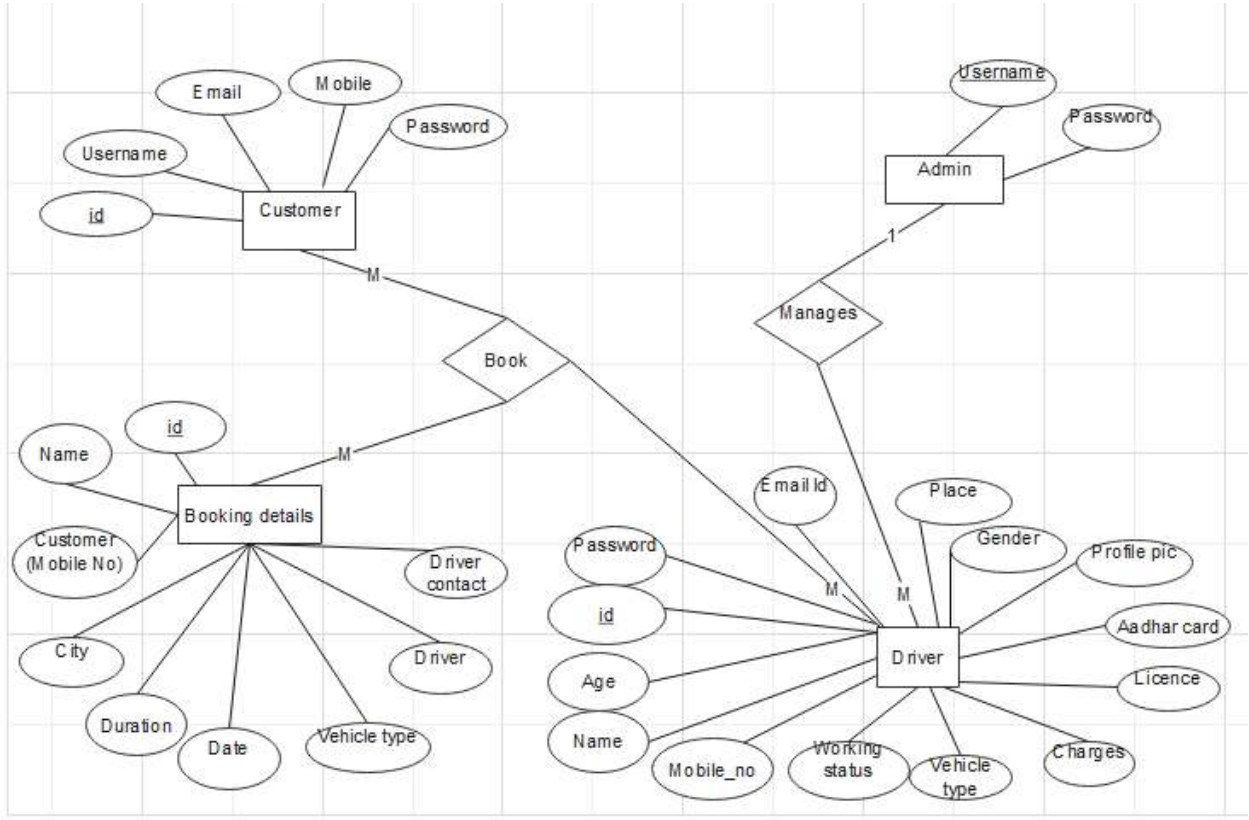
An Entity-Relationship Model is a popular high-level Conceptual data model and its diagrammatic notation is known as ER Diagram. An entity-relationship diagram is a detailed logical representation of data for an organization. It has three main components:

i. Data Entities

ii. Relationships

iii. Attributes

Entities are the elementary thing of an organization. About which data is to be maintained. Every entity has a unique identity. Entities are connected by relationship. It indicates how two entities are associated. Attributes are a property or characteristic of an entity that is of interest to the organization.



## Data Dictionary

**ADMIN**

| Column | Type | Null |
|---|---|---|
| Username *(Primary)* | varchar(25) | No |
| Password | varchar(10) | No |

**CUSTOMER**

| Column | Type | Null |
|---|---|---|
| Id *(Primary)* | int(10) | No |
| Name | varchar(50) | No |
| Password | varchar(255) | No |
| Email | varchar(50) | No |
| Mobile_no | bigint(10) | No |

**DRIVER**

| Column | Type | Null | Default |
|---|---|---|---|
| Id *(Primary)* | int(10) | No | |
| Name | varchar(50) | No | |
| Password | varchar(255) | No | |
| Email | varchar(50) | No | |
| Mobile_no | bigint(10) | No | |
| Age | int(3) | No | |
| Gender | varchar(10) | No | |
| Place | varchar(50) | No | |
| Charges | int(5) | No | |
| Working_status | varchar(20) | No | Available |
| Type_of_vehicle | varchar(20) | No | |
| Profile pic | varchar(100) | No | |
| License | varchar(100) | No | |
| Aadhar card | varchar(100) | No | |

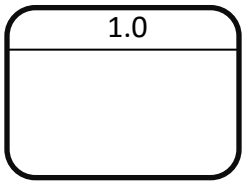
**BOOKING**

| Column | Type | Null |
|---|---|---|
| Id *(Primary)* | int(10) | No |
| customer_name | varchar(50) | No |
| customer_mobile_no | bigint(10) | No |
| city | varchar(50) | No |
| duration | float | No |
| date | date | No |
| Vehicle_type | varchar(20) | No |
| driver_name | varchar(50) | No |
| Mobile_no | bigint(10) | No |

## A-2: Data Flow Diagram

Data Flow Diagram is a graphical representation of the flow of data in an information system. It is capable of depicting (drawing/showing) incoming data flow, outgoing data flow, and data stored. I have used Gane and Sarson's notations for making these DFDs.

In the Data Flow Diagrams, there are four symbols

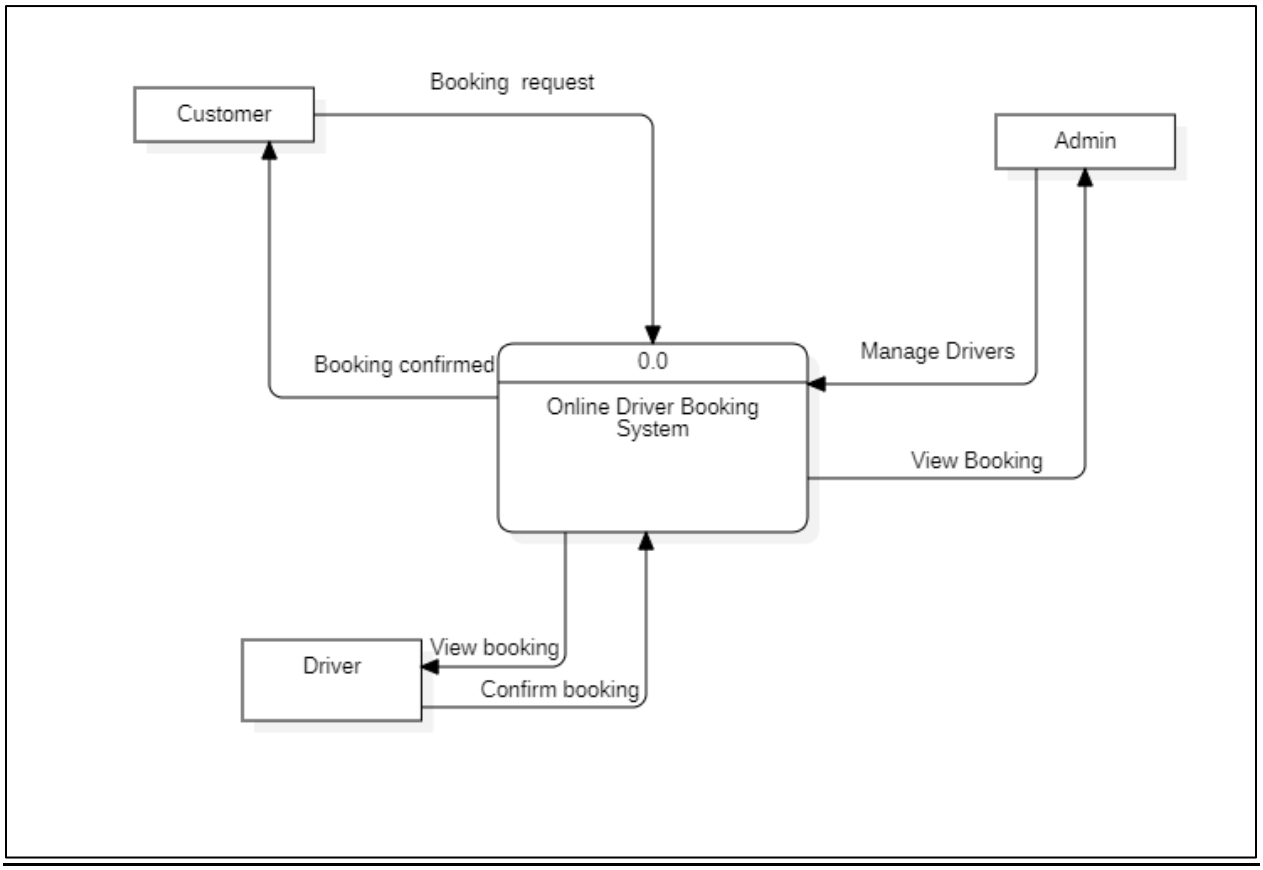
| Symbol | Name |
| --- | --- |
|  | Entity |
|  | Data Flow |
|   | Process |
|   | Data Store |

Two types of DFD are made for this system:

**CONTEXT DIAGRAM**

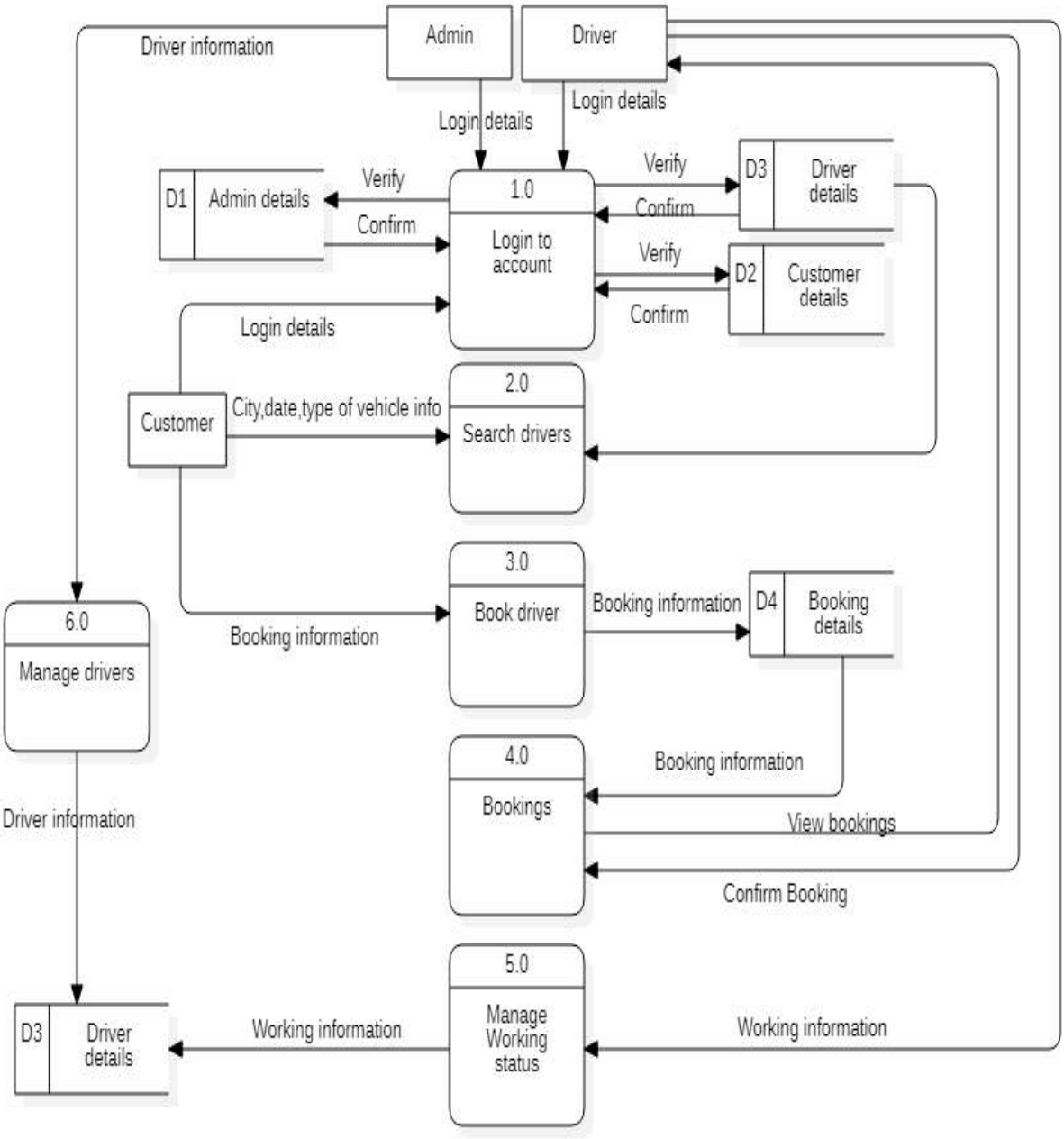
- The context diagram is the most abstract data flow representation of a system.

- It represents the entire system as a single bubble.
- It depicts the entire information system as one diagram concealing all underlined details.
- It is also called 0 level (zero level).




**1- LEVEL DIAGRAM**

- In level 1, the level 0 DFD is broken into a more specific level.
- Level 1 DFD depicts basic modules in the system and the flow of data among various modules.
- It also mentions basic process and source of information



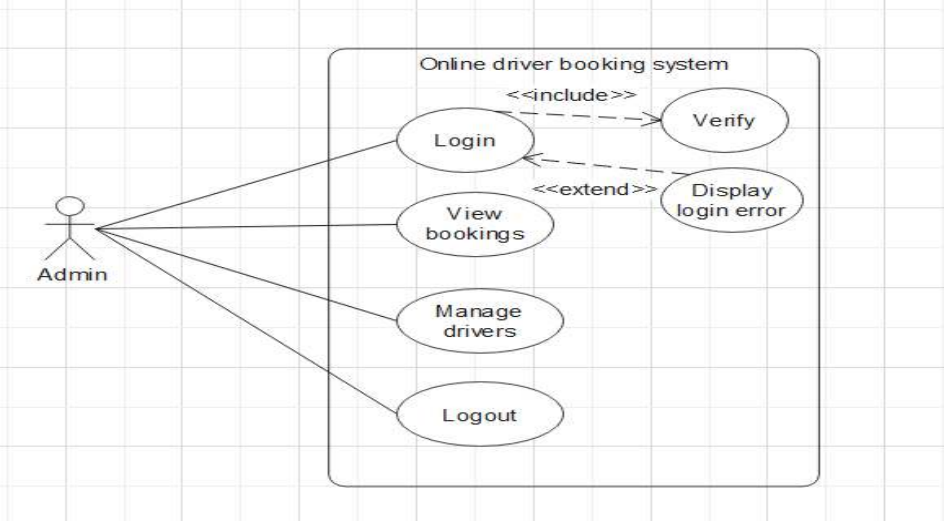
## A-3 : UML Diagram

Three users interact with the system:

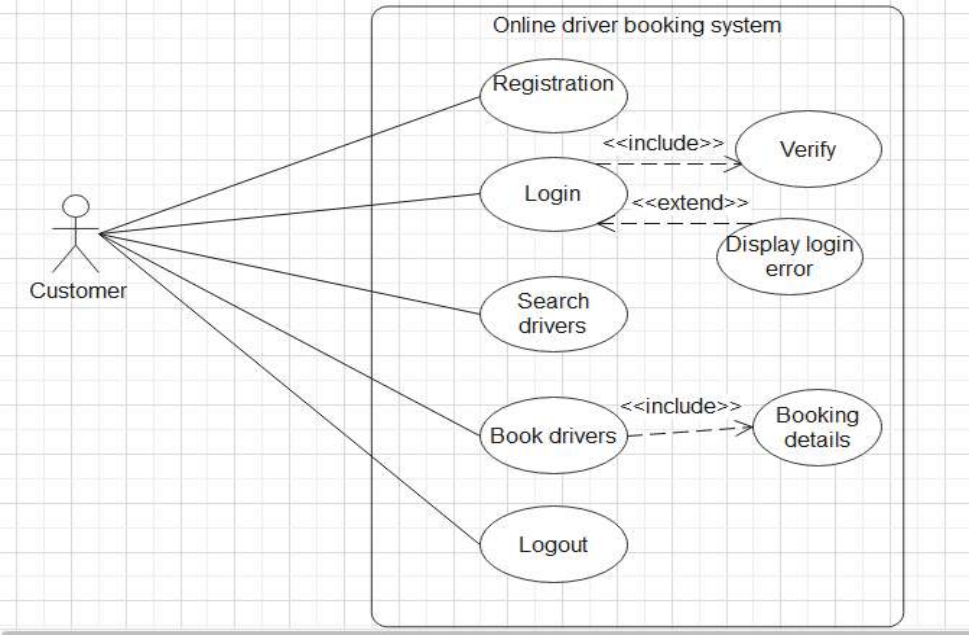
It will be easier to understand different uses of the user by the following use case diagram

**Use Case Diagram**

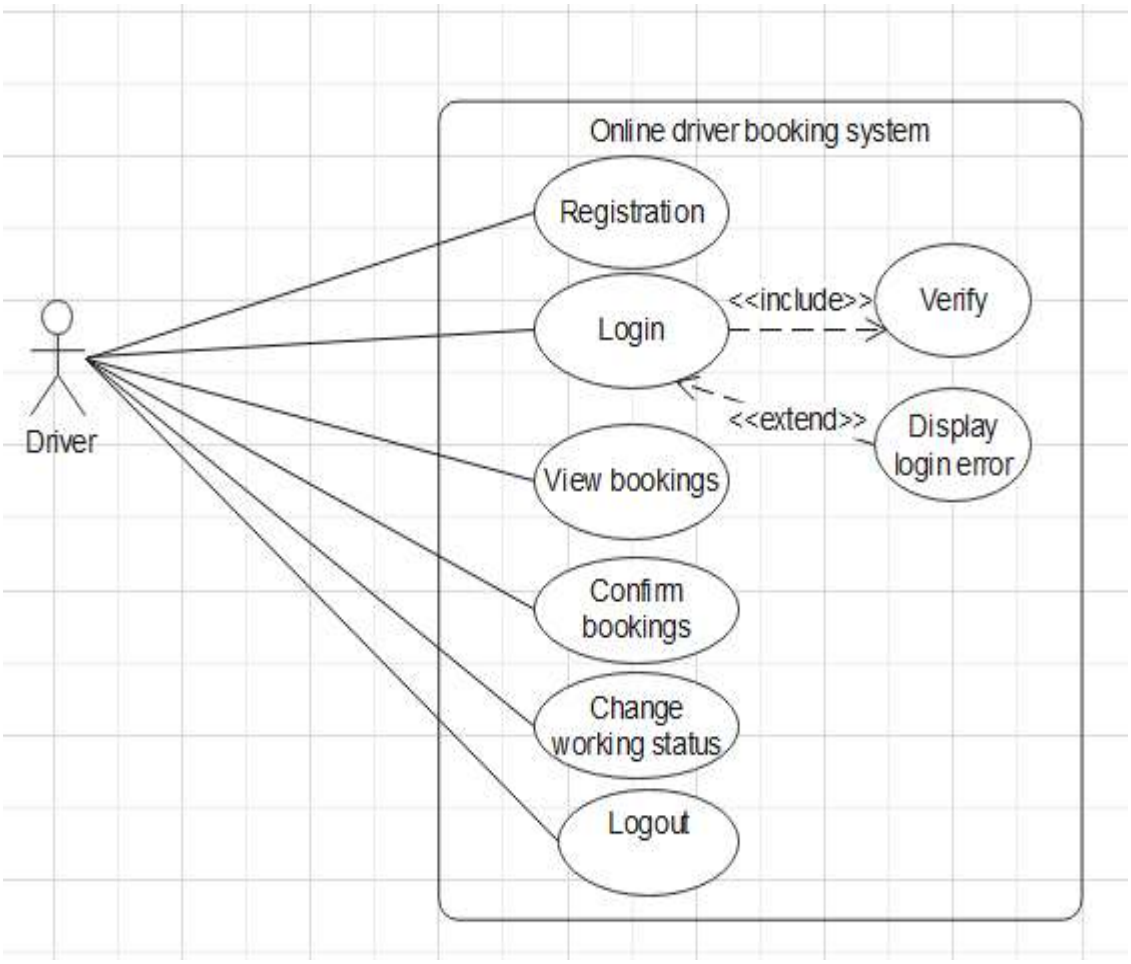
**Admin Use Case:**



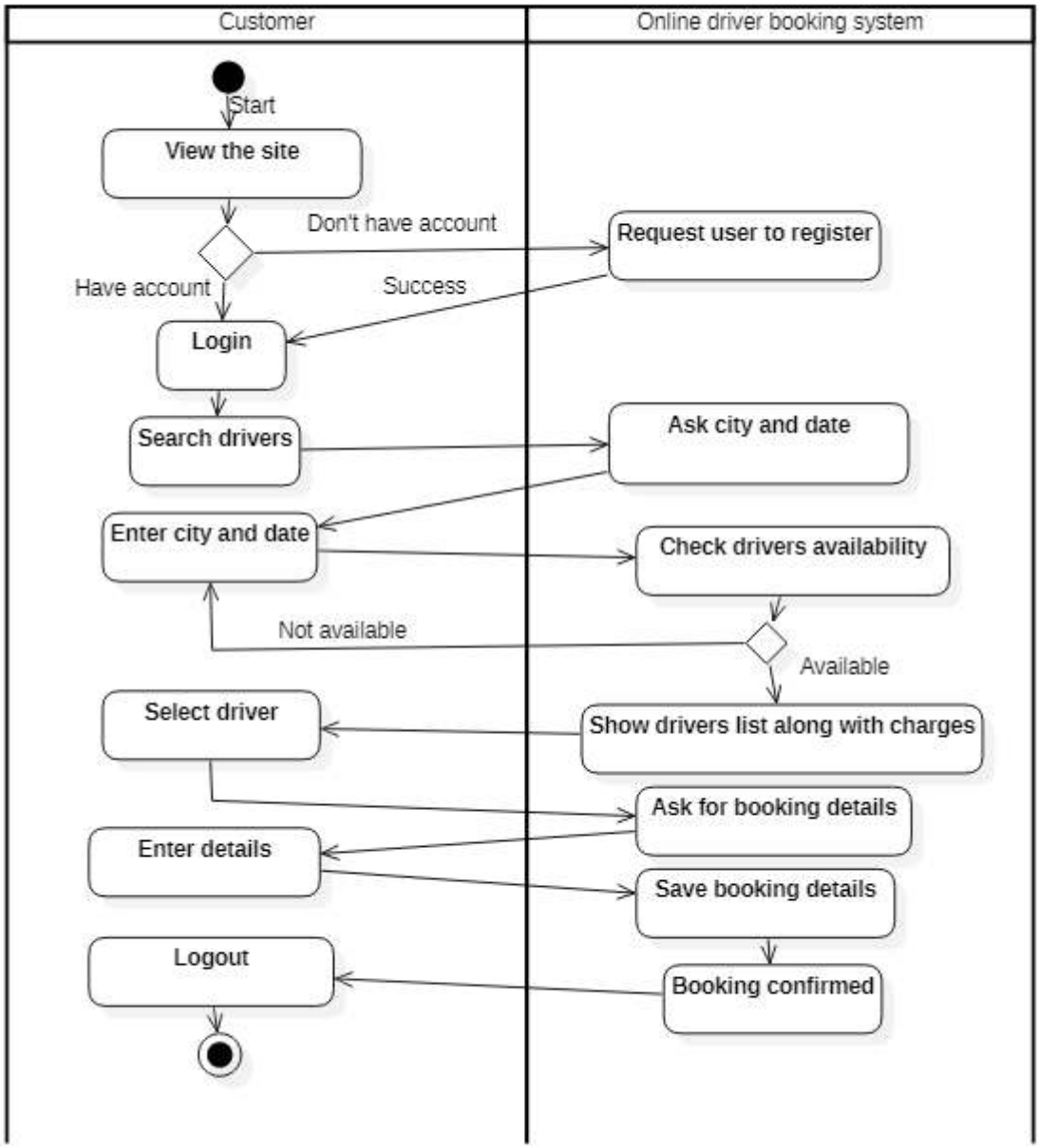

**Customer Use Case:**



**Driver Use Case:**



## A-4: Activity Diagram



## A-5:Class diagram