

Online Service Providing System

Named as Ustaad G

**BACHELOR OF SCIENCE
IN**



COMPUTER SCIENCE

FYP-Proposal

By

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1. Introduction:

In this fast-growing technology, we still have to take the appointment of person who solve the problems related to our daily life like plumbing related problem, mechanical problem, electrical problem, electronic problem, pest control etc.

To take the appointment of service provider we have to call him or with the personal meeting we can meet him, and it is not sure that we get the appointment of the service provider at a time because there are many problems occur, like the service provider is busy at somewhere else or he is not present at his office when we go there or he wants heavy cost for fix the problem etc.

We are not getting any service on time and also not proper changes of services. It is also not secure in terms of safety concern.

To overcome this type of problem we are going to make website where the people get appropriate result.

This website is very dynamic and very easy to understand. The interface website is very easy and anybody can easily work on it. This website can provide all the description and important information about the problem.

The Household service website is also very useful because the customer doesn't have to visit to service provider's office, he/she can easily book his/her order via this website and he/she can also pay the payment online in website. So, he/she can book order without any kind of disturbance. Our website is secured with QR code. It will provide security for the customer.

To make this website work successfully we have used some latest technology such as PHP etc. and my SQL as the database management environment.

The UML diagram has been drawn which is useful to display the flow of the process throughout the system so even an inexperienced people can easily get the idea of the proposed system

1.1 General Information:

Project Name: Online service providing Website Named Ustad G **Starting Date:** 27/06/2021.

Controlling Agency: LCAST

Final Date:

Prepared by:

- i. Zeeshan
- ii. Noman
- iii. Ubaid
- iv. Ali

Authorized by:

1.2 Project Summary:

The aim of project is to provide the services to the customers at reasonable rate. Through this project provide the facilities to the customer such as registration, display profile of service provider, advertisement, QR code, map navigation etc.

1.3 Purpose:

We have observed how limitations in existing system:

- Existing system is offline.
- Difficult to manage records.
- No time limit for service to be provided.
- No guaranteed service.
- Difficult to find paper service provider.
- 24 hours service is not available.
- No security.

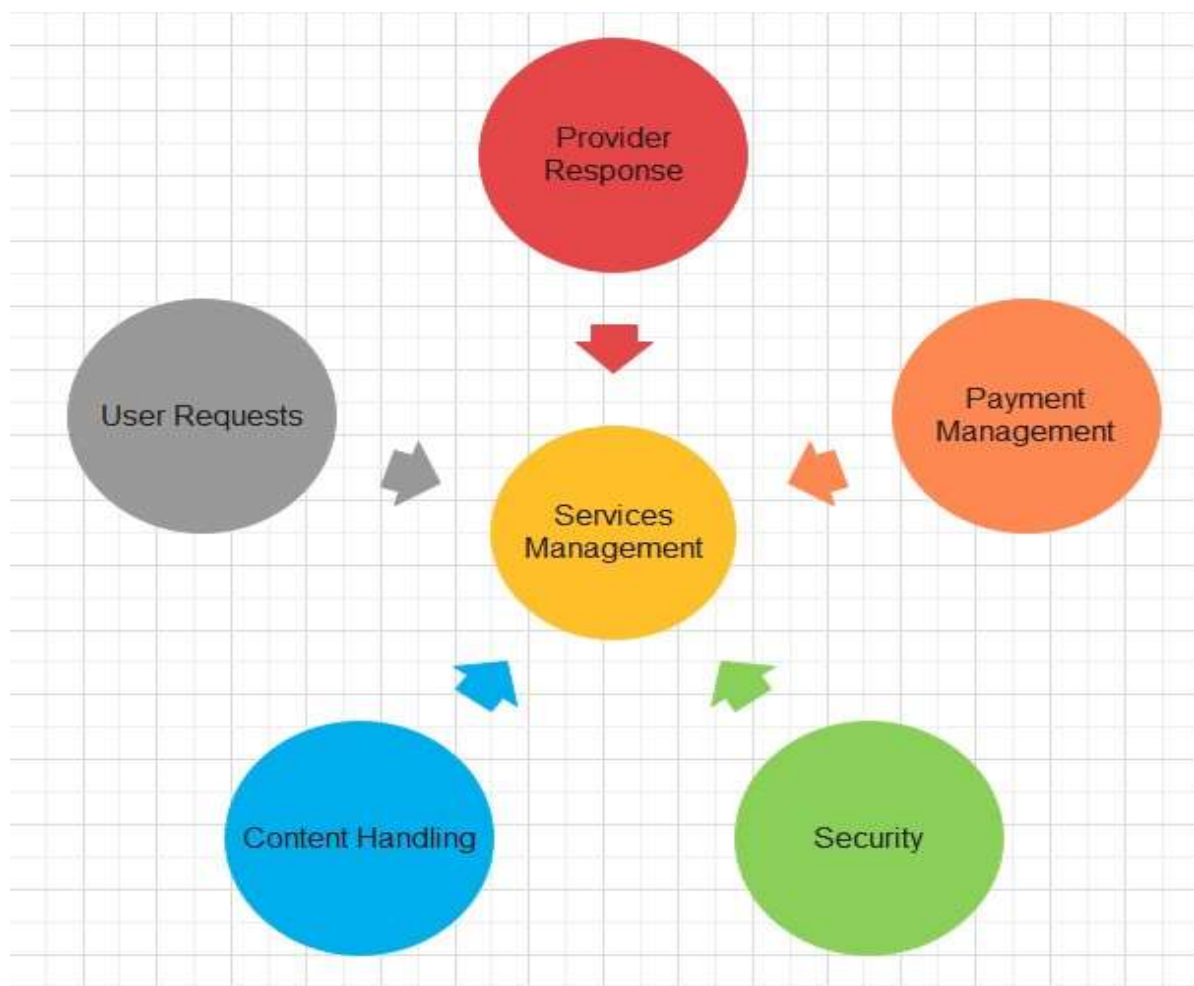
So, our purpose is to overcome this limitation with following features.

- House hold services easily available.
- To provide house hold services any time.
- Easy online payment.
- Saving of time.
- Make available house hold services through website.

1.3 Scope:

The scope of our project is to designing a complete environment to provide a safe and user-friendly environment for online domestic services. The main aim of the project is to provide an easy-to-use application for services provided for customer.

We often get frustrated while taking the appointment of service provider because there are many problems that occur, like the service provider is busy at somewhere else or is not receiving our call or his cost is very high according to problem. So, in this project we will remove this headache.



2. Project Planning:

2.1.1 Project Development Approach:

Tools & Technologies

FRONT END

HTML, CSS, JavaScript, jQuery, Bootstrap, AOS

BACK END

SQL, PHP.

Operating System

Web Browsers

3. System Requirements specification:

User Characteristic: The users of the system include:

3.1 Admin

3.2 Service Provider

3.3 Customer

1. Admin

Administrator has maximum privileges to access the system. He maintains user login details, can assign access rights to a user, can manipulate data and do all the transactions.

Administrator is the super-user of the system.

He /She can verify service provider and customer.

He /She manages all the categories of service.

He /She can take the payment from the customer.

He /She can add the new advertisement.

He /She can send notification to the customer and service provider.

He /She can also comment to user.

2. **Service Provider:**

In this Website service provider first do registration and then login after this process the service provider can view the service which are ordered by user and send acknowledgement to the user in positive reply. After that service provider get the QR code which is matched with the QR code of customer. In this website we are providing the map for the service provider to find his location. The then service provider comes at the place of customer then he verifies the QR code with the customer and then do his work.

3. **Customer:**

In this application the customer first does registration and then do login, after the user search for the particular service and receive the list of service available on our website. The user then selects the service and request for the service after this process He/she can get acknowledgement as reply and get QR code which is unique for every user.

4. **System Analysis:**

4.1 **Feasibility Study:**

Feasibility study is carried out when there is a complex problem or opportunity. It is considered as the primary investigation which emphasizes on "Look before You Leap" approach to any project. A Feasibility study is undertaken to determine the possibility of either improving the existing system or developing a completely new system.

- We are going to develop the new system which is feasible as our application is very user friendly and easy to understand.

4.1.1 **Technical Feasibility:**

In this type of study, the current technology in use in an organization is checked such as the existing software, hardware, and personnel staff to determine whether it will work for the proposed system or completely new ones are to be used. The technology that was important in developing a new system such as Development tools, back-end database system was available from within the organization. The proposed system is capable of adding, changing, enhancing functionality, features etc. The proposed system is capable of handling large storage of data. The back-end and front-end technology has greater importance for providing an accurate, error-free, frequency of data to be used.

- Our project is technically feasible in terms of current technology. Our project will provide latest platform like android technology.

4.1.2 Economical Feasibility:

For proving that system developed is economical, the economic feasibility study takes place to check the cost of developing a system against the benefits that it provides. If the cost is less and benefits are more than we can define our system to be economically developed. User saves time in searching for a particular product to be purchased by simply few clicks. The registration process is speedier than the registered manually. The saving of papers as all data are stored computerized. The record is of free of human errors as there is less chance of mistakes. The above benefits are in terms of saving time, minimize errors and provide efficiency in work done.

- In terms of economic feasibility our application is very reasonable in cost. So, application is economically feasible.

4.1.3 Operational Feasibility:

The operational feasibility is concerned with the operability of the system after it has been installed. That is, some programmer may not like changes in their routine method of work or has fear that they will lose their peer group. The following areas will have the operational feasibility in the proposed project

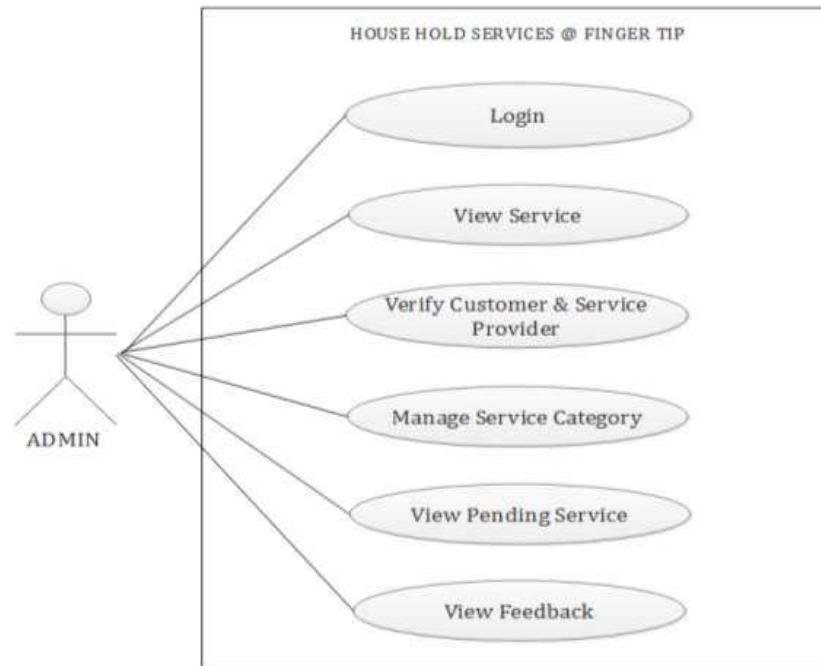
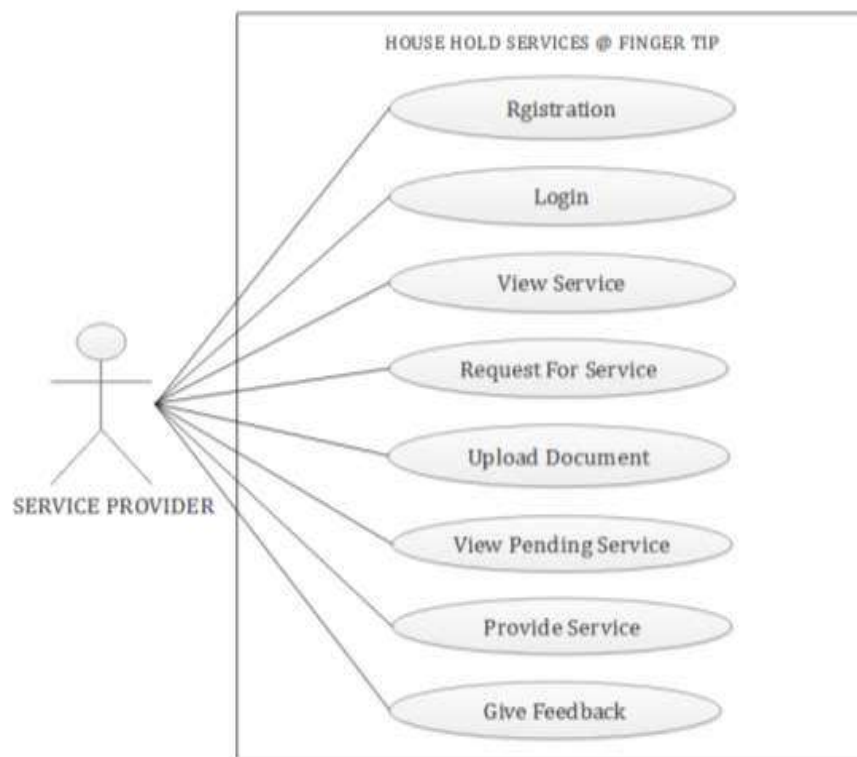
- The organization has approved this system as their working system.
- The User of the system has accepted the proposed system as their new working system and realized the benefits of it.
- The system will work in a proper way after it has been installed and the installation process is easy to use.

4.2 Functions of system:

The function of the system consists of the Use case Diagram which represents how the customer, Service Provider & admin interact with the system.

5.2.1 Use case Diagram:

Use case diagrams are a set of use cases, actors and their relationships. They represent the use case view of a system. A use case represents a particular functionality of a system. So, use case diagram is used to describe the relationships among the functionalities and their internal/external controllers. These controllers are known as actors.

ADMIN**Figure 4.1 Use Case Diagram for Admin****SERVICE PROVIDER****Figure 4.2 Use Case Diagram for Service Provider**

CUSTOMER

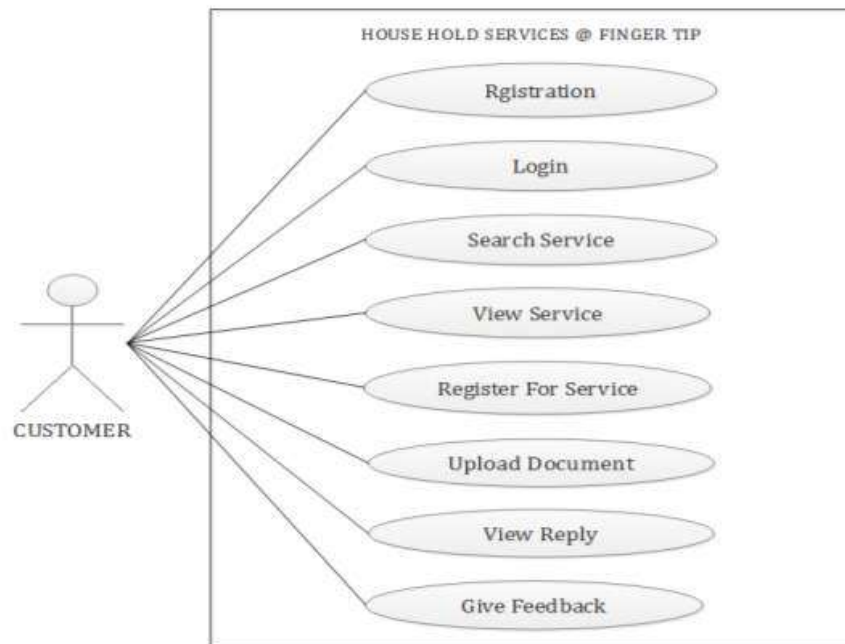


Figure 4.3 Use Case Diagram for Customer

5.2.2 Class Diagram:

The **class diagram** is the main building block of object-oriented modeling. It is used for general conceptual modeling of the structure of the application, and for detailed modeling, translating the models into programming code. **Class diagrams** can also be used for data modeling.

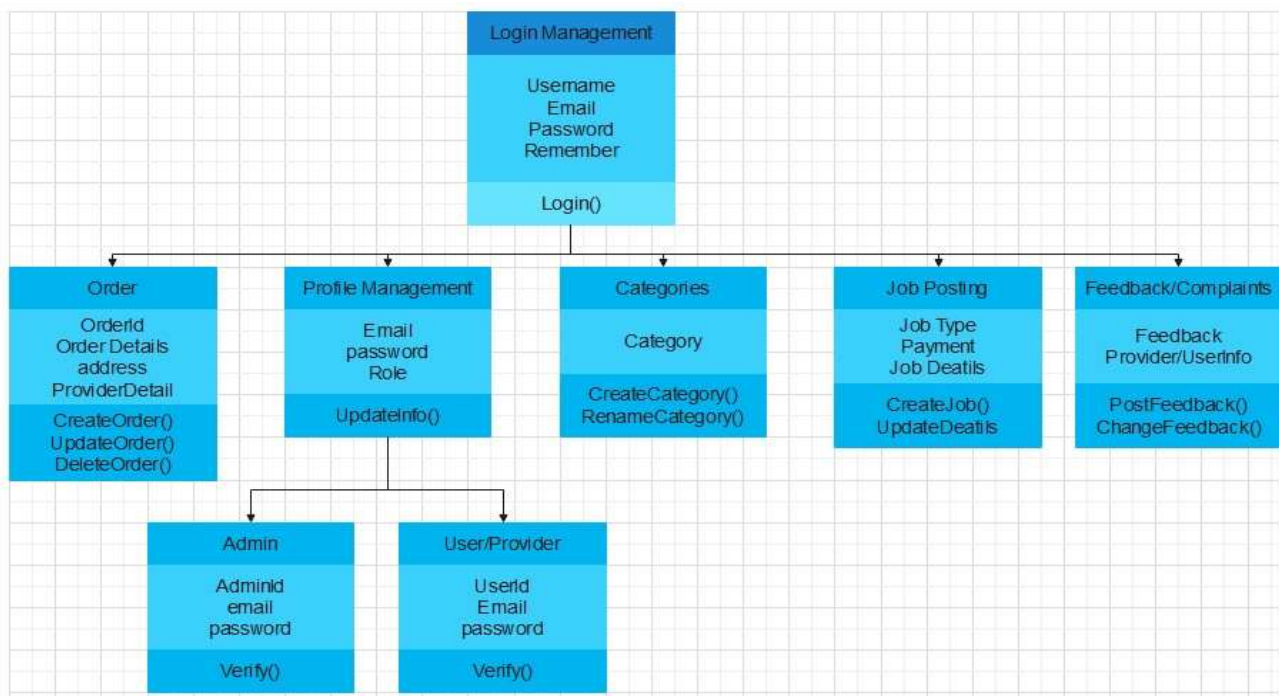


Figure 4.4 Class Diagram

5.2.3 ER Diagram:

An entity-relationship diagram (ERD) is a graphical representation of an information system that shows the relationship between people, objects, places, concepts or events within that system. An ERD is a data modeling technique that can help define business processes and can be used as the foundation for a relation database.

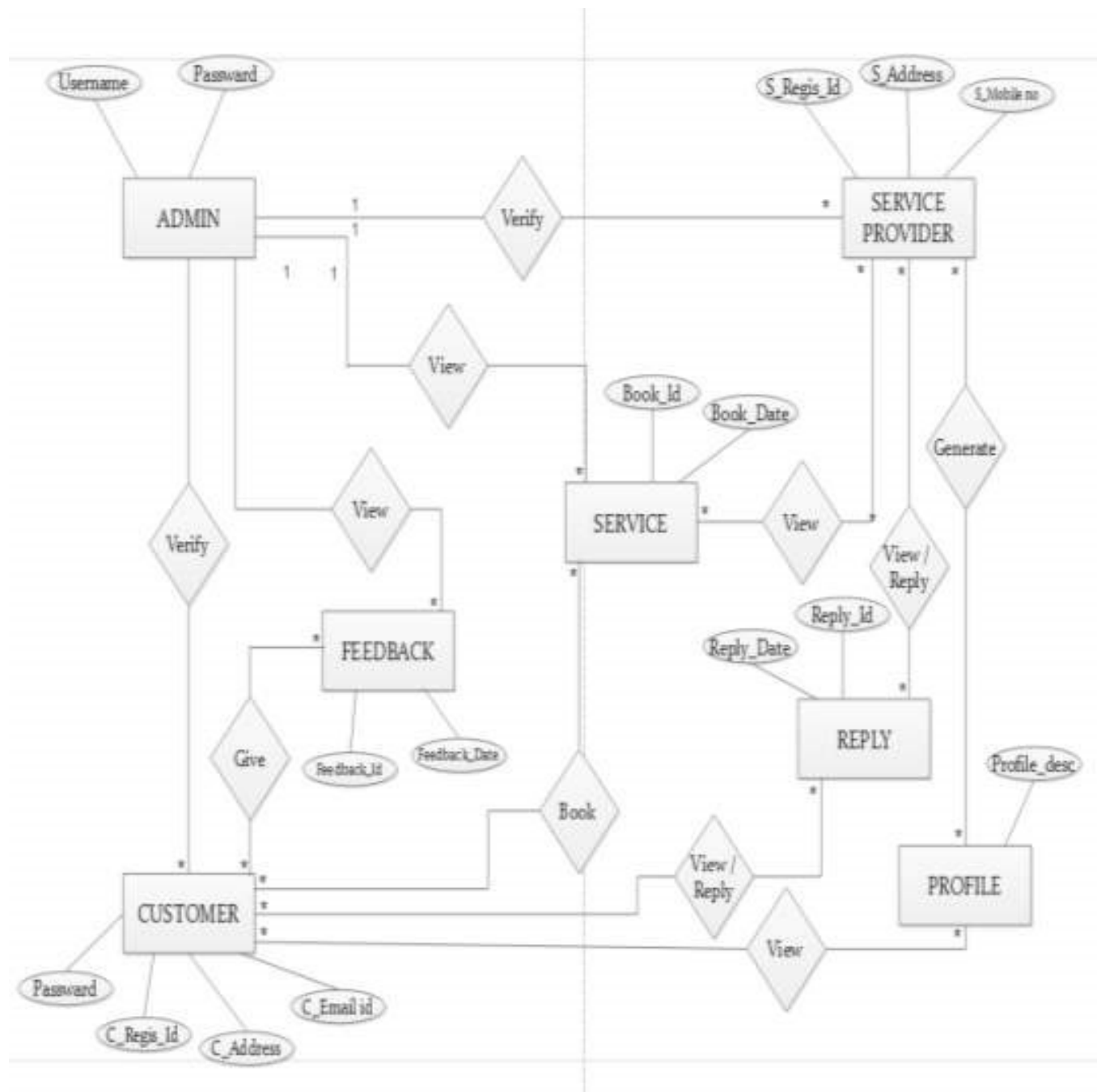


Figure 4.5 ER Diagram

5.2.4 Object Diagram:

Object diagrams represent an instance of a class **diagram**. **Object diagrams** also represent the static view of a system but this static view is a snapshot of the system at a particular moment. **Object diagrams** are used to render a set of **objects** and their relationships as an instance.

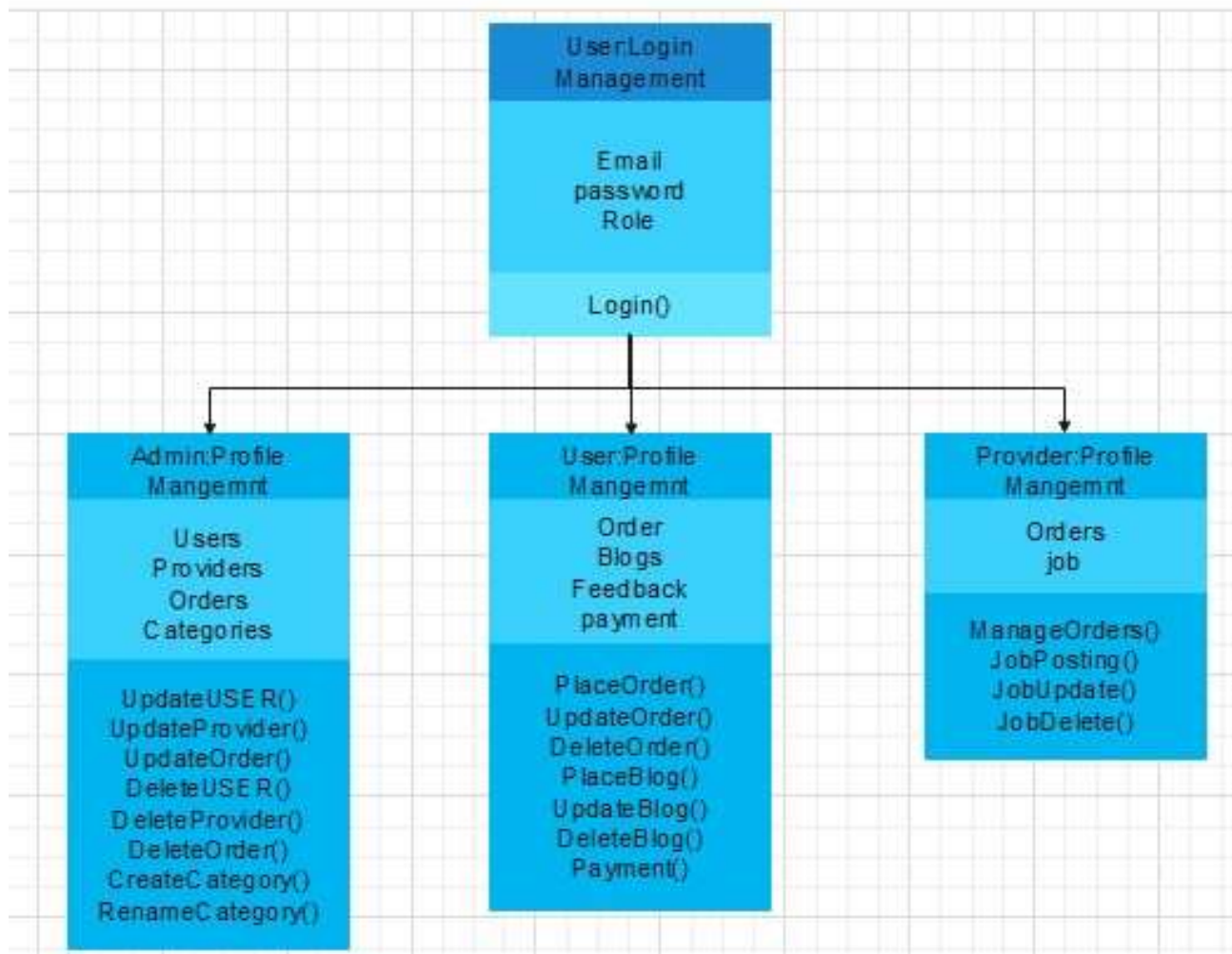


Figure 4.6 Object Diagram

4.3 Data Modeling:

It consists of:

- Sequence Diagram
- Activity Diagram
- State Diagram
- WBS
- Work Distribution Table

4.3.1 Sequence Diagram

A sequence diagram is an interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of message exchanged between the objects needed to carry out the functionality of the scenario. They are typically associated with use

Admin

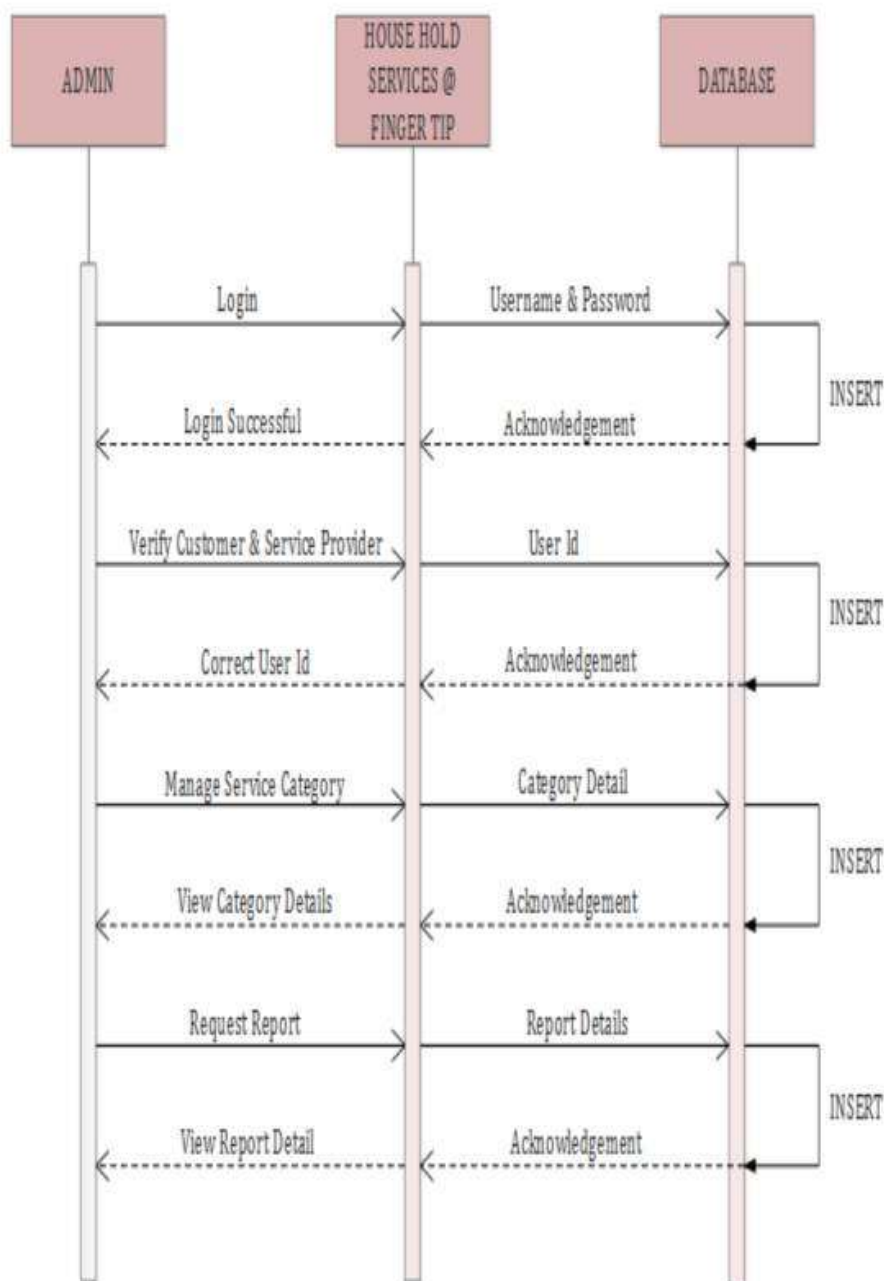


Figure 4.7 Sequence Diagram for Admin

Service Provider



Figure 4.8 Sequence Diagram for Admin

Customer

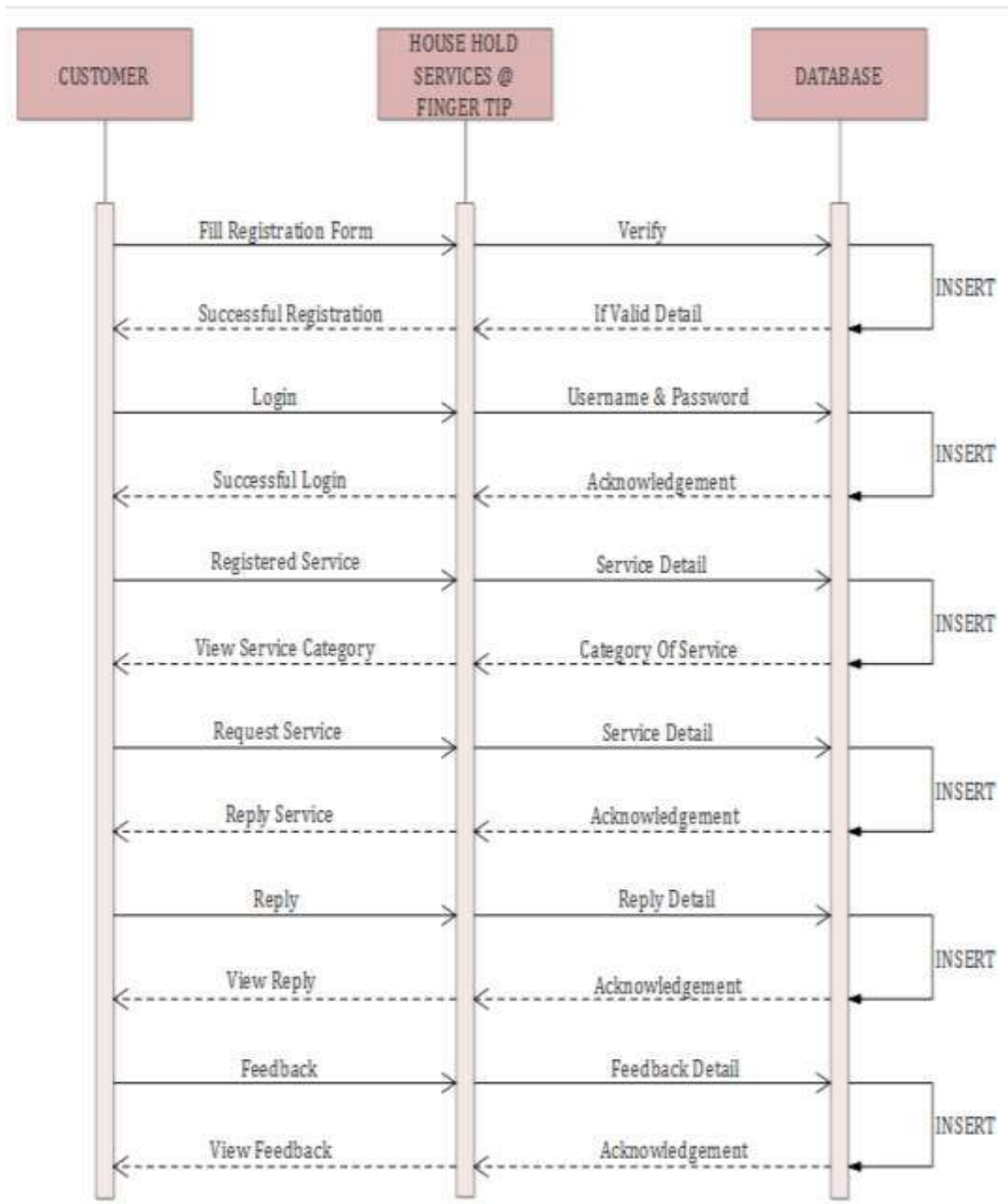


Figure 4.9 Sequence Diagram for Admin

4.3.2 Activity Diagram:

Activity diagram describes the flow of ^{control} in a system. So, it consists of activities and links. The flow can be sequential, concurrent or branched.

Activities are nothing but the functions of a system. Number of activity diagrams are prepared to capture the entire flow in a system.

Activity diagrams are used to visualize the flow of controls in a system. This is prepared to have an idea of how the system will work when executed.

LOGIN & REGISTRATION

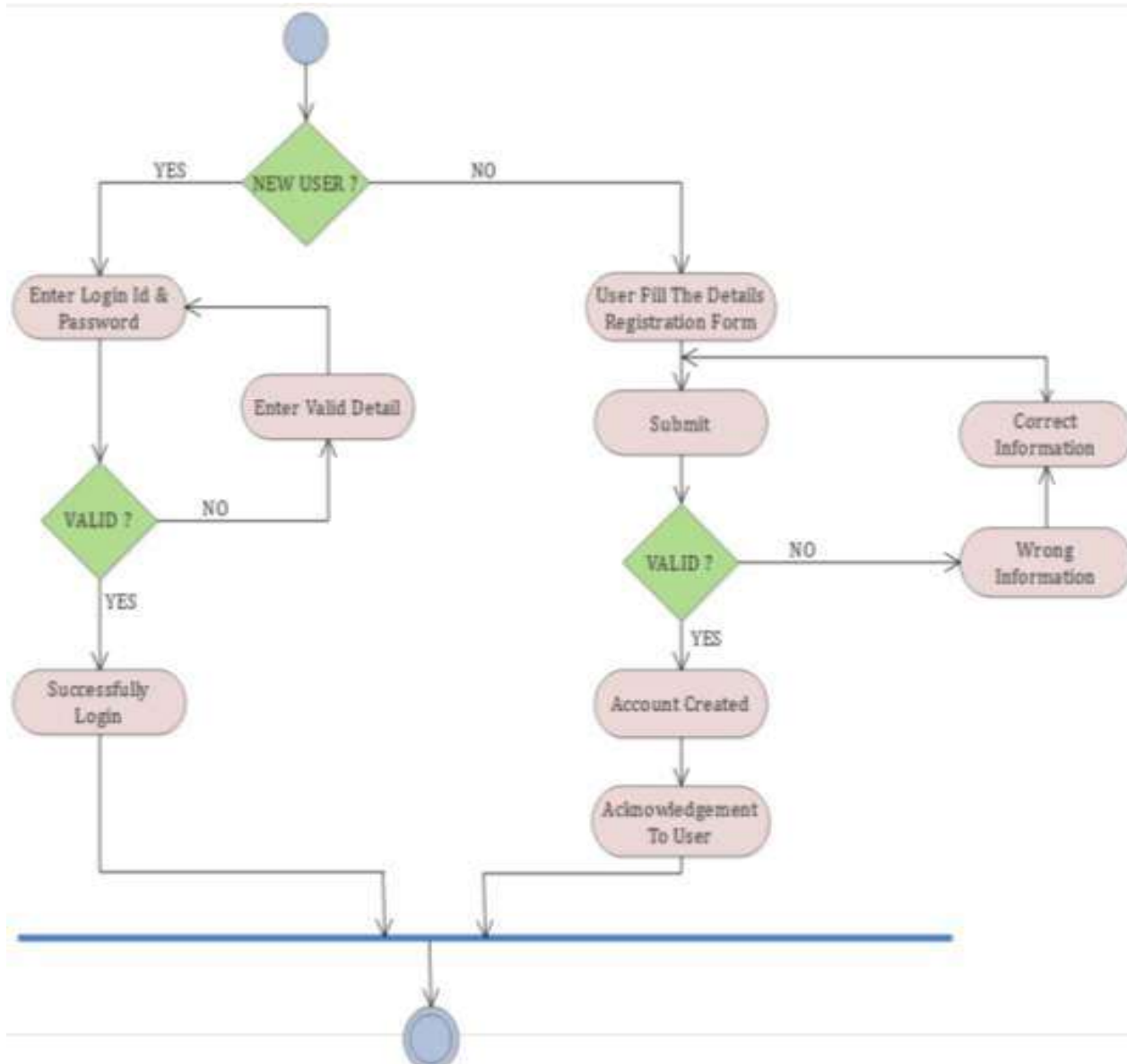


Figure 4.11 Activity Diagram for Login & Registration

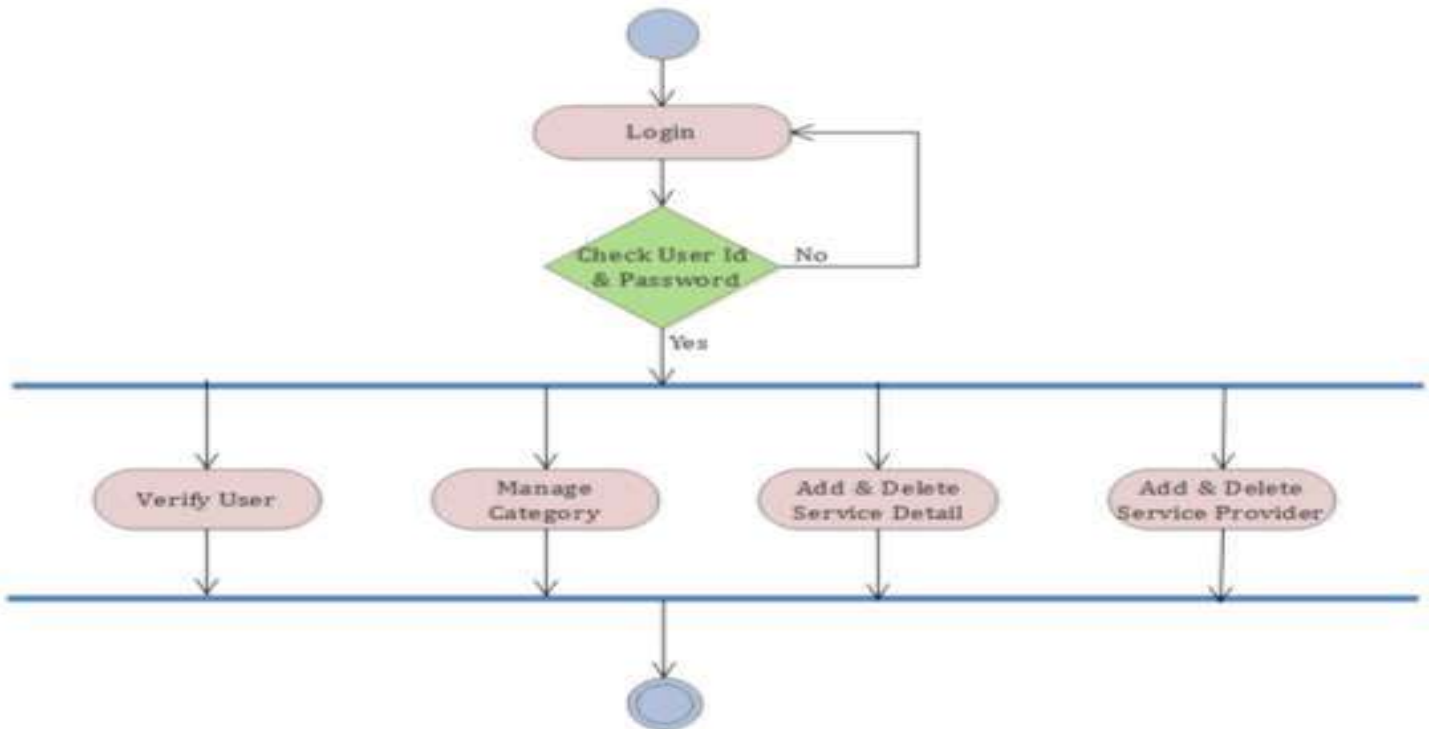


Figure 4.12 Activity Diagram for Admin

SERVICE PROVIDER

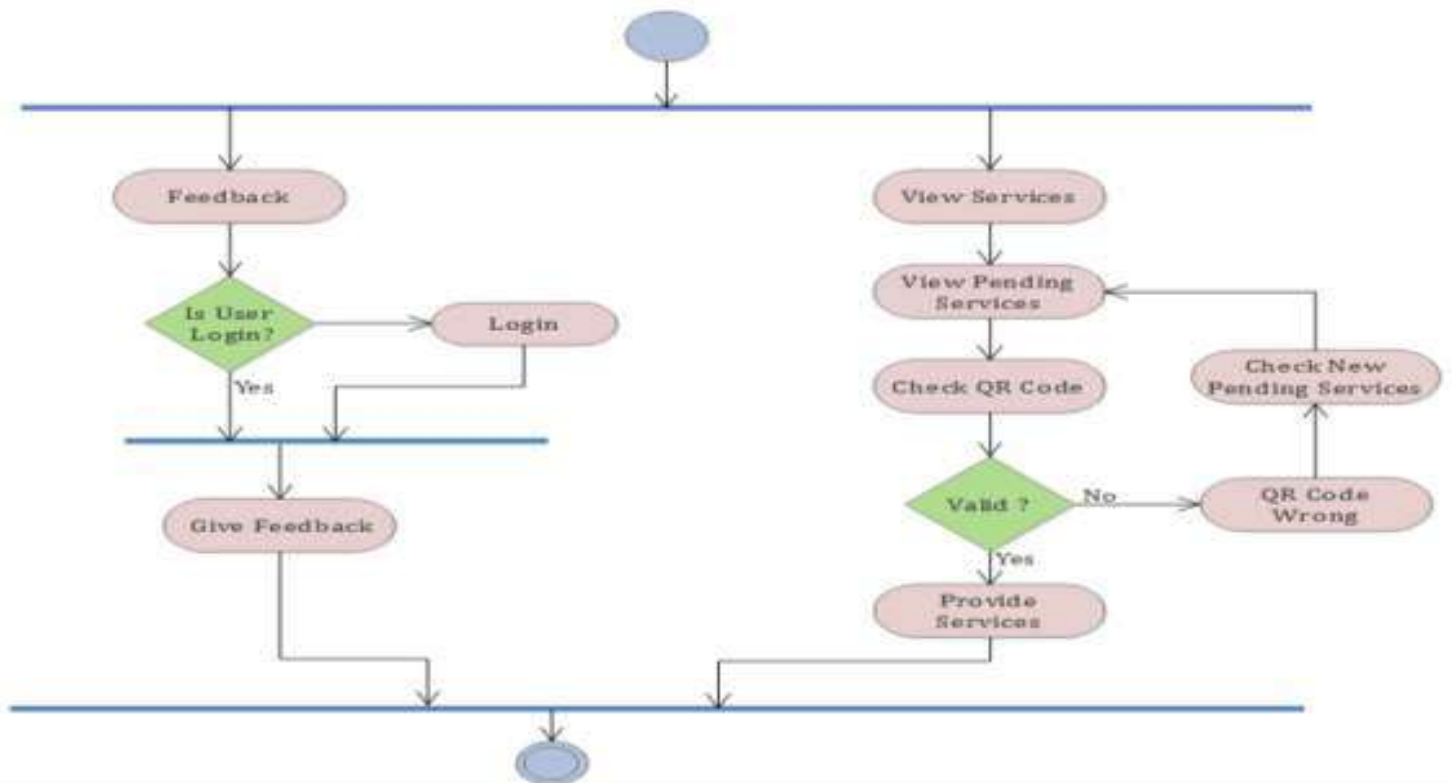


Figure 4.13 Activity Diagram for Service Provider

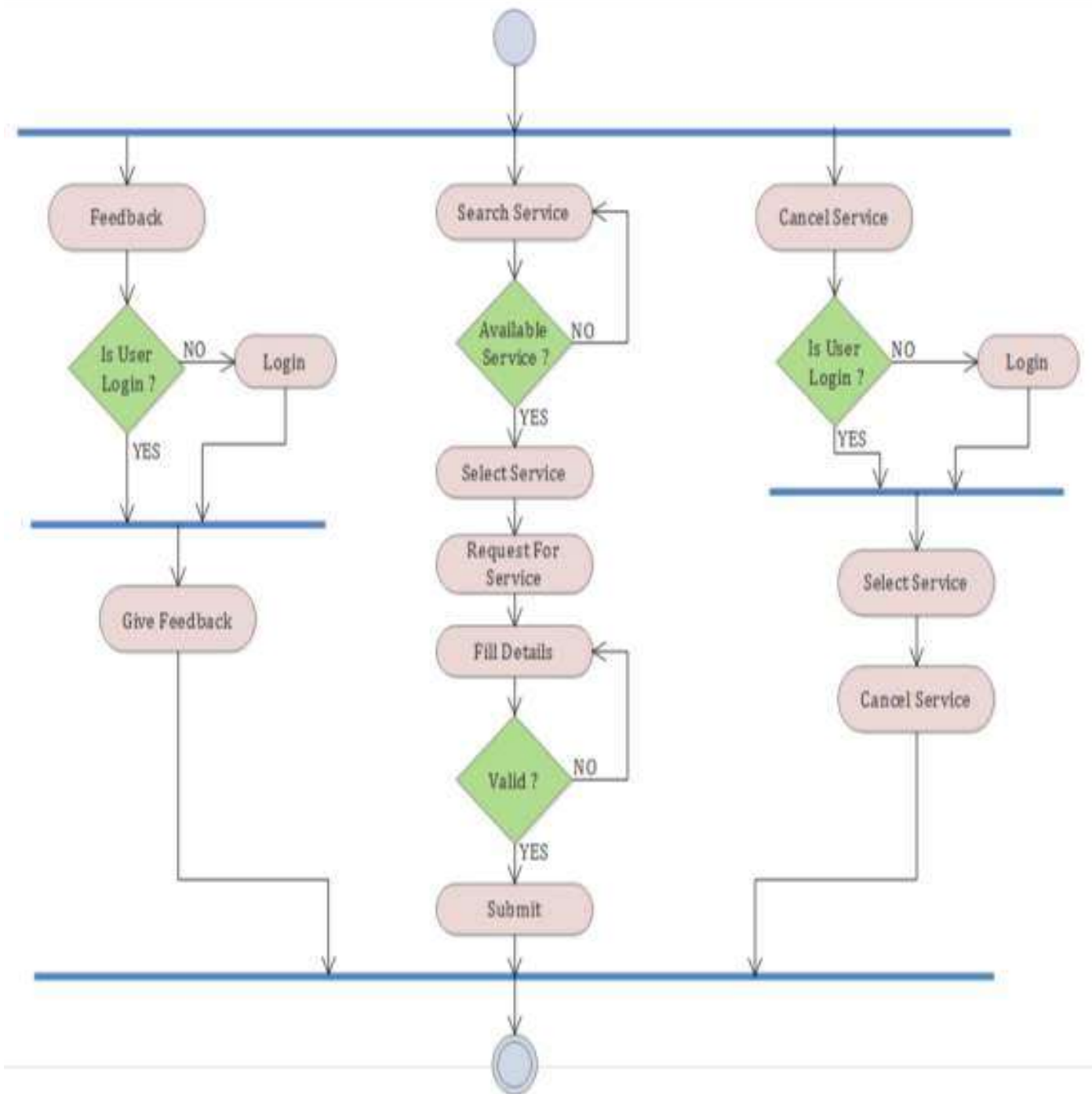


Figure 4.14 Activity Diagram for Customer

4.3.3 State Diagram:

A **state diagram** is a type of **diagram** used in computer science and related fields to describe the behavior of systems. **State diagrams** require that the system described is composed of a finite number of **states**; sometimes, this is indeed the case, while at other times this is a reasonable abstraction.

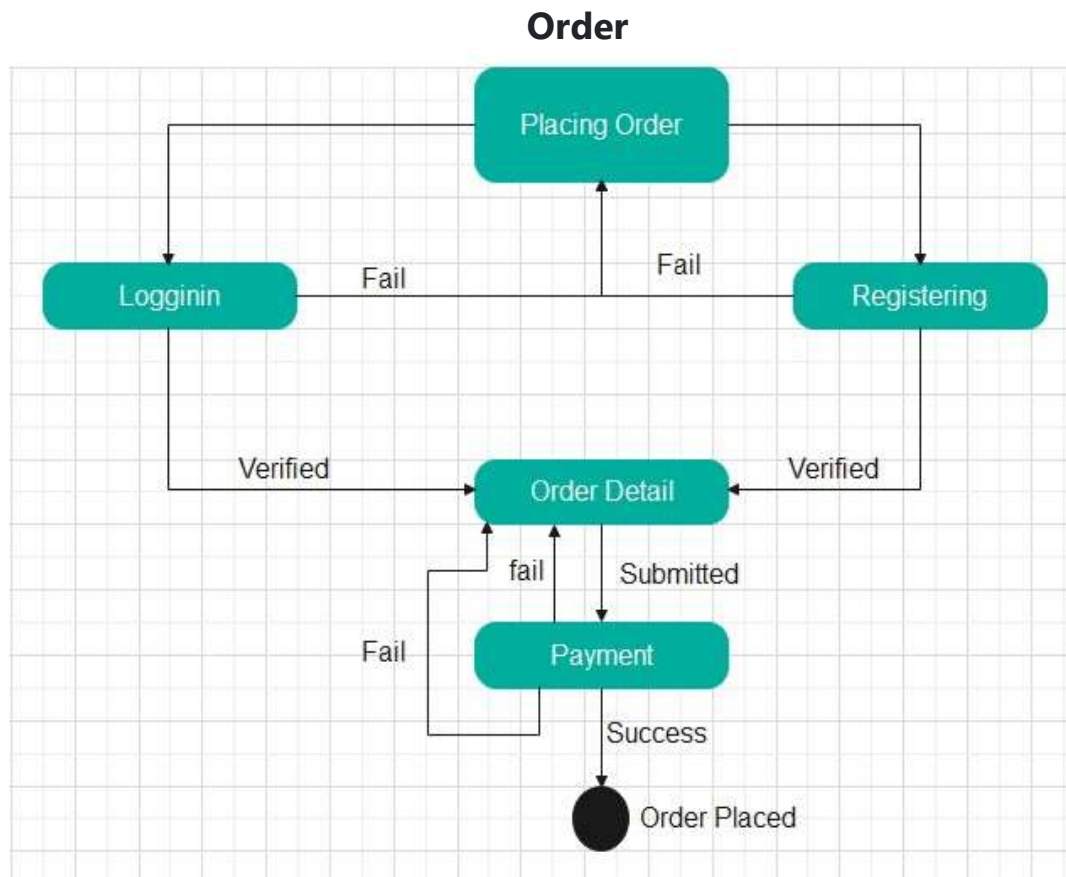


Figure 4.15 State Diagram for Order

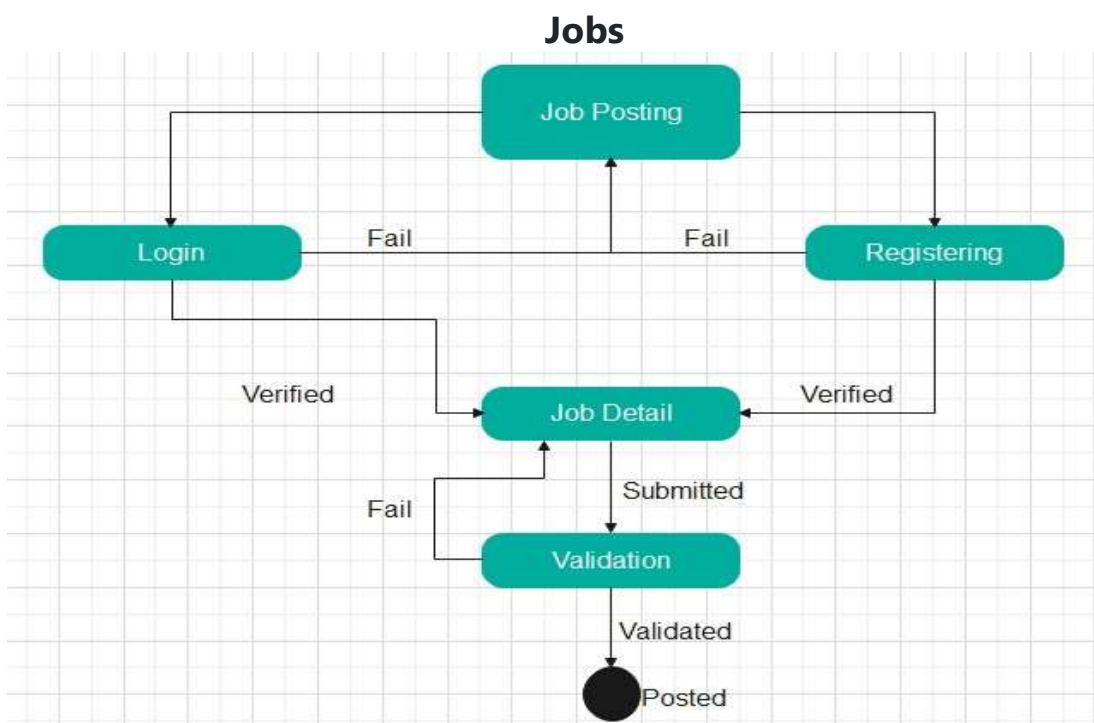


Figure 4.16 State Diagram for Jobs

4.3.4 WBS:

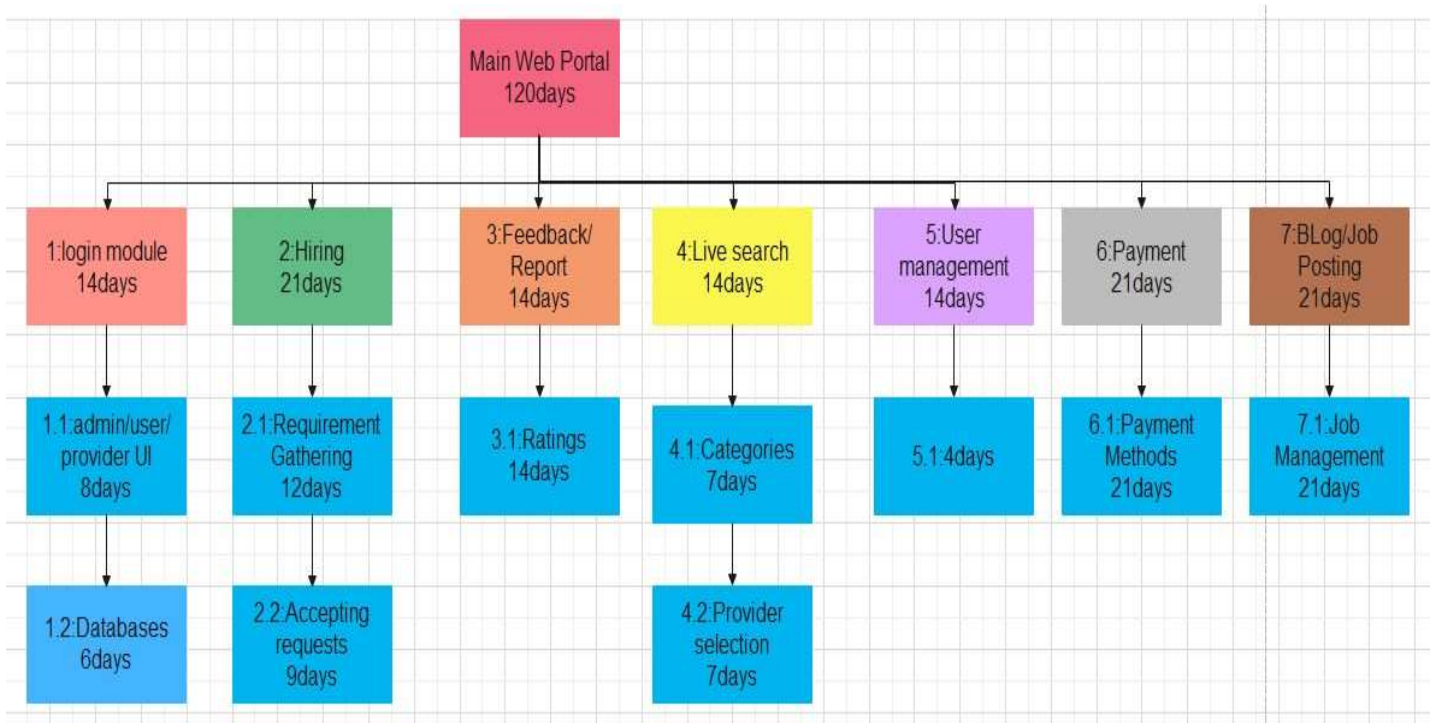


Figure 4.17 WBS

4.3.5 Work Distribution Table:

Ali Asghar	Abid Noman	Zeeshan Butt
Live Search	Categories	Database
Job/Blog Posting	User Management	Request Management
User Interfaces	Provider Management	Feedback
Payment	Login	Complaints

4.4 Functional and Behavioral Modeling:

A data flow diagram is a graphical representation of the “flow” of data through an information system, modeling its process aspects.

A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored. It does not show information about the timing of process or information about whether processes will operate in sequence or in parallel.

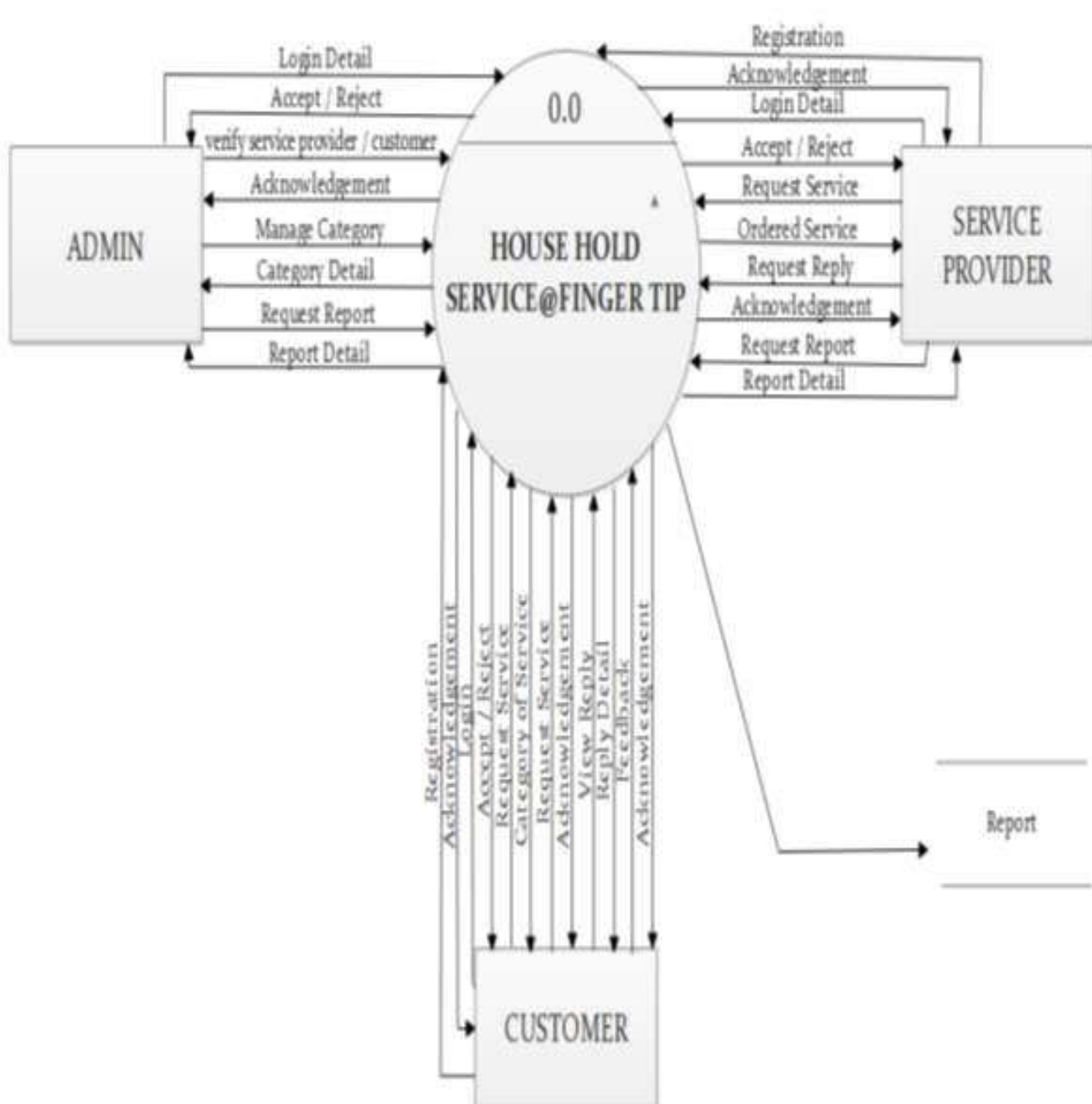


Figure 4.16 Functional and Behavioral Diagram

5. Database Schema Design

ADMIN_LOGIN TABLE:

Table 1: Admin Table

COLUMN	DATATYPE	INDEXES	ALLOW NULLS
USERNAME	VARCHAR(50)	PRIMARY KEY	
PASSWORD	VARCHAR(10)		

SERVICE_REGISTRATION TABLE:

Table 2: Service_Registration Table

COLUMN	DATATYPE	INDEXES	ALLOW NULLS
S_REGIS_ID	INT(10)	PRIMARY KEY	
S_NAME	VARCHAR(50)		
ADDRESS	VARCHAR(255)		
CITY	VARCHAR(50)		
STATE	VARCHAR(50)		
MOBILE_NO	VARCHAR(10)		
EMAIL_ID	VARCHAR(50)		
PASSWORD	VARCHAR(10)		
CAT_ID	INT(10)	FOREIGN KEY	
S_LICENSE	VARCHAR(50)		
PROFILE_DESCRIPTION	VARCHAR(255)		
SERVICE_RATE	INT(10)		
STATUS	INT(1)		

CUSTOMER_REGISTRATION TABLE:

Table 3: Customer_Registration Table

COLUMN	DATA TYPE	INDEXES	ALLOW NULS
C_REGIS_ID	INT(10)	PRIMARY KEY	
C_NAME	VARCHAR(50)		
ADDRESS	VARCHAR(255)		
CITY	VARCHAR(50)		
STATE	VARCHAR(50)		

MOBILE_NO	VARCHAR(10)		
EMAIL_ID	VARCHAR(50)		
PASSWORD	VARCHAR(10)		
AADHAR_IMAGE	VARCHAR(50)		
STATUS	INT(1)		

ORDER_SERVICE TABLE :

Table 4: Order_Service Table

COLUMN	DATA TYPE	INDEXES	ALLOW NULLS
ORDER_ID	INT(10)	PRIMARY KEY	
C_REGIS_ID	INT(10)	FOREIGN KEY	
S_REGIS_ID	INT(10)	FOREIGN KEY	
DESCRIPTION	INT(10)		
ADDRESS	VARCHAR(255)		
CITY	VARCHAR(50)		
MOBILE_NO	VARCHAR(10)		
BOOK_DATE	DATE		
QR CODE	VARCHAR(20)		
STATUS	INT(1)		

CATEGORY TABLE :

Table 5: Category Table

COLUMN	DATA TYPE	INDEXES	ALLOW NULLS
CAT_ID	INT(10)	PRIMARY KEY	
CATEGORY	VARCHAR(50)		
CAT_IMAGE	VARCHAR(50)		

REPLY_DETAIL TABLE :

Table 6: Reply_Detail Table

COLUMN	DATATYPE	INDEXES	ALLOW NULLS
REPLY_ID	INT(10)	PRIMARY KEY	
REPLY_DATE	DATE		
S_REGIS_ID	INT(10)	FOREIGN KEY	
C_REGIS_ID	INT(10)	FOREIGN KEY	
REPLY_MSG	VARCHAR(255)		
SENDER_TYPE	VARCHAR(50)		

FEEDBACK TABLE :

Table 7: Feedback Table

COLUMN	DATA TYPE	INDEXES	ALLOW NULLS
FEEDBACK_ID	INT(10)	PRIMARY KEY	
S_REGIS_ID	INT(10)	FOREIGN KEY	
DESCRIPTION	VARCHAR(255)		
FEEDBACK_DATE	DATE		

6. Implementation

6.1 Testing:

Software testing is a critical element of software quality Assurance and represents the ultimate review of specification, design and code generation. Testing is an internal part of any system or project. If a system is implemented without being tested it may lead to an erroneous working and dissatisfaction on part of the customer. It will also prove disastrous to the reputation of the organization or the person who developed the system and lead to loss in business.

Keeping all these things in view, we left no stone unturned in testing our systems. It was tested keeping in view the different possibilities on part of the user. As human beings are prone to commit errors under different working conditions, we had to keep our vigil on different possibilities that can occur on part of the user.

The system was tested for validation, functional implementation and its navigation.

- Validation Testing:

The user must login to the system with his/her unique login name and password. The user must enter all mandatory fields. If he/she fails to do so then a warning message is issued.

- Functional Testing:

The entire system was divided into sub modules. Adding/Updating of user Information in the database is done.

- Navigational Testing:

The system was tested so that all the pages are properly accessible with their respective links.

To uncover the errors in the system we have done testing as follows:

- Input Checking:

In this phase we tested the validation process only. When users enter the data in the given text box or in grids, proper input format is checked. If entry required numeric data user is bounded to enter only numeric. If text (alphanumeric) data, then user is bounded to enter text data only also check for null values. Like this all entries of all input areas are tested.

- Condition Testing:

Condition testing is a method that exercises the logical condition contained in program module. All relational statements were individually examined and tested. Extreme case values are given for testing.

- Loop Testing:

Loops are cornerstones for the vast majorities of all implementation in software. Each loop is examined separately. Its end point values were given and terminating condition each case tested.

- Output Testing:

First step of testing is checking how friendly it is. Then its accuracy is checked, that is whether it can be present all relevant information, it can report missing less, data etc.

- Acceptance Testing:

In this type we run the system live data by actual user.

6.2 Test Case:

Test case id	Test case name	Input	Expected Output	Actual Output	Observation
1	User login	Email id and Password	Homepage open	Homepage open	Pass
2	User login	Email id and Password	Homepage open	Error message "Incorrect Email id or password".	Fail
3.	User Status	1.Active 2.Inactive	Access to homepage	When verified through Database	Pass
4.	User Status	1.Active 2.Inactive	Access to homepage	When not verified through Database	Fail
5	Apply for the services	Apply for the services	Successfully apply for the services	Apply for the services successful	Pass
6	Apply for the services	Apply for the services	unsuccessfully apply for the services	Apply for the services unsuccessful	Fail
7	Generate the customer details	Generate the customer details	Successfully generate the details	Generated details success	Pass
8	Generate the customer details	Generate the customer details	unsuccessfully generate the details	Generated details unsuccessful	Fail

7.Conclusion

A website is developed which provide online domestic services. The website will provide a good user-friendly interface for getting the services. It will give us security by generating QR code in the website itself. It will provide notification so that the user keeps updated every time. It will provide the comments on feedback. Generating the QR code in the website itself will be more secured. No need of carrying print outs for proofs as the data is stored in the website itself. If the QR code is available with the user, the service provider will validate it by matching the QR code and if it is not available with the user, then that user is not valid.

Future work:

In future we developed a website in which we will put a map navigation for the service provider for find the location of user and the advertisement of shopkeeper where the shopkeeper can sell his equipment.

7 Appendix A: Check List

Check List	Yes	No
I. Starting/Ending Dates		
II. Project Scope		
III. System Features (covering scope)		
IV. Interface Requirements		
V. Non-Functional Requirements		
VI. Use-Case		
VII. ER-Diagram		
VIII. Sequence Diagram		
IX. State Diagram		
X. Class Diagram		
XI. WBS (Work Breakdown Structure)		
XII. Data Flow Diagram		
XIII. Distribution of Work		
XIV. Activity Diagram		
XV. Object Diagram		
XVI. Tools & Technology		

1. Appendix B: Supervisory Committee

For Approval of any two Consultant Teachers	
<p>Teacher Consulted</p> <p>Name: _____.</p> <p>Designation: _____.</p> <p>Comments: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Signature: _____</p>	<p>Teacher Consulted</p> <p>Name: _____.</p> <p>Designation: _____.</p> <p>Comments: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Signature: _____</p>

(For office use only)

Date: _____

☐ **Approved**

Group ID: _____

☐ **Meeting Required:**

Date: _____ **Time:** _____ **Place:** _____

○ Rejected

Remarks:

Project Title (if revised):

Project Coordinator
