A Project Report on

VeeServe

Submitted in partial fulfilment of requirement for the award of degree of Diploma Computer Engineering,
Gujarat Technological University

Submitted By: -

Megh Shah 206170307007

Kuntal Shah 206170307045

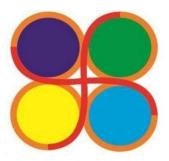
Ansh Patel 206170307010

Sameer Vaghela 201670307003

Bhargi Patel 206170307055

Under the Guidance of

Guide **Mr. Jigar Acharya**



Computer Department Government Polytechnic, Ahmedabad July-November-2022

CERTIFICATE

Computer Department

Government polytechnic, Ahmedabad



This is to certify that the project entitled

VeeServe

Submitted in partial fulfilment of the requirement of the degree of

Diploma in Computer Engineering Is a result of

the bonafide work carried out by

Megh Shah 206170307007

Kuntal Shah 206170307045

Ansh Patel 206170307010

Sameer Vaghela 206170307010

Bhargi Patel 206170307055

During the year July-2022 to November 2022

Internal Guide

Head of Department

Mr. Jigar Acharya

Prof. B.H.Kantevala

Government Polytechnic, Ahmedabad

ACKNOWLEDGEMENT

It is our privilege to express our sincerest regards to our project coordinator, Mr. Jigar Acharya, Mrs. Bhoomika Sharma, Mr. Hardik Shah for their valuable inputs, able guidance, encouragement, whole-hearted cooperation and constructive criticism throughout the duration of our project. We deeply express our sincere thanks to our Head of Department Mr. B.H. Kantevala for encouraging and allowing us to present the project on a fitness website called "VeeServe" at our department premises for the partial fulfillment of the requirements leading to the award of Diploma in Computer engineering. We take this opportunity to thank all our lecturers who have directly or indirectly helped our project. We pay our respects and love to our parents and all other family members and friends for their love and encouragement through out our career. Last but not the least we express our thanks to our friends for their cooperation and support.

ABSTRACT

Veeserve is a service provider system that connects customers with service agents for booking and delivering various services. The platform aims to streamline the process of service booking and ensure efficient service delivery to customers.

Through Veeserve, customers have the convenience of accessing a wide range of services from different service categories. They can browse through the available services, view service descriptions, and book the desired service based on their requirements. The system provides a user-friendly interface for customers to manage their bookings, including selecting a suitable date and time slot.

Once a customer books a service, the system assigns a service agent who specializes in the particular service category. The service agent receives the booking details and is responsible for delivering the service at the scheduled date and time. The agent may visit the customer's location to provide the service or carry out the service remotely, depending on the nature of the service.

Veeserve ensures a seamless communication channel between customers and service agents, allowing them to coordinate and address any specific requirements or concerns related to the service. Customers can provide feedback and ratings for the service received, which helps maintain service quality and improve customer satisfaction.

The system also incorporates features such as user authentication, secure payment processing, and a comprehensive management dashboard for service agents to track their bookings, manage their availability, and update their service offerings.

Overall, Veeserve aims to enhance the customer experience by offering a convenient platform for service booking, efficient service delivery through qualified service agents, and continuous improvement through customer feedback.

List of Figures

Figure No	Name	Page No
3.1 to 3.8	UrbanClap	14 to 19
6.0	Flowchart	28
7.1	Use-Case of System	32
8.1	Context Level	34
8.2	Level 1: Customer	35
8.3	Level 2: Scheduling	36
9.0	E-R Diagram	64
4.61	Home Page	66
4.62	User Login	67
4.63	Service Display Page	67
4.64	Service Detail Page	68
4.65	Contact Us Page	68
4.66	Cart Page	69
4.67	Register Page	69

List of Tables

Table No.	Name	Page No.
1.1	Project Profile	2
1.2	Hardware requirement	2
1.3	Software requirement	3
4.1	System flow chart symbols	50
4.5.1	Bookings	56
4.5.2	User_mst	57
4.5.3	serviceAgent_mst	58
4.5.4	userType_mst	59
4.5.5	Services_mst	60
4.5.6	serviceCategory_mst	61
4.5.7	Cart	61
4.5.8	subcategory_mst	62
4.5.9	Feedback_mst	63
4.5.10	companyDetails_mst	63
4.5.11	cancelReason_mst	64
4.5.12	Cities_mst	64

Index

Sr. No	Index	Page
I	Acknowledgement	I
II	Abstract	II
III	List of Figures	III
IV	List of Tables	IV
Chapter 1	Introduction	2
1.1	Project Profile	2
1.2	Hardware Requirement	2
1.3	Software Requirement	3
Chapter 2	Literature survey	4
2.1	Existing System	4
2.1.1	Working of Current System	4
2.1.2	Shortcoming of current System	4
2.2	Existing Site Survey	5
2.3	Process Model	10
Chapter 3	Proposed System	11
3.1	Introduction	11
3.2	Functionality	11
3.3	Advantage	12
3.4	System Modules	12
Chapter 4	System Design	17
4.1	System Flow Diagram	17
4.2	Use Case Diagram	22
4.3	Data Flow Diagram (DFD)	23
4.4	Entity Relationship Diagram (ERD)	26
4.5	Data Dictionary	27
4.6	System Design	35
Chapter 5	Testing	63
5.1	Test Planning	64
5.2	Testing Strategy	65
5.3	Test Cases	66
Chapter 6	Conclusion And Future Scope	72
6.1	Limitation of Project	73
6.2	Conclusion	73
6.3	Future Scope	74
Chapter 7	Bibliography and Reference	75

Chapter – 1

INTRODUCTION

Project Profile

PROJECT TITLE	VeeServe
FRONT END:	HTML-5, CSS-3, JAVASCRIPT, JQUERY,
	REACTJS
BACK END:	NodeJS, MONGODB
WEB SERVER	NodeJS
SUPPORTING TOOLS TO DEVELOP	Bootstrap, Tailwindess, Tailblocks
WEBSITE	
TEXT EDITOR	Vs code
INTERNAL GUIDE:	Mr. Jigar Acharya
SUBMITTED TO:	Department of CS
TEAM SIZE:	5 MEMBERS
TEAM MEMBER NAMES:	1: Megh Shah
	2: Kutal Shah
	3: Ansh Patel
	4: Sameer Vaghela
	5: Bhargi Patel

(1.1 project profile)

Project-II(3350706)

GROUP NO: A1

(1.2 Hardware requirements)

Hardware Requirements

Server side

RAM	2GB
Hard Disk	80GB
Processor	2GHz

Client side

RAM	512MB
Hard Disk	20GB
Processor	1.0GHz

(1.3 Software requirements)

Software Requirements

Server Side

Front End	HTML, CSS, JS, ReactJS
Back End	NodeJS with MONGODB
Other Tools	Vs code, Xamp, Bootstarp
Operating System	Windows7 or any compatible os

Client side

Browser	Internet explorer or any compatible browser
Operating system	Windows7 0r any compatible Operating
	System

Chapter – 2

LITERATURE SURVEY

Existing System

(2.1)

- **♣** The foremost used website for online service booking in India is Urban Company. It provides following main features:
 - Seamless Service delivery on user's convenience
 - All the professionals are well-trained and police-verified
 - In-app notification and tracking for the service
 - Feedback available for all the services
 - Good Customer Care support
 - As per our survey, the urban company some issues with its business strategy that causes an issue for service provider and even some users.
 - https://www.urbancompany.com

Working of current System

(2.1.1)

♣ There are two main users of our system. 1] Customers 2] Service Providers

1)Customers

- o First, the customers install the app from the Google Play Store (Android) or App Store (iOS) or visit the dedicated website. The interface enables a secure and instant registration process so that they can sign up with ease. Similar to other on-demand multi-service apps, this app facilitates O-Auth.
- The app will list service categories. They can choose the service they need from the available services list. Notably, they can use the Filter & Search Options feature to browse for the service quickly.
- Once they select the service, they have to choose the package based on their requirements. They can schedule the service at their convenience.
- The app notifies the service provider. Upon confirmation, customers can connect with the service provider via in-app call/chat.
- The app displays the fare based on the service duration. Finally, customers have the option to prefer cash on service or digital payment.

2) Service Providers

- o Step 1
 - Firstly, they have to visit this Professional business register URL. It is given below.
 - https://partner.urbanclap.com/professional-sign-up

- o Step 2
 - First, they have to click on sign up
 - Then they have to choose their service
 - Then they have to enter their mobile number
- o Step 3
 - They have to Setup their profile
 - Then have to add a photo
 - Then they have to give description of their service
 - Then they have to enter their information
 - After that they have to add the location where they provide services.
- o Step 4
 - Now, they have to wait for customers to send in a request.

Shortcoming of current system

(2.1.2)

- ♣ The first and the foremost shortcoming of urbanclap is its availability. Urbanclap provides services to the cities and the towns. It doesn't provide its services to villages or many a times town also.
- ♣ It results that the villagers can't get the privilege to get the service at home and they have to go out to find the service professionals on their own which can cost them undetermined time and money.
- ♣ Secondly, urbanclap charges of around 30% to 35% for every service through it's platform. It is a huge percentage for the mid-sized businesses as they can't earn much from this platform.
- It results that after a period of time the businesses losses confidence from the platform and they gets detached from the platform.

Existing Site Survey (2.2)

Website Name: https://www.urbancompany.com

- > Pros of UrbanClap:
- 1. This platform provides a wide range of services from which the user can select.

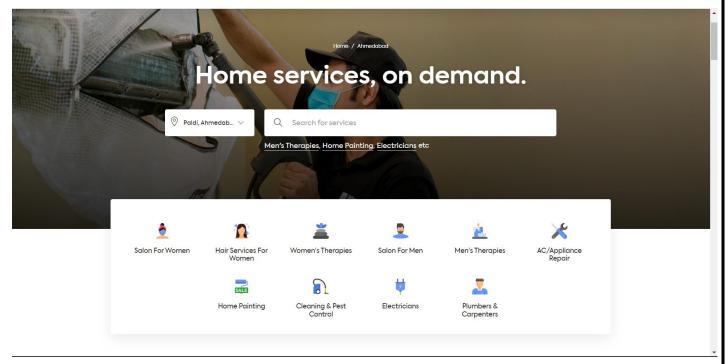


Figure 2.2.1

2. The prices for all the services are very reasonable and they are priced almost same as the prices of the services at the offline stores.

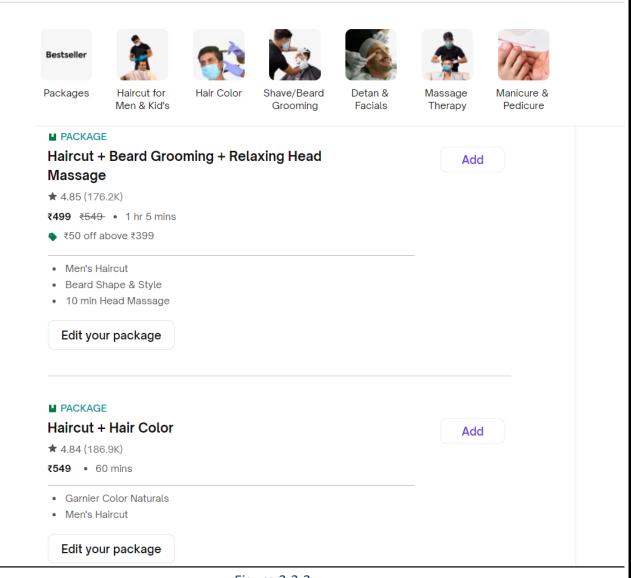


Figure 2.2.2

3. The platform provides a great number of deals that the user can use to be benefitted.

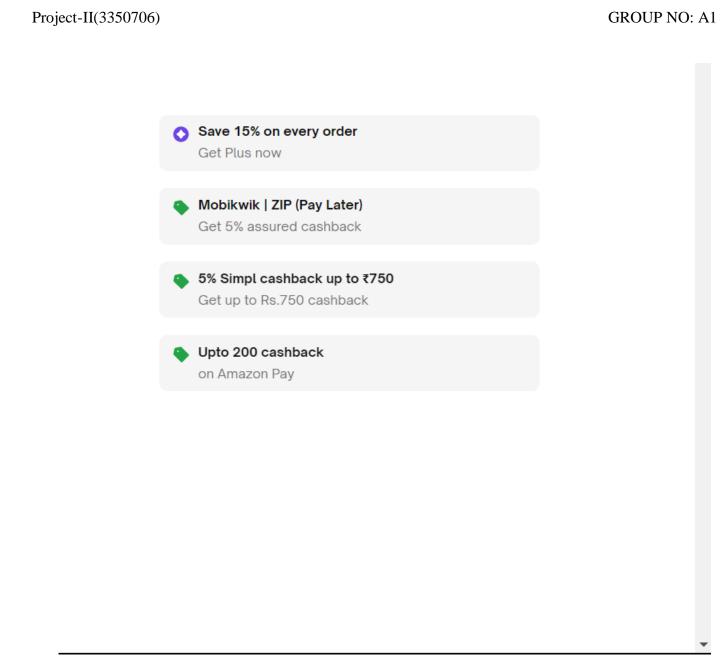
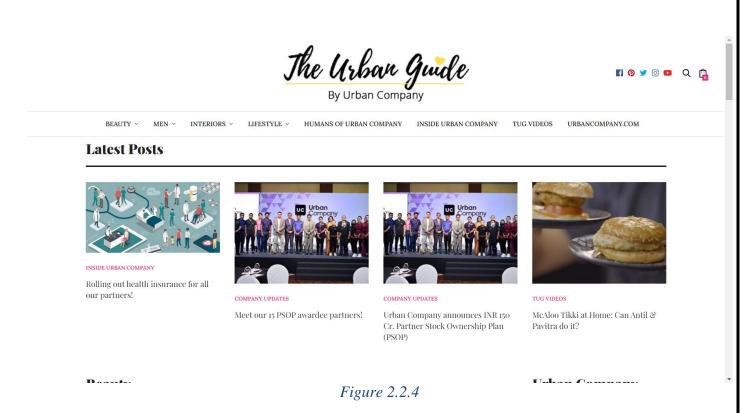


Figure 2.2.3

4. There are a number of blogs provided by the urbanclap regarding different topics.



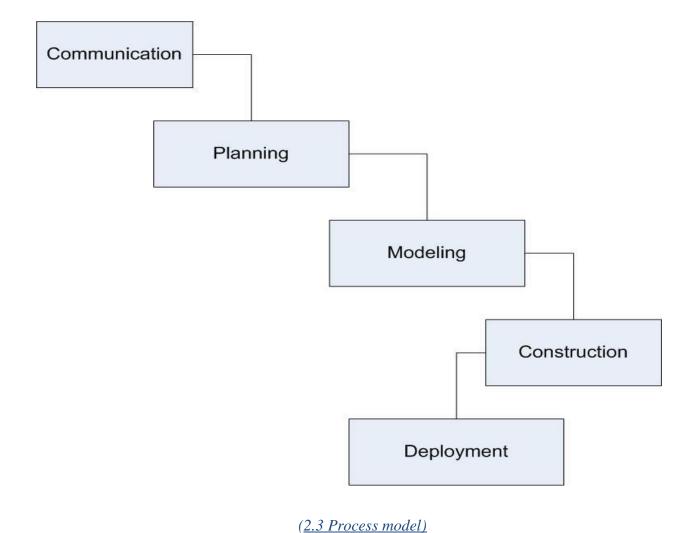
> Cons of MyFitnessPal:

1. There are only number of cities and no villages where urbanclap provides online services.



Figure 2.2.5

Process model



Reason to choose this model

- This project is Service Provider web application.
- So ,All the requirements regarding Services are gathered In advance.

Chapter – 3

PURPOSED WEBSITE

Introduction

(3.1)

• Right now, People want everything at their comfort and opt for Online based platforms but, there are very few platforms that are serving all types of services at home. So, this is our main reason to provide all types of Facilities and Services at Home.

- Nowadays, the world is developing very fast and people are adopting the technology rapidly. Main reason of customers is to find ease and they are adapting online platform for day-to-day needs.
- Our Platform links the Offline Service Providers and the Customers through Online Platform. The platform provides a wide range of services that are required in day-to-day life (Home related).

Functionality

(3.2)

- The user can register himself using his mobile number and OTP.
- The user gets a wide range of services from every domain.
- The user can get the service delivered on his convenience.
- The user can even change the date and time of service delivery.
- The user can willingly provide the feedback which can be used by the service provider to uplift the quality of service.
- The customer gets a wide range of payment options.
- The service provider gets notified for each and every service booked by the customer.
- The service professionals are police verified before they are allowed to provide service.

ADVANTAGE

(3.3)

- Customers need not to go to the offline stores to seek services.
- Customers are ensured that the service professionals are authenticated and not frauds.
- They can get a number of good offers that the offline stores can't provide.
- Incase of any issue with the service provider, customer can get best customer care.
- The customers can provide their valuable feedback, which can be used by service providers to improve their service.
- The customers can get the services at their doorstep at their convenience.
- The customer is provided with a wide range of payment options like COD, Credit Card, Debit Card, etc.
- Customers can even re-schedule the services.
- Service Providers can even reject the service request, if they are not free for the requested day.

System Modules

(3.4)

System Modules:

1. Login:

- a. Description: Allows users to access the system by providing their user ID and password.
- b. Functionality: User authentication and login.

2. Register:

- a. Description: Enables users to register by providing necessary details, resulting in the generation of a unique user ID for future login.
- b. Functionality: User registration and account creation.

3. Service Booking:

- a. Description: Allows users to browse available services, select desired services based on their requirements, and book appointments or service sessions.
- b. Functionality: Service catalog display, service selection, scheduling, and booking.

4. User Profile:

- a. Description: Stores and manages user-specific information such as name, phone number, address, and preferences.
- b. Functionality: User profile creation, editing, and management.

5. Notification:

- a. Description: Sends alerts and notifications to users regarding electronic bills, service updates, offers, and relevant information.
- 6. Functionality: Notification generation and delivery to users. Cart:
 - a. Description: Allows users to add selected services to a cart for future reference and review before proceeding to checkout.
 - b. Functionality: Adding services to the cart, viewing cart contents, applying/removing promotional codes, and order summary display.

7. Service Agent Management:

- a. Description: Facilitates the management of service agents who deliver the services.
- b. Functionality: Service agent registration, availability management, assignment to service bookings, and performance tracking.

8. Feedback and Rating:

- a. Description: Allows users to provide feedback and ratings for the services they have received, contributing to service quality improvement.
- b. Functionality: Feedback submission, rating system, and review management.

System Users:

1) Admin: -

Responsibilities: -

- Preparing, organizing and storing information in paper and digital form.
- Dealing with queries on the phone and by email.
- Updating computer records using a database.
- Connect with service provider and contractors.

2) Service Provider: -

Responsibilities: -

- Provide Services to customers.
- Keeping the Client Informed.
- Connect with clients.

3) Customer: -

Responsibilities: -

- They can see all the services which are available.
- They can contact to the service provider.
- They are also able to give feedback and rating.

Chapter -4

SYSTEM DESIGN

System Flow Chart

(4.1)

What is Flowchart?

A flowchart is a visual representation of the sequence of steps and decisions needed to perform a process. Each step in the sequence is noted within a diagram shape. Steps are linked by connecting lines and directional arrows. This allows anyone to view the flowchart and logically follow the process from beginning to end.

A flowchart is a powerful business tool. With proper design and construction, it communicates the steps in a process very effectively and efficiently.

Types and Uses of Flowchart

There are a wide variety of flowchart types. Here are just a few of the more commonly used ones.

- 1 Swimlane flowcharts
- 1 Data flow diagrams
- 2 Influence diagrams
- 3 Workflow diagrams
- 4 Process flow diagrams
- 5 Yes/no flowcharts
- 6 Decision flows

Symbols of Flowchart



The terminator symbol marks the starting or ending point of the system. It usually contains the word "Start" or "End."

Start/End



It Represents the process that needs to be carried out in the system.

Action or Process Symbol



The Diamond is used to represent a decision taken in the system flowchart. It is used for decision making (yes or no).

Decision Symbol



Represents material or information entering or leaving the system, such as customer order (input) or a product (output).

Input/Output Symbol

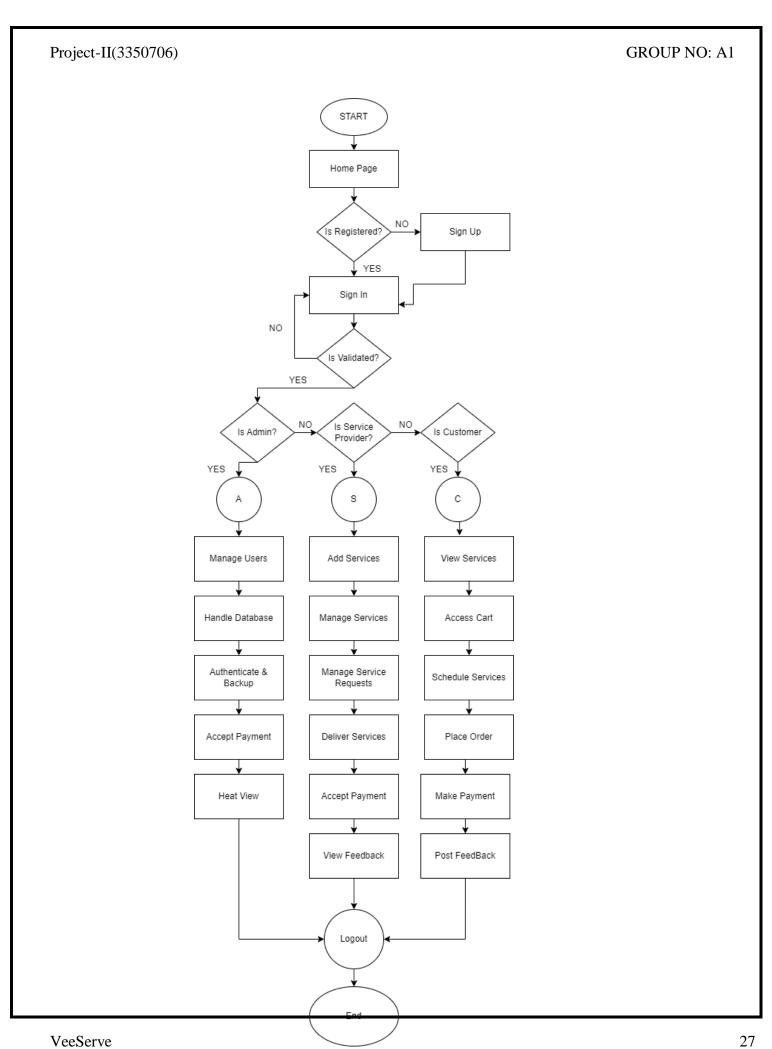


Indicates a list of information with a standard structure that allows for searching and sorting.

Database

Flow line, a line with an arrowhead is used to indicate the flow of data or logic in the system flowchart.

Data Flow



USE -CASE DIAGRAM

(4.2)

What is Use – Case Diagram?

In the Unified Modelling Language (UML), a use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system. To build one, you'll use a set of specialized symbols and connectors. An effective use case diagram can help your team discuss and represent:

- Scenarios in which your system or application interacts with people, organizations, or external systems
- Goals that your system or application helps those entities (known as actors) achieve
- The scope of your system

Purpose of Use – Case Diagram?

Use case diagrams are typically developed in the early stage of development and people often apply use case modelling for the following purposes:

- Specify the context of a system
- Capture the requirements of a system
- Validate a systems architecture
- Drive implementation and generate test cases
- Developed by analysts together with domain experts

Symbols of Use – Case Diagram

Actor

- Someone interacts with use case (system function).
- Named by noun.
- Actor plays a role in the business
- Similar to the concept of user, but a user can play different roles
- For example:
 - A prof. can be instructor and also researcher
 - plays 2 roles with two systems
- Actor triggers use case(s).
- Actor has a responsibility toward the system (inputs), and Actor has expectations from the system (outputs).



Use Case

- System function (process automated or manual)
- Named by verb + Noun (or Noun Phrase).
- i.e., Do something
- Each Actor must be linked to a use case, while some use cases may not be linked to actors.



VeeServe 2^t

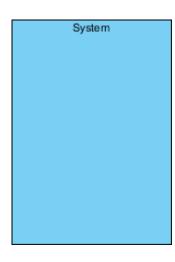
Communication Link

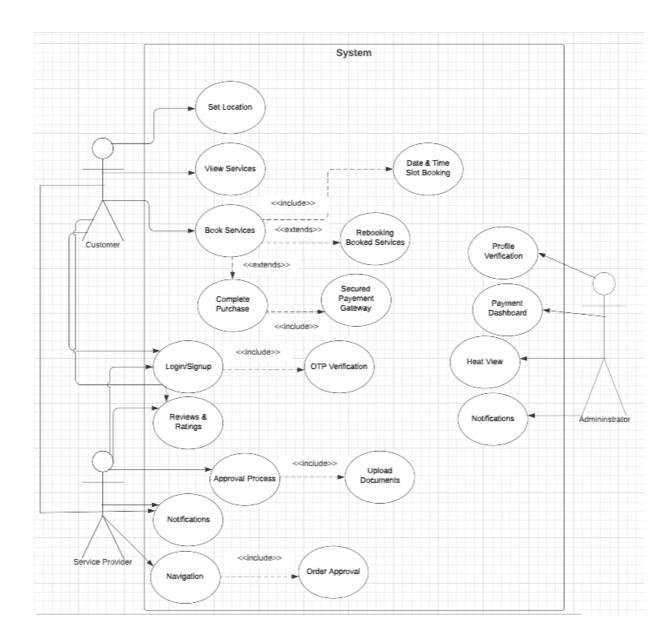
• The participation of an actor in a use case is shown by connecting an actor to a use case by a solid link.

• Actors may be connected to use cases by associations, indicating that the actor and the use case communicate with one another using messages.

Boundary of system

- The system boundary is potentially the entire system as defined in the requirements document.
- For large and complex systems, each module may be the system boundary.
- For example, for an ERP system for an organization, each of the modules such as personnel, payroll, accounting, etc.
- can form a system boundary for use cases specific to each of these business functions.
- The entire system can span all of these modules depicting the overall system boundary





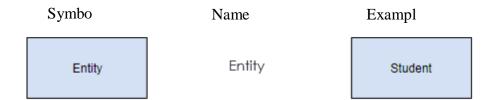
System UseCase (VeeServe)

Data flow Diagram (4.3)

What is Data Flow Diagram?

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. Data flowcharts can range from simple, even hand-drawn process overviews, to in-depth, multi-level DFDs that dig progressively deeper into how the data is handled. They can be used to analyze an existing system or model a new one. Like all the best diagrams and charts, a DFD can often visually "say" things that would be hard to explain in words, and they work for both technical and nontechnical audiences, from developer to CEO. That's why DFDs remain so popular after all these years. While they work well for data flow software and systems, they are less applicable nowadays to visualizing interactive, real-time or database-oriented software or systems.

Symbols of Data Flow Diagram



Entities represent people, organizations, or other things that interact with the system, i.e., entities are "outside of the system," that is they are part of a process, but external to the information system.



Data flow is the lines with arrows that are used to mark where the data flows. As external entities create processes and interact with data stores, data flow lines map out these inputs and outputs. Data flow lines are an essential aspect of a data flow diagram as they tie all of the

information together.



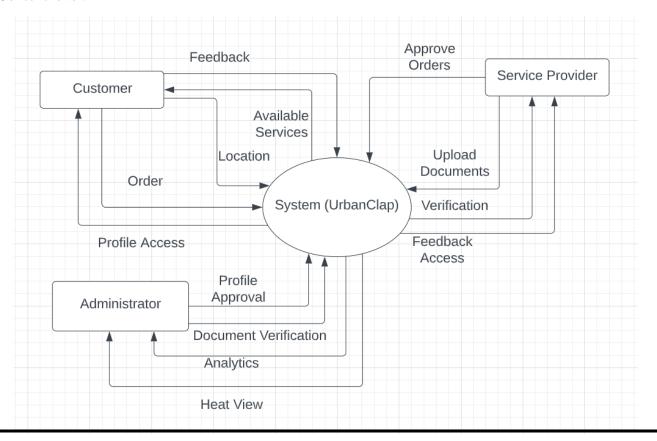


Processes are the actions that directly change the data. Whenever an action takes place, a new output is formed based on that action. Typical processes include calculations, data sorting or set of specific rules.



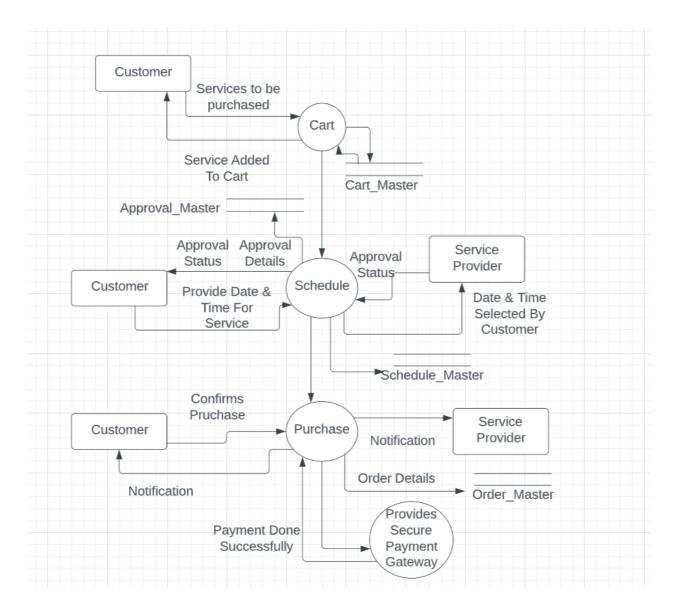
Data-stores are files or storage areas that contain information that can be called on at a later date. They typically appear as database tables or spreadsheets. Like processes, data stores receive simple labels explaining their purpose or order.

Context level:



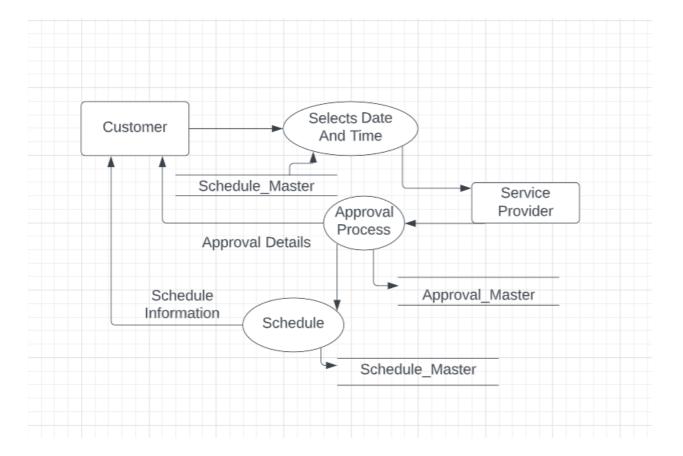
DFD of Customer Level-1

(4.3.1)



DFD of Scheduling Level-2

(4.3.2)



ER- DIAGRAM

(4.4)

What is E-R Diagram?

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.

Symbols of E-R Diagram.



Entity represents the name of an object, person, thing, event, or place where data is stored. This is usually represented by rectangles.



Weak Entity unlike a strong entity that is defined by its attributes, a weak entity solely depends on the existence of another entity.



Relationship defines the interaction between two entities.



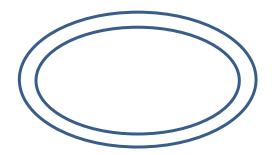
Weak - Relationship

Weak entity is represented by double rectangle. The relation between one strong and one weak entity is represented by double diamond



Attribute

Attribute refers to the unique characteristic or property of an entity.

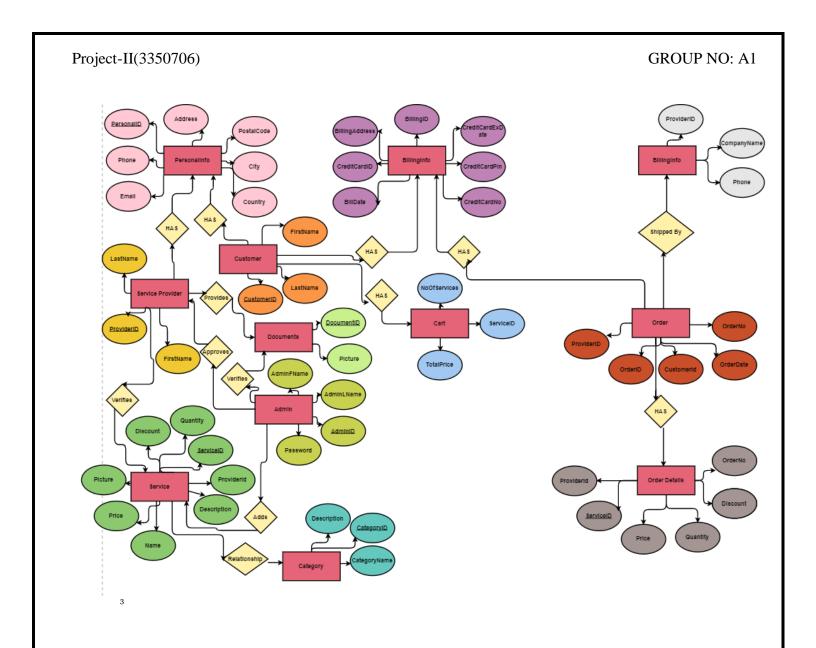


Multivalued Attribute

Multivalued Attribute is a type of attribute that can have multiple value.

→ Cardinality

• Cardinality refers to the occurrences of a relationship. In particular, it specifies the maximum number of relationships within two entities.



(4.4: ER Diagram)

Data Dictionary

(4.5)

What is Data Dictionary?

Data dictionary describes all the data used in the system. A Data Dictionary is a document that describes the basic organization of a database.

Typically a data dictionary will contain a list of variables in the database as well as the assigned variable names and a description of each type of variable (e.g. character, numeric, dates).

The data dictionary should also include the values accepted for each variable and any helpful comment such as important exclusions and skip patterns. The data dictionary is used primarily for data analysis.

Why Use a Data Dictionary?

Data Dictionaries are useful for a number of reasons.

Enforce the use of Data Standards

Assist in avoiding data inconsistencies across a project
Help define conventions that are to be used across a project
Provide consistency in the collection and use of data across multiple members of a
research team
Make data easier to analyze

Tables used in the System (VeeServe).

Serial No.	Table Name	Description
1.	Bookings	Stores the bookings of the user
2.	User_mst	Store user details (Customer, Admin)
3.	serviceAgent_mst	Stores Service Provider Info
4.	userType_mst	Stores the type of user.
5.	Services_mst	Store information about services.
6.	serviceCategory_mst	Stores information about categories of service.
7.	Cart	Stores information about user cart.
8.	subcategory_mst	Stores subCategories of services.
9.	Feedback_mst	Store feedbacks
10.	companyDetails_mst	Store info about the company
11.	cancelReason_mst	Stores the cancel Reason
12.	Cities_mst	Stores the cities

Data dictionary of Our System (VeeServe).

Table Name: Bookings

Column Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the booking record
serviceld	ObjectId (Ref: service_mst)	Required	Foreign key referencing the service_mst table, represents the service associated with the booking
serviceProviderId	ObjectId (Ref: serviceAgent_mst)	Required	Foreign key referencing the serviceAgent_mst table, represents the service provider associated with the booking
date	Date	Required	Date of the booking
timeSlot	String	Required	Time slot of the booking
customerName	String	Required	Name of the customer
customerEmail	String	Required	Email address of the customer

Column Name	Data 1	Гуре	Constraints	Description
customerPhone	String	Required		Phone number of the customer
createdAt	Date			Timestamp of when the booking record was created
updatedAt	Date			Timestamp of when the booking record was last updated

Table Name: User_mst

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the user record
userType	ObjectId (Ref: userType_mst)		Foreign key referencing the userType_mst collection, represents the type of user (e.g., admin, customer, etc.)
fullName	String		Full name of the user

Field Name	Data Type	Constraints	Description
emailAddress	String		Email address of the user
password	String		Hashed password of the user
isActive	Boolean		Indicates if the user is active or not
resetPasswordToken	String		Token used for resetting the user's password
reset Password Expires	Date		Date and time when the reset password token expires
address	String		Address of the user
contact	String		Contact information of the user
createdAt	Date	Default: Date.now	Timestamp of when the user record was created

Table Name: serviceAgent_mst

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the service agent record
name	String	Required	Name of the service agent
serviceCategory	ObjectId (Ref: serviceCategory_mst)	Required	Foreign key referencing the serviceCategory_mst collection, represents the service category associated with the service agent
isAvailable	Boolean	Default: true	Indicates if the service agent is available or not
userType	ObjectId (Ref: userType_mst)		Foreign key referencing the userType_mst collection, represents the type of user associated with the service agent

Table Name: Cart

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the cart record
items	Array of Objects		Array containing cart items
items.serviceId	ObjectId (Ref: services_mst)	Required	Foreign key referencing the services_mst collection, represents the service associated with the item
user	ObjectId (Ref: user_mst)	Required	Foreign key referencing the user_mst collection, represents the user associated with the cart

$Table\ Name:\ UserType_mst$

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the user type
userType	String		Name or description of the user type

Table Name: subCategory

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the subcategory
title	String		Title or name of the subcategory
categoryld	ObjectId		Reference to the parent service category in the serviceCategory_mst collection

Table Name: Service

Primary Key: Service_ID

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the service
name	String	Required	Name of the service
description	String	Required	Description of the service

Field Name	Data Type	Constraints	Description
price	Number	Required	Price of the service
type	ObjectId (Reference)	Required	Reference to the 'ServiceCategory' model
subCategory	ObjectId (Reference)	Required	Reference to the 'SubCategory' model
image	String		URL or path to the image associated with service

Table Name: serviceCategory_mst

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the service category
categoryName	String		Name of the service category
category Description	String		Description of the service category

Field Name	Data Type	Constraints	Description
cities Available	Array		Array of cities where the service category is available
imagePath	String		URL or path to the image associated with the category
isActive	Boolean		Flag indicating if the service category is active

Table Name: Feedback

Field Name	Data Type	Constraints	Description
_id	ObjectId	Primary Key	Unique identifier for the feedback
userld	ObjectId	Required	Reference to the user in the user_mst collection
serviceCategoryId	ObjectId	Required	Reference to the service category in the serviceCategory_mst collection
feedback	String	Required	Feedback message or content provided by the user

Field Name	Data Type	Constraints	Description
createdAt	Date	Default: Date.now	Timestamp indicating when the feedback was created
rating	Number	Required	Rating provided by the user for the service

Table Name: Company_Details

Field Name	Data Type	Constraints	Description
companyName	String	Required	Name of the company
companyAddress	String	Required	Address of the company
companyPhone	String	Required	Phone number of the company
companyEmail	String	Required	Email address of the company

Table Name: Cancel_Reason

Field Name	Data Type	Constraints	Description
reason Code	String	Required	Code representing the cancellation reason
reason Description	String	Required	Description of the cancellation reason
isActive	Boolean	Default: true	Indicates if the reason is active or not

Table Name: Cities_mst

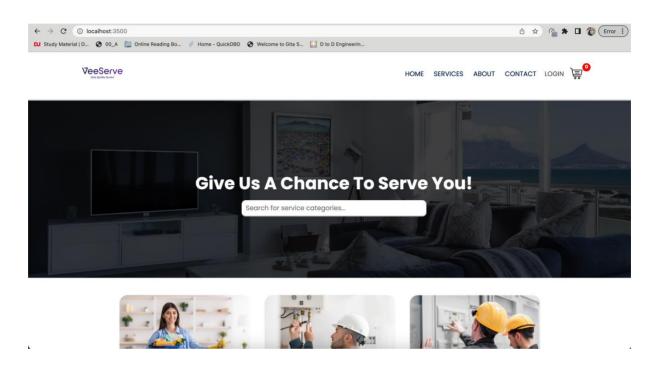
Field Name	Data Type	Constraints	Description
cityName	String		Name of the city
stateName	String		Name of the state
countryName	String		Name of the country
isActive	Boolean		Indicates if the city is active or not

(4.5: Data Dictionary)

SYSTEM DESIGN

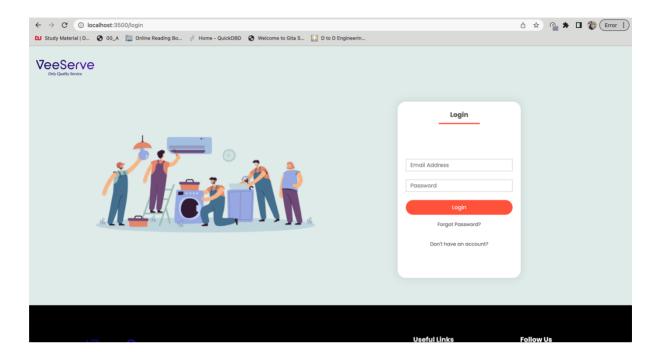
(4.6)

Home Page



(4.6.1 Homepage design)

User Login Page:



(4.6.2 Activity page design)

Service Display Page:

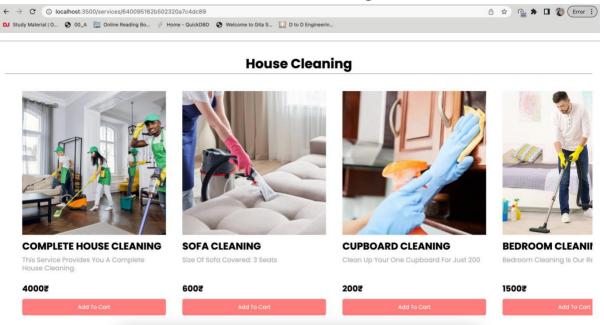


We Provide Better



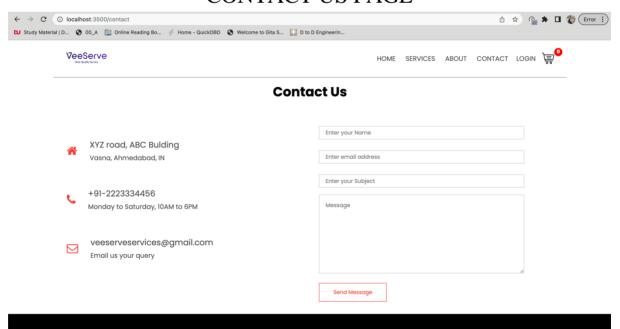
(4.6.3 Service Display Page design)

Service Detail Page:

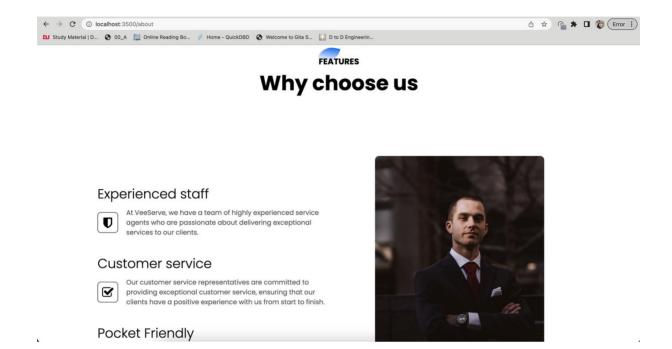


(4.6.4 Service Detail page design)

CONTACT US PAGE

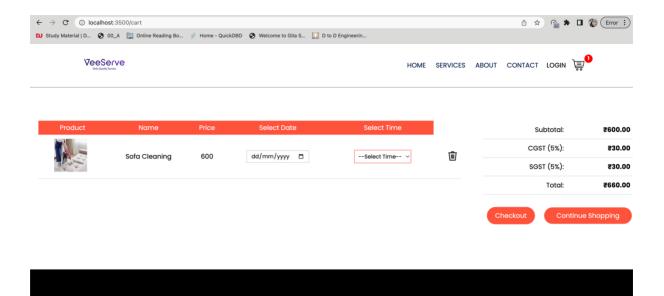


About Page

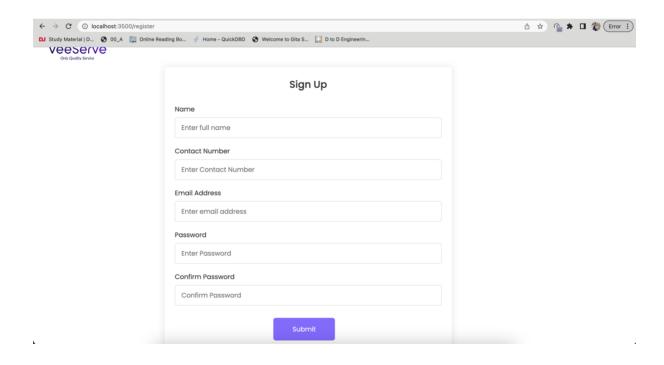


(4.6.6 Service Schedule Page design)

Cart Page



Register Page



Project-II(3350706)	GROUP NO: A1
What is System design?	
Systems design is the process of defining elements of components and their interfaces and data for a system the process of defining, developing and *designing system requirements of a business or organization	based on the specified requirements. It is
VeeServe	7

Chapter – 5

TESTING

5.0 Testing:

Various parameters like implementation environment, program modules and coding standards are explained in previous chapter while this chapter is aimed to provide brief account of testing the software. There are two principal motives of testing the software

- 1. To rectify the error in execution
- 2. To check the viability of software

The testing ensures that the software is according to the required specification standards and performs the task meant for it. The testing is done by us in house employee that act as novice user and test the application with all possible way to find the bugs and error as well as check validation.

5.1 Testing Plan:

Testing is carried out at the following three stages:

- ➤ Design
- > Implementation
- ➤ Coding

5.1.1 Design Testing:

The design errors are to be rectified at the initial stage. Such errors are very difficult to repair after the execution of software.

- **5.1.2 Implementation Testing:** The errors occurred at this stage can't be overlooked because such errors do not allow the further process.
- **5.1.3 Coding Testing**: The coding procedure plays significant role in software designing. The improper coding of any software can generate inconsistent results. Such errors may occur due to incorrect syntax or false logic. If the errors at coding stage remain unnoticed may give rise to grave failure of the system

5.2Testing Strategy:

A strategy for software testing integrates software test case design method into a well planned series of steps that result in the successful construction of the software. The strategy provides the roadmap that describes the steps to be conducted as a part of testing, then these steps are planned and then undertaken, and how much effort, time and resource will be required.

- > We have tested our whole system using bottom up testing strategy.
- > Bottom up testing involves integrating and testing the modules to the lower levels in

Project-II(3350706)	GROUP NO: A1
the hierarchy, and then working up hierarchy	of modules until the final module is test.
VeeServe	7

➤ Bottom up testing strategy shows how actual testing is to be done with whole system but it does not show any detail about each module testing.

- ➤ For each module testing We have decided to test each lower level module with white box testing strategy.
- ➤ When all modules are tested successfully then I will move to one step up and continue with white box testing strategy.

Why Black Box Testing in my Project?

In my project whatever I have implemented was going to be tested by external guide without knowing our code, so there was a black box testing involve directly.

Why White Box Testing in my Project?

During the project we were making the applications, we knew how it should proceed internally; we needed to Debugging also for testing our small functionalities.

Why interface Testing in our Project?

We examined the code to be tested and explicitly list each call to an external component.

- ➤ Testing the screen.
- > The position and the related labels for all views were checked.
- ➤ All menu and sub menus were verified for correctness.
- ➤ Validations for all input were done.
- ➤ All required fields aren't left blank.

5.3 Testing Method

5.3.1 Unit Testing

The unit testing is meant for testing smallest unit of software. There are two approaches namely bottom-up and top-down. In bottom up approach the last module is tested and then moving towards the first module while top down approach reverses the action. In present work we opt for the first one. The bottom up approach for the current project is carried out as shown in.

5.3.2 Integration Testing

The integration testing is meant to test all the modules simultaneously because it is possible that all the modules may function correctly when tested individually. But they may not work altogether and may lead to unexpected outcome.

5.3.3 Validation Testing

After the integration testing software is completely assembled as a package, interfacing error have been uncovered and corrected, and then validation testing may begin. Validation can be defined in many ways but a simple definition is what a validation succeeds when software functions in a manner that can be reasonably accepted by the user.

5.3.4 Storage Testing

The database of the system has to be stored on the hard disk. So the storage capacity of the hard disk should be enough to store all the data required for the efficient running of the system

5.4 Test Cases

5.4.1 Purpose

The purpose of this application is to reduce overhead in paper work and all the records are maintained such that the user as well as administrator can easily segment them into desired properties so it is easy for any novice user to have access to the application. Another purpose is to make record of papers in database so it can be referred in future.

5.4.2 Test Cases

1.Create Account

Test Case	Test Data	Test Result	Test Report
1	User Name: Blank	Invalid	Please enter user name
2	Name: Blank	Invalid	Please enter name
3	Email: Blank	Invalid	Please enter email
4	Password: Blank	Invalid	Please enter password
5	Email: Invalid, Password: Valid	Invalid	Email or password is incorrect
6	Email: Valid, Password: Invalid	Invalid	Email or password is incorrect
7	Email: Valid, Password: Valid	Valid	Account Created

2.Registration

Test Case	Test Data	Test Result	Test Report
1	Blank Name, Email, Password, Phone number, Address	Invalid	Please enter all required details
2	Valid Name, Blank Email, Password, Phone number	Invalid	Please enter a valid email address
3	Valid Name, Invalid Email, Password, Phone number	Invalid	Please enter a valid email address
4	Valid Name, Valid Email, Blank Password, Phone number	Invalid	Please enter a password
5	Valid Name, Valid Email, Invalid Password, Phone number	Invalid	Password should be at least 8 characters long
6	Valid Name, Valid Email, Valid Password, Blank Phone number	Invalid	Please enter a phone number
7	Valid Name, Valid Email, Valid Password, Invalid Phone number	Invalid	Please enter a valid phone number
8	Valid Name, Valid Email, Valid Password, Valid Phone number	Valid	Account created successfully

3.Home Page (Customer)

Test Case	Test Data	Test Result	Test Report
1	User logged in	Valid	Home page is displayed with personalized content for the customer.
2	User not logged in	Invalid	Redirected to the login page.
3	No services available	Valid	Display a message indicating no available services.
4	Services available	Valid	Display a list of available services.
5	Service category selected	Valid	Show subcategories or specific services based on the selection.
6	Service booked	Valid	Successful booking of the selected service.
7	Service details clicked	Valid	Show detailed information about the selected service.
8	Search for a service	Valid	Display search results matching the entered keyword.
9	Service rating submitted	Valid	Successful submission of service rating.

Test Case	Test Data	Test Result	Test Report
10	Logout button clicked	Valid	User is logged out and redirected to the login page.

4.Home Page (Admin)

Test Case	Test Data	Test Result	Test Report
1	Admin logged in	Valid	Home page is displayed with personalized content for the admin.
2	Admin not logged in	Invalid	Redirected to the login page.
3	User management	Valid	Display a list of registered users with their details.
4	Service management	Valid	Display a list of services with options to add, edit, or delete services.
5	Category management	Valid	Display a list of service categories with options to add, edit, or delete categories.
6	Subcategory management	Valid	Display a list of subcategories with options to add, edit, or delete subcategories.
7	Agent management	Valid	Display a list of service agents with options to add, edit, or delete agents.
8	City management	Valid	Display a list of cities with options to view, delete cities.
9	Report generation	Valid	Generate various reports such as user statistics, service analytics, or feedback analysis.
10	Logout button clicked	Valid	Admin is logged out and redirected to the login page.

5.Home Page (Service Agent)

Test Case	Test Data	Test Result	Test Report
1	Agent logged in	Valid	Home page is displayed with personalized content for the service agent.
2	Agent not logged in	Invalid	Redirected to the login page.
3	View Assigned Tasks	Valid	Display a list of tasks assigned to the service agent with relevant details.
4	Task Details	Valid	Clicking on a task displays the detailed information about the task.
5	Update Task Status	Valid	Ability to update the status of a task, such as "In Progress" or "Completed".
6	View Customer Info	Valid	Access to view customer information associated with the assigned tasks.
7	Navigation Menu	Valid	Navigation menu allows the service agent to access different sections of the system.
8	Logout Button	Valid	Clicking on the logout button logs out the service agent and redirects to the login page.

Test Case	Test Data	Test Result	Test Report
9	Error Handling	Invalid	System handles errors gracefully, displaying appropriate error messages when necessary.

6.Cart

Test Case	Test Data	Test Result	Test Report
1	Empty Cart	Valid	Cart page displays a message indicating that the cart is empty.
2	Add Item	Valid	Successfully add an item to the cart and verify that it appears in the cart with correct details.
3	Remove Item	Valid	Remove an item from the cart and verify that it is no longer displayed in the cart.
4	View Total Price	Valid	Verify that the total price of all items in the cart is calculated correctly and displayed accurately.
5	Proceed to Checkout	Valid	Clicking on the "Proceed to Checkout" button takes the user to the checkout page for payment processing.
6	Continue Shopping	Valid	Clicking on the "Continue Shopping" button redirects the user back to the home page or product listing page.
7	Empty Cart Message	Valid	Verify that a message is displayed when the cart is empty, guiding the user to add items to the cart.
8	Error Handling	Invalid	System handles errors gracefully, displaying appropriate error messages when necessary.

7.Edit Profile

Test Case	Test Data	Test Result	Test Report
1	Valid Data	Valid	Enter valid data such as a new name, email, and phone number, and save the changes. Verify that the profile is updated successfully.
2	Invalid Email	Invalid	Enter an invalid email format (e.g., missing @ symbol) and attempt to save the changes. Verify that an error message is displayed indicating the invalid email format.
3	Missing Fields	Invalid	Leave one or more required fields (e.g., name, email) empty and attempt to save the changes. Verify that an error message is displayed indicating the missing fields.
4	Invalid Phone Number	Invalid	Enter an invalid phone number format (e.g., alphabetic characters) and attempt to save the changes. Verify that an error message is displayed indicating the invalid phone number format.
5	Password	Valid	Enter the current password and a new password. Verify that the

Test Case	Test Data	Test Result	Test Report
	Update		password is updated successfully.
6	Password Mismatch	Invalid	Enter the current password and a new password, but confirm the new password incorrectly. Verify that an error message is displayed indicating the password mismatch.
7	Cancel Changes	Valid	Make changes to the profile fields and choose to cancel the changes. Verify that the changes are not saved and the profile remains unchanged.
8	Error Handling	Invalid	System handles errors gracefully, displaying appropriate error messages when necessary.

8.Category And Subcategory

Test Case	Test Data	Test Result	Test Report
1	Valid Category	Valid	Create a new category with valid data (e.g., name, description) and verify that it is successfully created.
2	Invalid Category	Invalid	Attempt to create a category with missing required fields (e.g., name) and verify that an error message is displayed indicating the missing fields.
3	Valid Subcategory	Valid	Create a new subcategory with valid data (e.g., title, category) and verify that it is successfully created and associated with the corresponding category.
4	Invalid Subcategory	Invalid	Attempt to create a subcategory with missing required fields (e.g., title, category) and verify that an error message is displayed indicating the missing fields.
5	Edit Category	Valid	Edit an existing category by updating its details (e.g., name, description) and verify that the changes are successfully saved.
6	Delete Category	Valid	Delete an existing category and verify that it is successfully removed from the system, along with its associated subcategories.
7	Edit Subcategory	Valid	Edit an existing subcategory by updating its details (e.g., title, category) and verify that the changes are successfully saved.
8	Delete Subcategory	Valid	Delete an existing subcategory and verify that it is successfully removed from the system.
9	Category Validation	Invalid	Attempt to create a category with the same name as an existing category and verify that an error message is displayed indicating the duplicate name.
10	Subcategory Validation	Invalid	Attempt to create a subcategory with the same title as an existing subcategory within the same category and verify that an error message is displayed indicating the duplicate title. Attempt to create a subcategory without selecting a category and verify that an error message is displayed indicating the missing category.

9.Search

Test Case	Test Data	Test Result	Test Report
1	Valid Search Keyword	Valid	Enter a valid search keyword (e.g., "plumbing") and verify that the system displays relevant search results.
2	Empty Search Keyword	Invalid	Leave the search keyword field empty and click the search button, then verify that the system displays an error message indicating the need to enter a search keyword.
3	Invalid Search Keyword	Invalid	Enter an invalid search keyword (e.g., special characters) and click the search button, then verify that the system displays an error message indicating the invalid keyword.
4	Search by Category	Valid	Select a specific category from the search filter options (e.g., "Electrical") and click the search button, then verify that the system displays search results filtered by the selected category.
5	No Search Results	Valid	Enter a search keyword that does not match any available services and verify that the system displays a message indicating no search results found.

10.Forget Password

Test Case	Test Data	Test Result	Test Report
1	Valid Email Address	Valid	Enter a valid email address associated with a user account, click on the "Forgot Password" link, and verify that the system sends a password reset email to the user's email address with instructions to reset the password.
2	Invalid Email Address	Invalid	Enter an invalid or non-existing email address, click on the "Forgot Password" link, and verify that the system displays an error message indicating that the email address is not registered.
3	Blank Email Address	Invalid	Leave the email address field blank, click on the "Forgot Password" link, and verify that the system displays an error message indicating the need to enter an email address.
4	Malformed Email Address	Invalid	Enter a malformed email address (e.g., missing '@' symbol), click on the "Forgot Password" link, and verify that the system displays an error message indicating an invalid email address.
5	Password Reset Flow	Valid	Follow the password reset flow by clicking on the password reset link in the email, enter a new password, and verify that the system successfully updates the user's password and displays a success message.
6	Expired Password Reset Token	Invalid	Use an expired or invalid password reset token, follow the password reset flow, and verify that the system displays an error message indicating that the token is expired or invalid.

Chapter – 6

CONCLUSION AND FUTURE SCOPE

Limitation of project

(5.1)

The proposed system is developed to overcome the shortcomings of the manual system, but still there are many limitations to this new system.

The limitations are as follows:

- We have not developed an android application of this system
- This system is available for limited areas, which will be improved with more service providers connecting us.

Conclusion

(5.2)

At the time of submitting the report we have successfully Completed Project documentation work, Created database of project and also Implemented Design of user registration and login.

We have tried our best to prepare documentation easy to understand and complete to develop our project.

Future scope

(5.3)

- **Mobile Application**: Develop a mobile application for Veeserve to expand its reach and provide convenience to customers and service agents.
- Service Ratings and Reviews: Implement a service ratings and reviews system where customers can provide feedback and ratings for the services they have availed.
- **Integration with Payment Gateways**: Integrate the system with popular payment gateways to provide secure and convenient online payment options. This will allow customers to make payments easily and securely, enhancing the overall user experience.
- Analytics and Reporting: Incorporate analytics and reporting features to gather insights on customer behavior, service trends, and performance metrics.
- **Social Media Integration**: Integrate the system with social media platforms to facilitate easy sharing of service experiences, promotions, and updates. This will help in expanding the system's reach, increasing brand visibility, and attracting new customers.
- **Multi-language Support**: Incorporate multi-language support to cater to a diverse customer base.
- Integration with Third-Party Service Providers: Explore partnerships with third-party service providers to expand the range of services offered through the system.

Overall, the future scope of the system involves continuous improvement, innovation, and embracing emerging technologies to enhance the customer experience, streamline operations, and stay ahead in the competitive service provider industry.

Chapter – 7

Bibilography and Reference

We have taken web reference from the following:

Google
W3-schools
UrbanClap
Geeksofgeeks
Youtube
Slide-share

We have taken external reference from **Mobio Solutions**. We have taken Internal faculty help from: **Mr. Jigar Acharya**