

**GHAR BANAO**

**BACHELOR OF SCIENCE**  
**IN**  
**COMPUTER SCIENCE**



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## **DEDICATION**

A final year project report presented to the Government College University of Faisalabad in partial fulfilment of the requirements of the degree of Computer Science. Also, my parents, my lecturers and mentors as well as my group members and family alongside every other person that has helped me achieve one of my goals. With the love, help and support, things became easier. I will forever be in gratitude to them and to the All Mighty for giving me this opportunity.



## **DECLARATION**

We carried out the work reported in this project under the supervision of Sir Rameez Raja Department of Computer Science GC University, Faisalabad, Punjab, Pakistan. We hereby declare that this project, neither whole nor as a part has been copied out from any source. We have developed this project and accompanied the report entirely based on our efforts. If any part of this project is, prove too copied out from any source. We will stand by all consequences. No portion of the work presented has been submit of any application for any other degree of this or any other university or institute.

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# Certificate by the Supervisory Committee

This is to certify that the final year project of BS (Hons) in CS “Online Admissions Management System” project was developed by “AHMAD HASSAN” AND “NOOR-UL-HASSAN” under registration number (2018- GCUF-075722, 2018-GCUF-075718) respectfully supervised by “MR. RAMEEZ RAJA” and that in his opinion it is fully adequate, for the degree of BS (Hons) in Computer Science.

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## **CHAPTER 1**

### **INTRODUCTION**

## 1. Introduction

According to the fast-changing of the business environment nowadays, we have to be more effective and fast in responding to customers' needs to make them able to access to our products instantly. This can be done by designing an E-commerce website for online shopping, which sells variant fashions and goods to the customers either by instant payment or by payment on delivery. Many business houses carry out commercial transactions using websites. This makes the shopping process on the web familiar and makes E-commerce an accepted paradigm. To implement online shopping, a virtual store on the Internet is needed which allows customers to seek for products and select them from a catalog. The customer needs to fill some fields to order a specific product. Our aim is to create a website in which customer can order any product that use for house building such as **Construction Material**, Tilling and flooring and also get a services of different kind of **Labor Services** such as painter, Carpenter, Electrician etc. Customer using our website and get the material and services at your door step. We also provide a Service to **Buy And Sell House** there are two types of house first one is our own making house and the second one is customer they can also add house on our site to sell, before this when a customer to Sell property he need to go to the Property Dealer and where he pay higher commission on that property.

As we all know, we all live in an era of modern technology. We use technology in every aspect of life. Without technology gadgets, it is very difficult to imagine our life. Construction and construction material are the most basic need in every country. Utilizing this system customer can get all the facilities of material and services at door step. As the customer have to wait too long to get their desired custom ordering and none of the ordering facility real-time custom orders according to their desire. It's our motive to provide ease to people by providing services to the user according to their needs and taste. The user can easily select built-in custom material and they can easily create their custom material and desire time. The website shows the features, menu, and custom order features and allows reservation of orders. If you want to make platform progress, you must have analyzed the requirements properly which can take us out of many difficulties. This project is for a client who can organize the construction reservation with the theme and supervise their work.

When the reservation date and time are confirmed, the user will get the confirmation message so that the user doesn't have to worry about the order confirmation. He/she can also watch the arrangement of the selected theme before the reservation. Because of that real-time experience, the user doesn't have to worry about the arrangements that he booked, as he/she will have proven for what he selected

as well as the custom order that the users ordered online will get what they ordered. They do not have to worry about until they are sure about what they ordered so that they can claim and judge the reality and arrangements. This system will solve many problems for the custom orders as they have so many worries about whether the reservation and custom order work correctly or not. The reason for the (Ghar Banao) is to give relief to their users from the reservation and custom order worries. So, the user gets the reservation and order without compromising privacy, worries, or scandals. This project is user-requirement-based. This project is for a client who wants to book products and workers of his desire for online from anywhere, anytime. This website should have completeness. We will make a website, products and services that will cover all the requirements of the client.

The developed (Ghar Banao) system will able to provide user a real-time platform to check and update the availability of the time and get the booking done with affordable rates, for example, reservation date and time. Besides this system also able to reduce the stress of the user for custom product and product ordering without any scandal and taking care of user privacy. Security of the sign-up procedure asks for the registered id and password that can provide enhanced services. Sign-up security ensures only authorized persons get to access the panel or the app solution to protect their privacy. Ghar Banao website works very fast as all you need to do is make a booking through the website of your desire products, workers available in giving the page of your need. You can have the most reliable, professional, and trustworthy booking through the Ghar Banao website and get the booking done without any effort. The main goal of the website is the correctness of all services to fulfil all the requirements. We provide a single-stop solution for building materials and will be continuously adding new products with time. Our goal is to assist people in visualizing, creating, and maintaining beautiful houses. We share eye-catching images of cool home decor products, unique space ideas, architectural design, and emerging design trends. Your home is the center of your world, a place where you find peace and comfort. Ghar Banao understands your desire to make your house truly your home. We offer a full range of standard architectural services. The company has specific expertise in most building types, including residential, commercial, and office buildings, educational, and health institutions.

## **1.1 Background**

Pakistan is a developing country and Information Communication and technology are playing their important roles in development of the country. By ecommerce we mean buying and selling of products or services over electronic systems such as the Internet and other computer networks. In truth in Pakistan we have very less ways to pay our bills online or trade online. But that does not mean we cannot. There are new players on Pakistan ground like Easypaisa, Jazz Cash and Online Bank Transfer who wants to revolutionize the way Pakistan ecommerce field is taken. With launch of these services many new startups can easily sell their products and services online. These services have lots of potential and we hope it will succeed and bring a change in the Pakistan ecommerce field. Pakistan which is already popular for its money transfer and online shops.

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

The objective of this project is to develop a general-purpose e-commerce store where any product (such as house building construction material, Tilling and flooring and also get a services of different kind of labor services such as painter, Carpenter, Electrician etc. Customer using our website and get the material and services at your door step.) We also provide a Service to Buy And Sell Houses there are two types of houses first one is our own making houses and the second is a user or a can add house on our site to sell, before this a when a user or person to Sell property he need to go to the Property Dealer and where he pay higher commission on that property or house but we charge very low commission..

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction.

Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e-mail notification is sent to the customer as soon as the order is placed.

## **1.2 Abstract**

The Ghar Banao System is a web application which provide the facility to making house and decorate your home. We provide the material for making house like Sand, Aggregates, Stone or Rock, Brick, Cement, Metal and Steel. We also provide a Service to Buy And Sell Houses there are two types of houses first one is our own making houses and the second is a user or a can add house on our site to sell, before this a when a user or person to Sell property he need to go to the Property Dealer and where he pay higher commission on that property or house but we charge very low commission. Ghar Banao System make it simple to locate and analyze Products information in real-time with a simple database search. Ghar Banao System that allows user to manage and maintain their House with ease. The Ghar Banao System has been developed to allow users to get different product use for construction material such as tilling and flooring and also get a services of different kind of labor services such as painter, Carpenter, Electrician etc and also use for buying and selling house easily.

### **1.3 Purpose**

The main purpose of this project is to build a Ghar Banao system for house building such as construction material, Tilling and flooring and also get a services of different kind of labor services such as painter, Carpenter, Electrician etc. Customer using our website and get the material and services at your door step.

With the evolution of technology and the wave of digitalization, more and more businesses are adapting to tech evolutions. You will find the digital payment options with the more use. The ultimate purpose behind this evolution is to make shopping a hassle-free experience for everyone. Our project aim is to develop a user-friendly and responsive E-commerce Website (Ghar Banao) that will facilitate to buyer for online buying construction material at your door step with easy process. One of its main purposes to assure the quality of selling product. It also provides an online platform for buyer to easily buying products without any extra expense. Some important purpose of making this site. Registered users can Sell their Properties on Buy House option and also he will buy our Houses.

#### **Visibility on web:**

To sell online or offline, the first step is to grab the customer's attention. Creating an online store helps you do the same with ease & without worrying about budget constraints. Opening a virtual shop over a website makes it easy for your shoppers to reach you, know your offerings, and shop from you instantly.

#### **Sell 24/7/365:**

No holidays, events, day-night cycles, and geographic boundaries can affect your business now. Keep your shop open for your customers 24/7 & serve them with your quality products throughout the year.

#### **Convenient Shopping Experience**

Provide in-store pickup, online orders, and offline purchases, enabling all the payment modes that seem convenient to your shoppers. The ultimate goal is to have more happy customers to make them your repeat customers.

## **1.4 Document Convention**

- This document follows the Modern Language Association style.
- Time New Roman (bold) font style is used for the main heading and their subheadings.
- For the main heading “Heading 1” style is used and for subheadings “Heading 2”, “Heading 3” is used.
- Font size is 12pt and text alignment is justified.
- Line spacing is 1.5.
- Important points are showing in the form of bullets.
- The important or main words are enclosed in double quotation.
- The paragraph starts from one “Tab” space.
- Table and figure captions will provide which recognize diagram.

## **1.5 Objectives**

The main objectives of the e-shopping are given below:

- To provide information about various products in a different category.
- Customer can purchase Products Online.
- Customer can log in and get various information about products and can purchase a suitable product with price and quality comparison.
- Customer can pay online, so security is must, therefore, e-shopping provide secure transactions.
- Customer can Buy and Sell Houses.
- Data security is maintained to a relatively high level.
- Provide a Unique Customer Experience.

- Customer can purchase a Building Material in easy way.
- Customer can also hire a labor services of different purposes

## **Projects Goals and Prospective**

<b>Agency Goals</b>	<b>Project Objectives</b>
Increase sales.	To provide information about various products in a different category.
Increase relevant traffic.	Build a safe and secure System.
Provide services at customer door step.	Data security is maintained to a relatively high level.
Provide visitors a personalized experience.	Improve Customer Loyalty.

**Table: 1.1**

### **1.6 Attended Audience and reading Suggestions**

A target audience, or “target market,” is a group of consumers that are most likely to need whatever you’re selling. These people are perfectly attuned to your business. They have the problem that your service or product addresses, and they’re looking to buy. Our target audience is those people who want to buy material that use for home building and for renovation of house and a services of many people such as painter, carpenter labor, plumber at your door step. Also Users can Buy and Sell Readymade Houses.

## **1.7 Project Scope**

E-commerce has bloomed over the years and is one of the fastest-growing domains in the online world. Though it took some time for this to be accepted by the end-users, today we are at a point where the majority of the people love to shop online. There were numerous concerns revolving around online shopping, but over years people tend to have started trusting E-commerce for all their shopping needs.

By using (Ghar Banao) website customer can order any product that use for house building such as construction material, Tilling and flooring and also get a services of different kind of labor services such as painter, Carpenter, Electrician etc. Customer using our website and get the material and services at your door step. A user also can Buy and Sell Houses on Our website according to his budget. Any one use our system with internet connectivity.

## **CHAPTER 2**

### **SOFTWARE REQUIREMENT SPECIFICATIONS**

## **2.1 Overall Description**

The Online Shopping system (Ghar Banao) enables to our customer to buy easily, customers to browse through the shops. Also the developer is designing an online shopping site to manage the items in the shop and also help customers to purchase them online without visiting the shop physically. The online shopping system will use the internet as the sole method for selling goods to its consumers. Admin can enter the item which customer purchase and then make an invoice for customer, the stock changes automatically when a new customer purchase some item. It also creates a whole day report for admin to check the details of the Purchase.

### **2.1.1 Project perspective**

- This product aimed toward a person who don't want to visit the shop as he might don't get time for that or might not interested in visiting there and dealing with lot of formalities.
- Any member can register and view available products.
- Only registered member can purchase multiple products regardless of quantity.
- Contacts us page is available to contact Admin for queries.
- There are three roles available: Visitor, User and Admin.
- Visitor can view available products.
- User can view and purchase products.
- An Admin has some extra privilege including all privilege of visitor and user.
- Admin can add products, edit product information and add/remove Product.
- Admin can add user, edit user information and can remove user.
- Admin can ship order to user based on order placed by sending Confirmation mail

### **2.1.2 Product Features**

E-commerce website features will help us to create a website that our customers love visiting. User-Friendly Design, Mobile-Friendly, Multiple Payment, 24/7 Customer Service, User Reviews, Discounts and Extensive Product Information, The main purpose of this project is to reduce the manual work. There are the following main Features are.

- **Register page.**
- **Login page.**
- **Building material.**

- **Tiling and flooring material.**
- **Kitchen and bath material.**
- **Paint Material.**
- **Electronics product.**
- **Labor services.**
- **Add Labor services.**
- **Cost Estimation Calculator.**
- **See products category.**
- **Add product to cart.**
- **Order product.**
- **Track order.**
- **Product Reviews.**
- **Search Products.**
- **24/7 Customer Service.**
- **Payment.**
- **Buy & Sell House.**

#### **Register Page:**

When a user's/ Customer registers and presses submit it redirects them to the home page.

#### **Login Page:**

When a user's/ Customer already registers then they just need to add login details and submit it redirects them to the home page.

#### **FAQ Page:**

In this page we will add most asked Question that are users ask on any Ecommerce website.

#### **See Products category:**

house building such as construction material, Tilling and flooring and also get a services of different kind of labor services such as painter, Carpenter, Electrician etc.

**Add product to Cart:**

In this page users/ Customer can add their favorites Product to cart to Purchase them.

**Delete Product:**

In this page users/ Customer can delete the Product From cart to add another product.

**Order Product:**

In this page users/ Customer can add details of buying product like address and phone number.

**Track order:**

In this page users/ Customer can view their shipments right from our e-commerce site using his/her reference or order number.

**Products Reviews:**

In this page users/ Customer can View product reviews and also give reviews on the product that he/she will buy.

**FAQ for Products:**

FAQ stands for “Frequently Asked Questions.” In FAQ is a list of commonly asked questions and answers on an e-commerce website about topics such as shipping and handling, product information, and return policies.

**Search Products:**

Users/ Customer can search product according to their need.

**24/7 Customer Service:**

24/7 customer support means customers can get help and find answers to questions as soon as they come up—24/7 and in real-time.

**Payment:**

The “payments system’ consumers, businesses and other organizations to transfer funds usually held in an account at a financial institution to one another

### **2.1.3 Design and Implementation Constraints**

- Ghar Banao system can be accessed successfully by any client location.
- It's necessary that every registration is genuine, so there is no chance of fake registration that may reflect some errors
- The system is designed such a way that the database will keep updated by administration and there is better security option available on the server that can prevent fake IP.
- The system must support English language.

### **2.1.4 Assumption and Dependencies**

Proper working of this web application is dependent on the internet connectivity of the users.

**The assumptions are:**

- The coding should be error free.
- The system should be user friendly so that it is easy to use for the users.
- The system should have more capacity and provide fast access to the database.
- The system should provide search facility and support quick transactions.
- The Ghar Banao system is running twenty four hours a day.
- Users may access from any computer that has internet browsing capabilities and an internet connection.
- User must have their correct usernames and passwords to enter into their online accounts and do actions.

**The dependencies are:**

- The specific hardware and software due to which the product will be run.
- On the basis of listing requirements and specification the project will be developed and run.
- The end users (admin) should have proper understanding to the product.
- The system should have the general report store.
- The information of all users must be stored in a database that is accessible by the Ghar Banao system.

## **2.2 System Features**

The description and the details information of this application's features are very clearly described below

### **2.2.1. Registration**

#### **2.2.1.1 Description and Priority**

A registration form is a list of fields that a user will input data into and submit it. There are many reasons why you would want a person to fill out a registration form. Companies use registration forms to sign up customers for subscriptions, services, or other programs or plans.

**Priority: low**

#### **2.2.1.2 Stimulus/Response sequence**

**Stimulus:** User click on signup page

**Response:** sign page is open.

**Stimulus:** User fill up the necessary information

**Response:** Information is shown in fields.

**Stimulus:** User click on submit button

**Response:** msg show form submit successfully.

### 2.2.1.3 Fractional Requirements

REQ-1: Users that have not yet registered cannot log in.

REQ-2: When the Register command button is clicked without filling in any field  
The error msg should be shown.

REQ-3: System should have capabilities to show msg after register successfully.

REQ-4: The data must be validate before saving in database.

REQ-5: When user click on the certain button, the task under the button is performed.

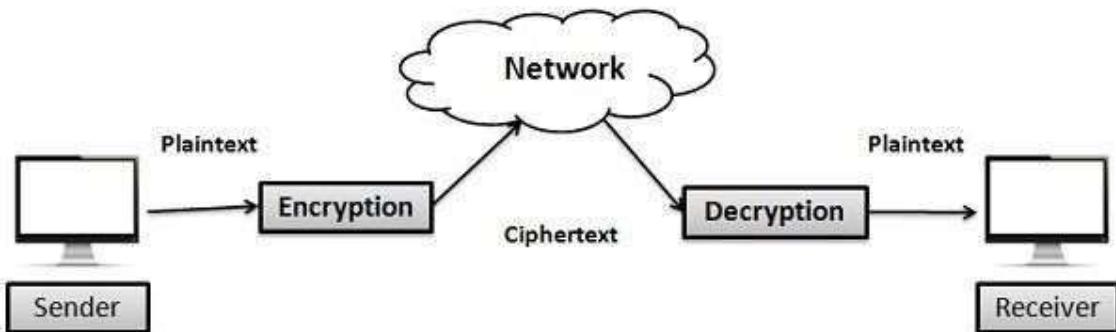


Figure 2-1: Registration

### 2.2.2. Login

A login page is a web page or an entry page to a website that requires user identification and authentication, regularly performed by entering a username and password combination. Logins may provide access to an entire site or part of a website. Logging in not only provides site access for the user, but also allows the website to track user actions and behavior.

#### 2.2.2.1 Description and Priority

A registration form is a list of fields that a user will input data into and submit it. There are many reasons why you would want a person to fill out a registration form. Companies use registration forms to sign up customers for subscriptions, services, or other programs or plans.

**Priority:** High

#### 2.2.2.2 Stimulus/Response sequence

**Stimulus:** User clicks on Login Link/Button.

**Response:** Login Page will display.

**Stimulus:** User Enters Username and Password.

**Response:** Username and Password will validate from Database. If the Username and Password will correct, then the user will allow to access else an Error message will display.

**Stimulus:** User Clicks on Login Button.

**Response:** Home Page is displayed with user profile.

### 2.2.2.3 Fractional Requirements

REQ-1: The system will incorporate a mechanism to authenticate its users.

REQ-2: The system will verify and validate all user input and would notify in case of error detection and would help the user in error correction.

REQ-4 When user click on the certain button, the task under the button is performed.

REQ-5: If the button is not clicked then the page is not open and task is not performed.

REQ-6: The website must have Cross-browser Compatibility.

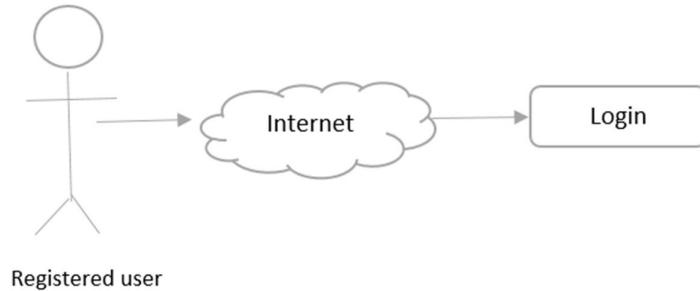


Figure 2-2: Login

### 2.2.3 Custom Order Choosing

Provide the order management process starts when an order is placed. The order is verified and processed to be received by the business or fulfillment partner to be picked, packed, and shipped. Order tracking information is generated and sent to the customer so they can track the delivery window and movement.

**Priority:** High

#### 2.2.3.1 Stimulus/Response sequence

**Stimulus:** User clicks the purchase quantities.

**Response:** Just below the product price, there should be an option to change the product quantity. That way, the customers can easily select the number of items they want to buy.

**Stimulus:** User clicks on product variables.

**Response:** Some variables like the color and size of a physical product will be selectable right from the product page.

**Stimulus:** User clicks add to cart button.

**Response:** It's a very good idea to mention a few trust signals near add to cart button. This influences the subconscious of the customers on making the purchasing decision.

**Stimulus:** The user clicks the wish list button on the product page.

**Response:** A wish list will enable the customers to store a product if they want to buy that later

### 2.2.3.2 Fractional Requirements

Req-2: Mobile-friendliness

Req-3: Product attributes

Req-4: Order and checkout flow

Req-5: Social sharing

### 2.2.4 See product category

#### See product category

##### Description and Priority

The Category page is basically the bridge between your homepage and your product pages. After your homepage, the category page is the next most important step in your funnel. This is the part where you help narrow down options for people and guide them to their desired product page so they make a purchase.

**Priority:** High

#### 2.2.4.1 Stimulus/Response sequence

**Stimulus:** User clicks the categories of product.

**Response:** All products of selected categories will show on the page.

**Stimulus:** The user clicks on a product that showed on the product page.

**Response:** All descriptions will display on the screen after clicking the product. In description price, product compatibility, model name will display.

**Stimulus:** User clicks product information.

**Response:** Product dimension, item weight, manufacturer, the model number will display. On the product pages, users found and access high-quality images that can be zoomed in to view particular parts of the product.

#### **2.2.4.2 Fractional Requirements**

- REQ-1: The system will be responsible to serve the product's functionality/info. that solves particular problems for users.
- REQ-2: The system will understand the requirements will benefit. Realizing that there may be different user personas for your product, naming the user persona will help provide a context for your engineers.
- REQ-3: Identifying and explaining the problem you are solving for the user might be the most important part of a requirement.

#### **2.2.5 Add product to cart:**

##### **Description and Priority**

If a customer want to buy a product form over website they can add product to cart and then they order they can also increase the quantity as per required.

**Priority: High**

#### **2.2.5.1 Stimulus/Response sequence**

- Stimulus:** Click on add to cart button.
- Response.** Product is added on the cart.
- Stimulus:** if he click on the increase quantity
- Response:** the quantity should be increase.

#### **2.2.5.2 Fractional Requirements**

- REQ-1: The Customer must be login to add product to cart.
- REQ-2: Cart page should do action in smart way.
- REQ-3: The data must be store in database.
- REQ-4: When user click on the certain button, the task under the button is performed.

#### **2.2.6 Search Product**

##### **Description and Priority**

In this section when a customer want to search a specific product they can simple enter the name of product and ten search it easily

**Priority: High**

### **2.2.6.1 Stimulus/Response sequence**

**Stimulus:** Click to the search button.

**Response.** Search bar is active.

**Stimulus:** enter the name of product

**Response:** result will be display

### **2.2.6.2 Fractional Requirements**

REQ-1: Search bar give accurate result.

REQ-2: Search product only by name.

### **2.2.7 Order Product**

#### **Description and Priority**

Provide the order management process starts when an order is placed. The order is verified and processed to be received by the business or fulfillment partner to be picked, packed, and shipped. Order tracking information is generated and sent to the customer so they can track the delivery window and movement.

**Priority:** High

### **2.2.7.1 Stimulus/Response sequence**

**Stimulus:** User clicks the purchase quantities.

**Response:** Just below the product price, there should be an option to change the product quantity. That way, the customers can easily select the number of items they want to buy.

**Stimulus:** User clicks on product variables.

**Response:** Some variables like the color and size of a physical product will be selectable right from the product page.

**Stimulus:** User clicks add to cart button.

**Response:** It's a very good idea to mention a few trust signals near the add to cart button. This influences the subconscious of the customers on making the purchasing decision.

**Stimulus:** The user clicks the wish list button on the product page.

**Response:** A wish list will enable the customers to store a product if they want to buy that later.

### **2.2.7.2 Fractional Requirements**

Req-2: Mobile-friendliness

Req-3: Product attributes

Req-4: Order and checkout flow

Req-5: Social sharing

## **2.2.8 Order Tracking**

### **Description and Priority**

Order tracking is a process of monitoring and tracking orders placed online and delivering real-time order status updates to customers. It helps customers learn where exactly their order is, when they should expect it to arrive, and whether there has been a delay.

**Priority:** High

### **2.2.8.1 Stimulus/Response sequence**

**Stimulus:** User clicks the shipment dashboard.

**Response:** order list, receipt information, order type, all other information will display.

**Stimulus:** Users have an option to add shipment location.

**Response:** product will be ready to process for delivery.

**Stimulus:** User clicks find the order (you want to track). If there are multiple orders, select view order to find details.

**Response:** Dashboard will display the product that is shipped to the customer.

**Stimulus:** User clicks the track shipment.

**Response:** System will display follow the instructions in the email to track your shipment.

### **2.2.8.2 Fractional Requirements**

REQ-1: A number must be generate to track an order

REQ-2: product must be order to track a product.

REQ-3: Tracking product fast.

REQ-4: All information is shown related the product like date time etc.

REQ-5: If the button is not clicked then the page is not open and task is not performed.

REQ-6: When user click on the certain button, the task under the button is performed.

## **2.2.9 Feedback/Reviews**

### **Description and Priority**

Providing product feedback is the most important feature of the ecommerce site. If we cannot give proper feedback on our products, then customers can get confused about the type of products we are showing, and it is matching with what they are looking for. In product reviews, customers can see the information about the products.

**Priority:** High

### **2.2.9.1 Stimulus/Response sequence**

**Stimulus:** User clicks the product review or feedback that is shown below of every product.

**Response:** The comment section or suggestion section will open.

**Stimulus:** The user writes feedback about the product for the best quality or the best experience with the product.

**Response:** System will save these reviews for every visitor/user.

**Stimulus:** The user submits the comment.

**Response:** Post will upload after submission.

### **2.2.10 FAQ**

#### **Description and Priority**

Provide the customer care system that is important. If any customer faces any issue about any function, the user/customer can contact this system. The “frequently asked questions” or FAQs are included in websites to allow questions to be asked, answered, and updated regularly. When a customer asks you a question, you need to make sure that you answer the questions.

Priority: High

### **2.2.10.1 Stimulus/Response sequence**

**Stimulus:** The user clicks the FAQ button that is placed in the footer.

**Response:** The FAQ page will display after the user clicked this.

**Stimulus:** User enters his question and enter user-email, then submit a question.

**Response:** User requirement will reach the help desk, then the middle man who is related with the customer and questions of the customer will reply the answer of the customer’s questions.

**Stimulus:** User clicks FAQ categories.

**Response:** A built-in question will display that is already written in headings of return, company info, and shipping questions.

**Stimulus:** User clicks FAQ categories.

**Response:** Service FAQs, customer care, product, and service-focused will display.

**Stimulus:** User clicks the offers on FAQ page.

**Response:** The system will provide their research before speaking to a sales representative, and quick means of asking those questions

## **2.2.10.2 Fractional Requirements**

- REQ-1: Descriptions of data will be entered into the system.
- REQ-2: Admin have right to see the FAQ page.
- REQ-3: The data must be save in database.

## **2.2.11 Payment method**

### **Description and Priority**

Providing an e-payment system is a way of making transactions or paying for goods and services through an electronic medium, without the use of checks or cash. It's also called an electronic payment system or online payment system.

**Priority:** High

### **2.2.11.1 Stimulus/Response sequence**

**Stimulus:** The user clicks the buy now/pay now button after selecting the product.

**Response:** Sign in using your account credentials (E-mail and password) will display.

**Stimulus:** User enters user email & password and continues for further process.

**Response:** Payment method will display in which user have to choose an option in these methods (jazz-cash and easy-paisa)

**Stimulus:** The user enters the input fields of the payment method. For example, if a user chooses a jazz cash

**Response:** Giving input of user will verified/validate by the system and our platform admin panel. After verification by accounts management of the admin panel, the further process will continue.

**Stimulus:** The user enters the input fields of the payment method. For example, if a user chooses a jazz-cash and easy-paisa method then the user entered the user id and password.

**Response:** Giving input of user will verified/validate by the bank system and our platform admin panel. After verification by accounts management of the admin panel, the further process will continue. .

### **2.2.11.2 Fractional Requirements**

**Req-1:** the ability to secure and limit access to information about the transactions and relations between involved parties from unauthorized outside parties while maintaining the complete anonymity of the process

**Req-2:** Identify messages and payment interfaces and mapping specifications

**Req-3:** ability to avoid transmission errors in the transaction process. Also, includes protection from outside tampering with the transmitted data

## **2.2.12 Cost Estimation Calculator**

### **Description and Priority**

This function can be used for the calculation of required material and also cost as well. In this page user can enter the area and then floor after entering it they will show the desire result.

**Priority:** medium

### **2.2.12.1 Stimulus/Response sequence**

**Stimulus:** The user clicks on this button.

**Response:** A new page is open.

**Stimulus:** User enters the home dimension.

**Response:** Estimate cost and material is shown.

...

### **2.2.12.2 Fractional Requirements**

**Req-1:** Data must be filled in correct way for better result.

**Req-2:** only valid data is entered.

## **2.2.13 Update Daily Price List**

### **Description and Priority**

In this section a detail list appears in which price of every product is mentioned. If increase in price it will show on the list and customer see the new price.

**Priority:** medium

### **2.2.13.1 Stimulus/Response sequence**

**Stimulus:** The user clicks on this button.

**Response:** A new page is open and price of goods is shown.

## **2.2.14 Manage Product**

### **Description and Priority**

This can be designed for admin (seller) site they use it for managing the products on website. They can add, delete, update product and perform all operations required as well.

**Priority:** High

#### **2.2.14.1 Stimulus/Response sequence**

**Stimulus:** The seller clicks on this button.

**Response:** A new page is open.

**Stimulus:** Seller click on add category.

**Response:** a option is active in which they enter category.

**Stimulus:** Seller click on add products.

**Response:** a option is active in which they enter products details.

#### **2.2.14.2 Fractional Requirements**

**Req-1:** Data must be save in database.

**Req-2:** Data must be fill in correct way for better result.

**Req-3:** only valid data is enter.

**Req-4:** Descriptions of data will be entered into the system

### **2.2.15 Labor Services**

#### **Description and Priority**

In this section customer can hire a person as per need. We have a different kind of labor such as labor, carpenter, electrician, Plumber etc.

**Priority:** medium

#### **2.2.15.1 Stimulus/Response sequence**

**Stimulus:** The customer clicks on this option.

**Response:** A new page is open.

**Stimulus:** Customer select a services they want.

**Response:** A detail is shown of person.

**Stimulus:** Customer Contact to person..

**Response:** person.

#### **2.2.15.2 Fractional Requirements**

**Req-1:** Data must be save in database.

**Req-2:** Data must be fill in correct way for better result.

**Req-3:** only valid data is enter.

**Req-4:** Descriptions of data will be entered into the system

## 2.3 External Interface Requirement

### 2.3.1 User interface:

2 Screen Name	Description
<b>Home page</b>	'Products Category' has many options on the first page. Users can register, log in, log out, about us, contact us, choose our Services, gallery, and about us. The first page will also have detailed information about the system.
<b>Admin Login</b>	Through this option only registered admin can login into the system.
<b>Sign up</b>	Using this option users can register on the website & app. Users have to use this info to access the account later.
<b>Add a Property</b>	Using this option user can add their own property in this categories to sell.
<b>Search the Products</b>	The client has to use this option to search for a specific Product he intended to book.
<b>Custom Order</b>	Users can order Product or Service from built in option they desired.
<b>Card payment</b>	The user can pay the bill online through debit/credit card.
<b>Booking</b>	By using this users can book their desire reservation category.
<b>Payment method</b>	By using this option user can select which payment method he/she wants to use.
<b>Logout</b>	User can log out from the system using this option.

**Table 2-3: User Interfaces**

The user will interact with the system through a web interface supported by any computer running one of the following operating systems: Microsoft Windows, UNIX, Linux, or Apple Macintosh. The interface will run properly provided the computer has a web-browser installed (Microsoft Internet Explorer, Mozilla Firefox, Chrome, etc.) and internet connection is available. The project requires some input devices like keyboard, mouse. Users this project is divided into three interfaces.

- 1. Admin User**
- 2. Customer**
- 3. Visitor**

If an unknown user want to enter through wrong name and password it display a message, if any of which is required and not filled then it also display an error message according the required functionality.

- Admin can View, Edit and Delete everything on the product.
- User can view the whole information.

### **Admin User Interface**

- Create new users.
- Add/update the details of Students.
- Add the information about the Papers.
- Add the information about the Result.
- Add the information about the new product.
- Manage Payments.

### **Customer Interface**

- Register
- Login.
- Search product.
- Hire Labor services
- Order Product
- Buy & Sell Home.
- Track order
- Products Reviews
- Payment.

### **Visitor Interface**

- Search product.
- Products Reviews
- View Category

### **2.3.2 Hardware Interface:**

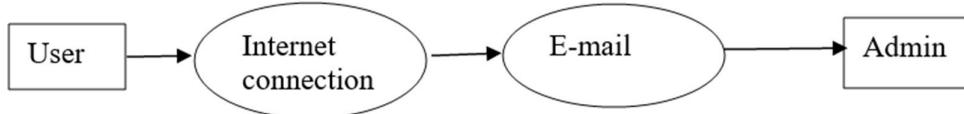
- The user must have an android mobile phone to access this system anywhere.
- The user must have a reliable internet connection. So the system can be easily used.
- The user can have a laptop or personal computer to access this website.
  - Hardware : Processor Intel dual core and above
  - Clock speed : 3.0 GHz
  - RAM size : 512 MB
  - Hard Disk capacity : 400 GB
  - Monitor type : 15 inch color monitor

### **2.3.3 Software Interfaces:**

- Windows-based laptop.
- SQLite database
- Stable internet connection.
  - Operating System : Windows XP, Windows 7, Windows 8, Windows 10
  - Internet connection : Existing telephone lines, Data card.
  - Browser : Google chrome latest version
  - Database : SQLite.
  - Performance : The turn-around time of the project will be medium.
  - Documentation : MS-Office
  - IDE : Visual Studio Code

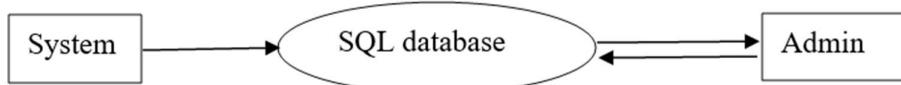
### **2.3.4 Communication Interface:**

The system has a help option. Using this option user can contact the admin. The user can use this option if they have any issue with system usage. Through this option, the user will send an e-mail to the admin for help through the internet.



**Figure 2.3-1: Communication Interface 1**

The admin can see all the data stored in the system about an event, update it, or delete it or add more information.



**Figure 2.3-2: Communication Interface 2**

## **2.4 Performance requirements**

### **Other Nonfunctional Requirements**

#### **2.4.1 Performance Requirements**

There is no performance requirement in this system because the server request and response is depended on the end user internet connection.

##### **2.4.1.1 Safety Requirements**

SR001: The system would be able to take backup.

SR002: System database is kept private.

SR003: Database is accessible to only authorized persons.

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

The user does not need some special requirement rather than proper internet connection with high speed, and accurate hardware devices like mouse (for selecting options). If system has internet connection with slow speed, then it creating problem for loading the page very slow hence the performance is affected. The database may get crushed at any certain time due to virus or operating system failure. There for it is required to take the database backup so that the database is not lost. Proper UPS/ Inverter facility should be there in case of power supply failure.

The **Ghar Banao** must be:

- Be simple
- Be self-explanatory
- Be user friendly

#### **2.4.1.2 Security Requirements**

SR001: The system would be secure from unauthorized persons.

SR002: Authentication allows us to control who can access the system.

SR003: We use the data encryption method for end-to end encryption.

SR004: The highest standards of data security and protection should be met when handling both Admin content and Customer data in the context of an online Shopping.

SR005: System will use secured database.

SR006: Normal users can just read information but they cannot edit or modify anything except their personal and some other information.

SR007: System will have different types of users and every user has access constraints.

If user/admin doesn't share their username and password to anyone then no one steals it personal data and product is secured. If user enter wrong data which user thought creating some errors in database thorough system cannot run properly. To reduce these errors RMS, provide some security in form of csrf token. It also secures the system from Cross Site Scripting (XSS) attacks, csrf attacks and provide SQL injection protection and click jacking protection. Student's data is stored in database –no sharing of data between students.

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or disclosure are described below. Keep specific log or history data sets

- Assign certain functions to different modules
- Restrict communications between some areas of the program
- Check data integrity for critical variables
- Later version of the software will incorporate encryption techniques in the user/license authentication process.

Communication needs to be restricted when the application is validating the user or license. (i.e., using https).

## 2.5 Software Quality Attributes

Software Quality Attributes are features that facilitate the measurement of performance of a software product by Software Testing professionals, and include attributes such as availability, interoperability, correctness, reliability, learnability, robustness, maintainability, readability, extensibility, testability, efficiency, and portability. High scores in Software Quality Attributes enable software architects to guarantee that a software application will perform as the specifications provided by the client.

- There may be multiple admin's creating the project, all of them will have the right to create changes to the system. But the members or other users cannot do changes.
- The project should be open source.
- The quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.
- The user be able to easily download and install the system.

There are the following Software quality attributes:

**a) USABILITY**

Usability of our system is the ease-of-use for the **Administration** and the **Customers**.

The Administration can easily set up the product category, determine the product Quantity.

**b) SECURITY**

Security is the enhanced privacy for Customers, which validates the usefulness of the entire process.

**c) MAINTAINABILITY:**

The installation and operation manual of Ghar Banao will be providing to admin.

**d) AVAILABILITY**

System will be available around the clock except for the time require for the backup of data. Availability also includes certain concepts that relate to software security, performance, integrity, reliability, dependability, and confidentiality. The system is available 100% for the user and used 24 hrs. A day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

**e) RELIABILITY**

Our system should be highly reliable and it should generate all the update Information in correct order. Reliability of a software system is defined as the probability that this system fulfills a function (determined by the specifications) for a specified number of input trials under specified input conditions in a specified time interval (assuming that hardware and input are free of errors).

The Quality of the System is maintained in such a way so that it can be very user friendly to all the users. The software quality attributes are assumed as under:

- ✓ Accurate and hence reliable.
- ✓ Secured.
- ✓ Fast speed.
- ✓ Compatibility.

### **System Interfaces:**

This section describes how the software interfaces with other software products or users for input or output.

### **Security Requirements**

SR001: User/student and admin information is our first priority.

SR002: The system would be secure from unauthorized persons.

SR003: Authentication allows us to control who can access the system.

SR004: We use the data encryption method for end-to-end encryption.

SR005: The highest standards of data security and protection should be met when handling both examination content and student data in the context of an online exam.

If user/admin doesn't share their username and password to anyone then no one steals it personal data and product is secured. If user enter wrong data which user thought creating some errors in database thorough system cannot run properly. To reduce these errors RMS, provide some security in form of csrf token. It also secures the system from Cross Site Scripting (XSS) attacks, csrf attacks and provide SQL injection protection and click jacking protection. Student's data is stored in database –no sharing of data between students.

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or disclosure are described below. Keep specific log or history data sets

- Assign certain functions to different modules
- Restrict communications between some areas of the program
- Check data integrity for critical variables
- Later version of the software will incorporate encryption techniques in the user/license authentication process.

Communication needs to be restricted when the application is validating the user or license. (i.e., using https).

## **CHAPTER 3**

### **USE CASE ANALYSIS**

# System Analysis

## 3.1 Identifying Actors and Use Case Using Textual Analysis

There are three types of actors in the use case diagram of the Ghar Banao. First are primary actors, which are user (Clients), second are secondary actors (Vister) and third which are admin and employees.

There are following use cases in the use case diagram which are listed below:

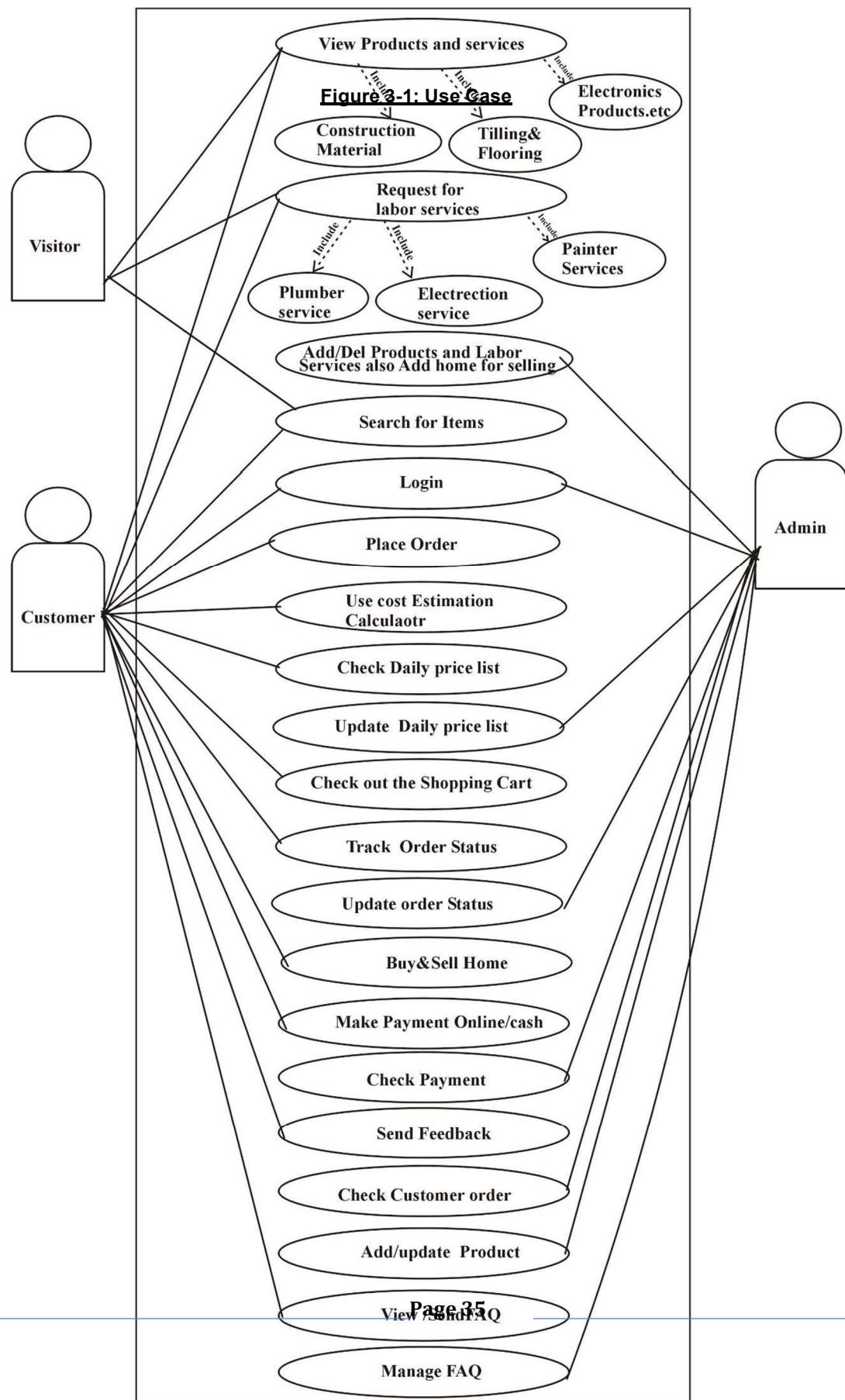
- i. Registration
- ii. Sign-in
- iii. User Profile
- iv. Search Products
- v. Custom Order
- vi. Book Services
- vii. Payment Method
- viii. Feedback
- ix. Contact Us
- x. Viewing Information
- xi. Buy Sell Home

Here the actor user (client) communicating with login, request our services or order our products, cancel order and feedback use cases. The login use case depends on register use case. Request service use case depend on select service use case and the select service use case further depends on available services list use case.

The actor Employee communicating with two use cases which are login and user's requests. For example, first of all the employee/admin have to register himself to the Ghar Banao. After that, he will login to the app and then manage the user's requests.

The actor admin is communicating with the work status and update users information. In other words, it means the admin will be monitoring the ongoing services by employees as work status and admin manage the users and employees.

## Use Case Mode



## Fully Dressed Use Case

<b>Number</b>	001
<b>Name</b>	Registration
<b>Summary</b>	Registration for User.
<b>Actor</b>	Customer
<b>Priority</b>	Low
<b>Pre-condition</b>	The user should be registered in this system. And the system should have a Stable internet connection.
<b>Post-condition</b>	The user should be provided secure access to the portal utilizing some sign-up credentials
<b>Primary</b>	User
<b>Secondary</b>	SQLite database
<b>Trigger</b>	By clicking the Signup button
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The system should display options on the Dashboard.</li> <li>2. The user should choose the login/register page.</li> <li>3. The user should choose a button to make him access the system.</li> <li>4. The user should fill out the whole required info in the form.</li> <li>5. The home page should be displayed when users click the Signup button.</li> </ol>
<b>Extension</b>	<p>Steps:</p> <ol style="list-style-type: none"> <li>1. The system should check the validation of the info entered.</li> </ol>

**Table 3-2: UC Registration**

<b>Number</b>	002
<b>Name</b>	Login
<b>Summary</b>	Login into the system.
<b>Priority</b>	High
<b>Pre-condition</b>	The user should be registered in this system. And the system should have a Stable internet connection.
<b>Post-condition</b>	The user selection page will be shown then.
<b>Primary</b>	Admin
<b>Secondary</b>	SQLite database
<b>Trigger</b>	By clicking the login button
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>6. The user should choose the login/register page.</li> <li>7. The user should fill out the whole required info in the form.</li> <li>8. The home page should be displayed when users click the login button.</li> </ol>
<b>Extension</b>	<p>Steps:</p> <ol style="list-style-type: none"> <li>1. The system should check the validation of the info entered.</li> <li>2. User shall see the user selection page after login</li> </ol>

**Table 3-3: UC Login**

<b>Number</b>	003
<b>Name</b>	User Profile
<b>Summary</b>	Users can view his/her Profile and update.
<b>Priority</b>	High
<b>Pre-condition</b>	The user should have login to system and connected to the internet.
<b>Post-condition</b>	User profile display on the top of the screen.
<b>Primary</b>	User.
<b>Secondary</b>	Database.
<b>Trigger</b>	By clicking on user icon user can view profile for updating their profile.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the profile button on the user screen.</li> <li>2. The user should click on the profile button.</li> <li>3. Users should updating and delete their profile.</li> <li>4. The user should move on to the next process.</li> </ol>

**Table 3-4:UC User Profile**

<b>Number</b>	004
<b>Name</b>	Search Products
<b>Actor</b>	customers and visitor
<b>Summary</b>	Users can view our Products and Services.
<b>Priority</b>	Low
<b>Pre-condition</b>	The user should have connected to the internet.
<b>Post-condition</b>	User see search box display on the right top corner of the screen.
<b>Primary</b>	User.
<b>Secondary</b>	Database.
<b>Trigger</b>	By clicking on search icon user can view product according to his need.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should search box display on the right top corner of the screen.</li> <li>2. The user should click on the search box.</li> <li>3. Users should search products.</li> <li>4. The user should move on to the next process.</li> </ol>

**Table 3-5:UC Search Products**

<b>Number</b>	005
<b>Name</b>	Custom Orders
<b>Summary</b>	Users can make the recipe as per their requirements.
<b>Priority</b>	5
<b>Pre-condition</b>	The user should have a system that is connected to the internet.
<b>Post-condition</b>	Custom order button display on the top of the screen.
<b>Primary</b>	User.
<b>Secondary</b>	Database.
<b>Trigger</b>	By clicking on custom orders your user can get the environment for creating their custom order.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the custom order button on the user screen.</li> <li>2. The user should click on the custom order button.</li> <li>3. Users should create the order as their requirements.</li> <li>4. The user should move on to the next process.</li> </ol>

**Table 3-6: Custom orders**

<b>Number</b>	006
<b>Name</b>	Book Services
<b>Summary</b>	Users can Book Services as per their requirements.
<b>Priority</b>	High
<b>Pre-condition</b>	The user should have login to a system that is connected to the internet.
<b>Post-condition</b>	Custom order button display on the top of the screen.
<b>Primary</b>	User.
<b>Secondary</b>	Database.
<b>Trigger</b>	By clicking on custom orders your user can get the environment for creating their custom order.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the custom order button on the user screen.</li> <li>2. The user should click on the custom order button.</li> <li>3. Users should create the order as their requirements.</li> <li>4. The user should move on to the next process.</li> </ol>

**Table 3-7: Custom orders**

<b>Number</b>	007
<b>Name</b>	Payment Method
<b>Summary</b>	User card or payment data will store in the database.
<b>Priority</b>	High
<b>Pre-condition</b>	The admin should have a device/system which is connected to the internet. And the admin should be logged in to the app.
<b>Post-condition</b>	The user should click on the checkout button
<b>Primary</b>	User.
<b>Secondary</b>	Database
<b>Trigger</b>	By clicking Continue to Check out on the ordering page.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the payment page.</li> <li>2. The user should fill out the whole required info in the form.</li> <li>3. The upload data should save in the database.</li> </ol>

**Table 3-8: UC Payment Method**

<b>Number</b>	008
<b>Name</b>	Feedback
<b>Summary</b>	User can give review after buy Product and data will store in the database.
<b>Actor</b>	Register User
<b>Priority</b>	High
<b>Pre-condition</b>	The USER should have a device/system which is connected to the internet. And the user should be logged in to the app.
<b>Post-condition</b>	The user should click on the feedback button from product section.
<b>Primary</b>	User.
<b>Secondary</b>	Database
<b>Trigger</b>	By clicking Continue to review on the ordering page.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the order page.</li> <li>2. The user should fill out the whole required Review info in the form.</li> <li>3. The upload data should save in the database.</li> </ol>

**Table 3-8: UC Feedback**

<b>Number</b>	009
<b>Name</b>	Contact Us
<b>Summary</b>	The user contacts us through the sending message.
<b>Priority</b>	6
<b>Pre-condition</b>	The user should have a system/device which is connected to the internet.
<b>Post-condition</b>	The contact us button should be displayed on the screen.
<b>Primary</b>	Admin.
<b>Secondary</b>	User.
<b>Trigger</b>	By clicking the contact, us button on-page them.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The website should display the contact us button on the navbar.</li> <li>2. The user should click on it.</li> <li>3. The user should fill out the whole required info in the form.</li> <li>4. On the click on the submit button data store in the database and the sender receive an auto-message.</li> </ol>

**Table 3-10: UC Contact Us**

<b>Number</b>	0010
<b>Name</b>	Viewing Information
<b>Summary</b>	Only the admin can view the information of the user from the database.
<b>Priority</b>	High
<b>Pre-condition</b>	The admin should have a system/device which connects with the internet
<b>Post-condition</b>	The data will be displayed on the screen from the database.
<b>Primary</b>	Admin.
<b>Secondary</b>	Database.
<b>Trigger</b>	By clicking the view button on the database page.
<b>Main scenario</b>	<p>Step action:</p> <ol style="list-style-type: none"> <li>1. The database should display different information in the DB.</li> <li>2. Admin should click on the table which they want to see.</li> <li>3. The data should be displayed from the database of the system on the screen.</li> </ol>

**Table 3-11: UC Viewing Information**

## **CHAPTER 4**

## **SYSTEM DESIGN**

## **System Design**

In system design, the whole design of “Ghar Banao” is designed. System design contains the Architecture design of a project, UML design, class diagram, Entity relationship diagram with the data dictionary, Sequence diagram, Activity diagram, State transition diagram, component diagram, and deployment diagram of the project.

## **Design**

A plan is an arrangement or detail for the development of an article or framework or for the execution of an action or measure, or the consequence of that arrangement or determination as a model, item or interaction. The action word to configuration communicates the way toward fostering a plan.

Configuration is the initial phase being developed stage for any methods and standards to characterize a gadget, a cycle, or framework in adequate detail to allow its actual acknowledgment. When the product necessity has been breaking down and determined the product configuration includes three specialized exercises Configuration, Coding, Execution, testing that are needed to construct and confirm the software. The plan exercises are of principal significance in this stage, in light of the fact that in this exercise choices, at last, influencing the accomplishment of the product execution and its simplicity of support are made. Programming need is coordinated in two phases. Starter arrangement is stressed over the difference in necessities into data. This choice has the last bearing on the dependability and practicality of the framework. Configuration is the best way to precisely move the client's necessities into completed programming or framework. The plan is where quality is encouraged to be developed. Programming configuration is the cycle through which necessities are converted into a portrayal of programming. Programming necessity is directed in two stages. Starter configuration is worried about the change of necessities into information. The arrangement is the place where quality is urged to be created. Programming setup is the cycle through which necessities are changed over into a depiction of programming. Programming need is coordinated in two phases. Starter arrangement is stressed over the difference in necessities into data.

Portray the framework engineering, or basically give the design outline. For Educational system it might incorporate electronic front end, web server, data set, and so forth don't stress a lot over it simply give a basic chart of a regular online venture.

This chapter contain diagrammatic view of our Project Ghar B System rule. Pictorial representation is the best way to convey the idea of a project. Below are some diagrams.

- E-R Diagram
- Flowchart
- Class Diagram
- Sequence Diagram
- Component Diagram
- Deployment Diagram

## 4.1 Work Breakdown Structure

A work breakdown structure (WBS) is an instrument that can be utilized for ventures, programs, and even drives to comprehend the work that must be never really produce a deliverable.

The objective of a WBS is to make a huge task more reasonable. Separating it into more modest pieces implies work should be possible at the same time by various colleagues, prompting better group efficiency and simpler venture the board. In Write, you can fabricate a WBS by making envelopes and subfolders and can go further to isolate singular assignments into subtasks.

As a task supervisor, you may need to examine to see which WBS turns out best for you and your group. The objective is to show the chain of command of your ventures and gain ground clearance to everybody included — regardless of whether they are colleagues or outside partners.

#### **4.1.1 Benefits of WBS**

- it characterizes and arranges the work required
- it works with the fast advancement of a timetable by distributing exertion evaluations to explicit areas of the WBS
- it very well may be utilized to recognize potential degree chances if it has a branch that isn't distinct
- it gives a visual of the whole degree
- it tends to be utilized to distinguish correspondence focuses
- it gives a visual of effects when expectations are falling behind
- it very well may be utilized to show and appoint accountabilities and obligations
- it can show control focuses and achievements
- it gives an approach to gauges' project costs
- it guarantees no significant expectations are neglected
- it can help with asset allotment
- it gives a demonstrated and repeatable way to deal with arranging projects
- it gives a device to group conceptualizing and coordinate effort
- it gives a chance to draw in the group and cause them to feel put resources into the arranging

# WBS Project Management

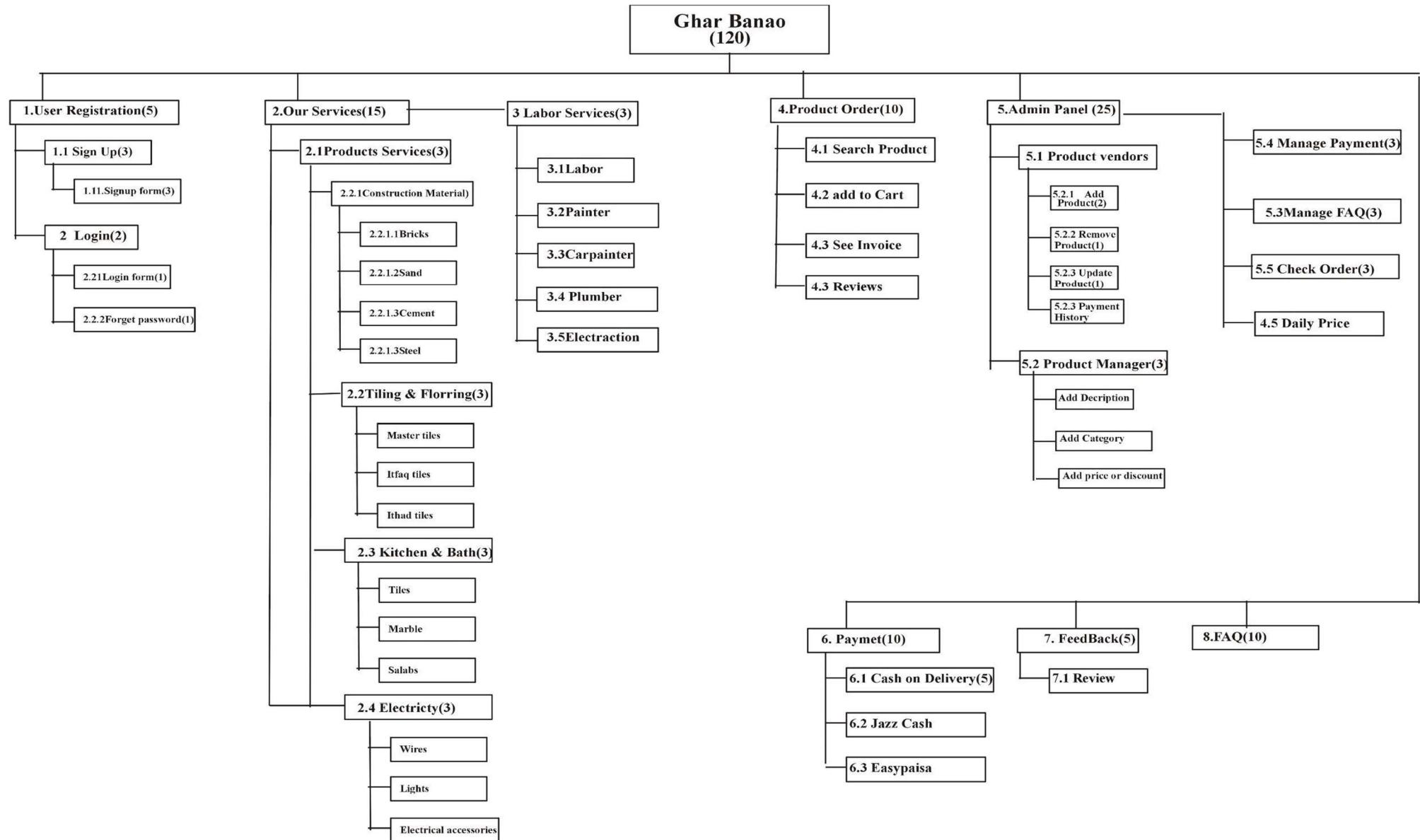


Figure 4-1: WBS

## 4.2 ER-Diagram

A Substance Relationship Outline (ERD) is a graphical apparatus to communicate the general design of an information base. It depends on an impression of a certifiable which comprises of a bunch of fundamental items. A substance is an individual, spot, strap, or occasion important to the association and about which information is caught, put away, or handled. The credits are different sorts of information that portray a substance. A relationship of a few elements in a Substance Relationship model is called a relationship.

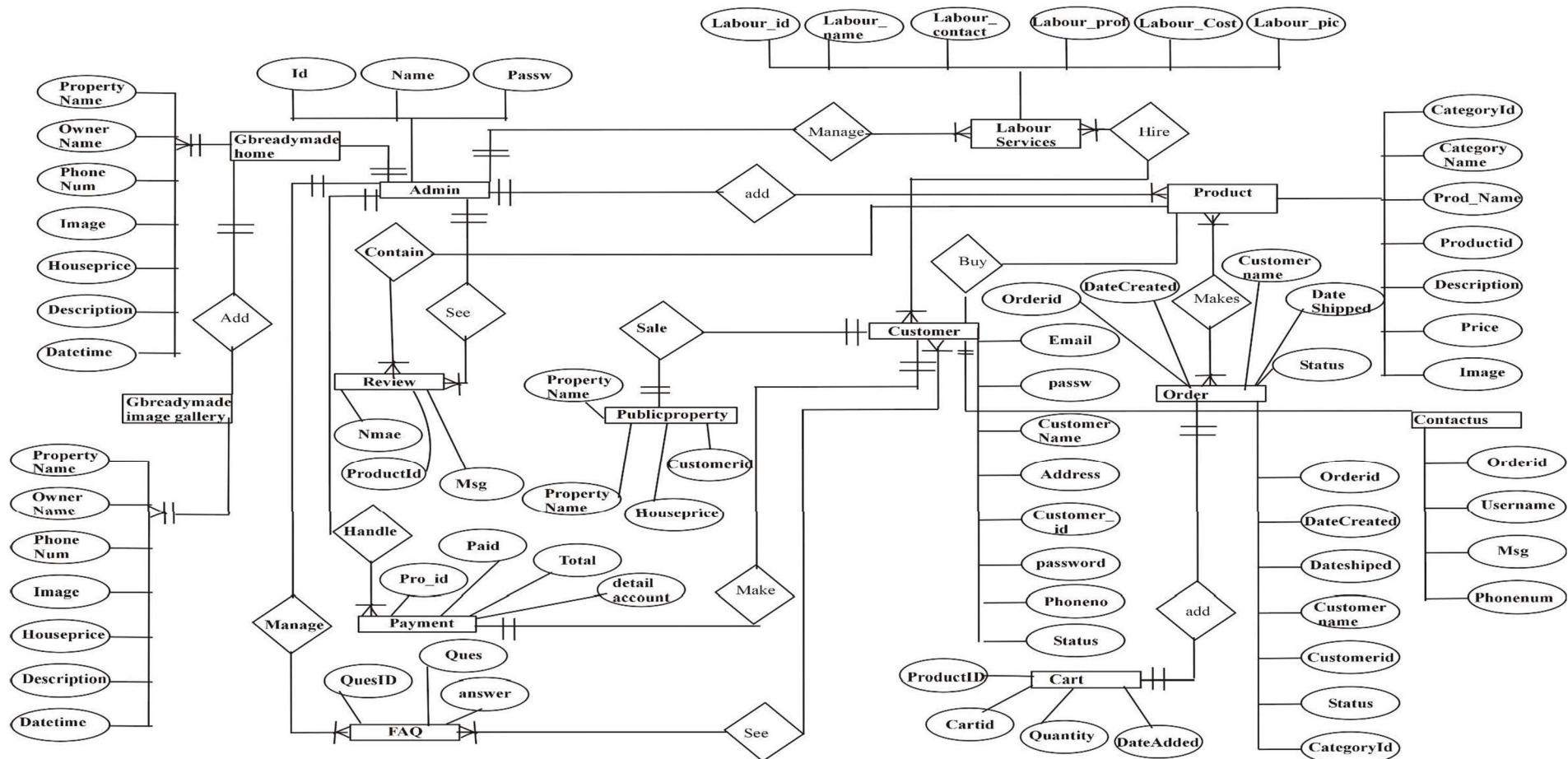


Figure 4-2: ER

## 4.3 Class Diagram

A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

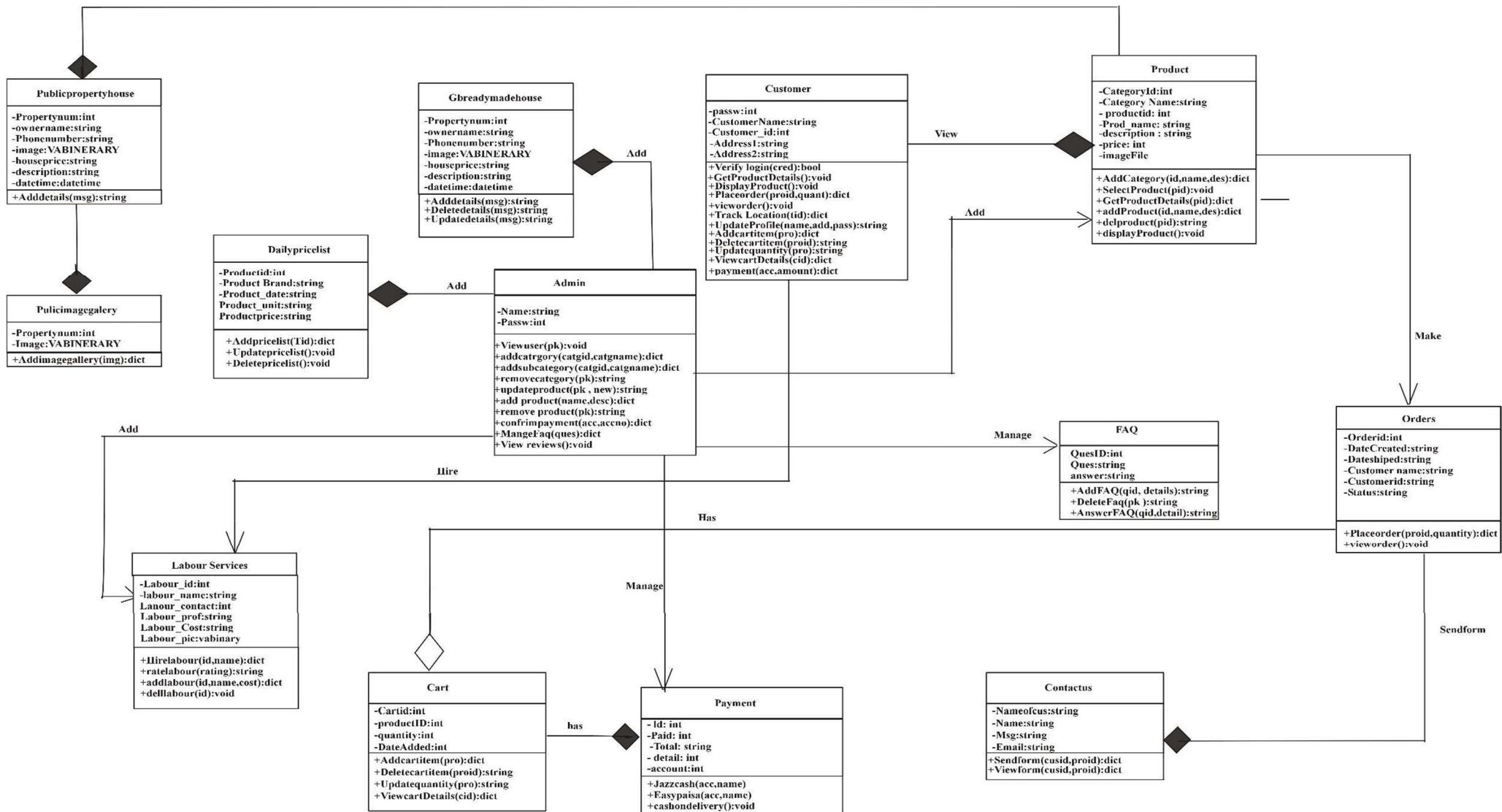


Figure 4-4: Class Diagram

## 4.4 Sequence Diagram

A sequence diagram is an interaction diagram. From the name, it is clear that the diagram deals with some sequences, which are the sequence of messages flowing from one object to another. Interaction among the components of a system is very important from implementation and execution perspective. Sequence diagram is used to visualize the sequence of calls in a system to perform a specific functionality.

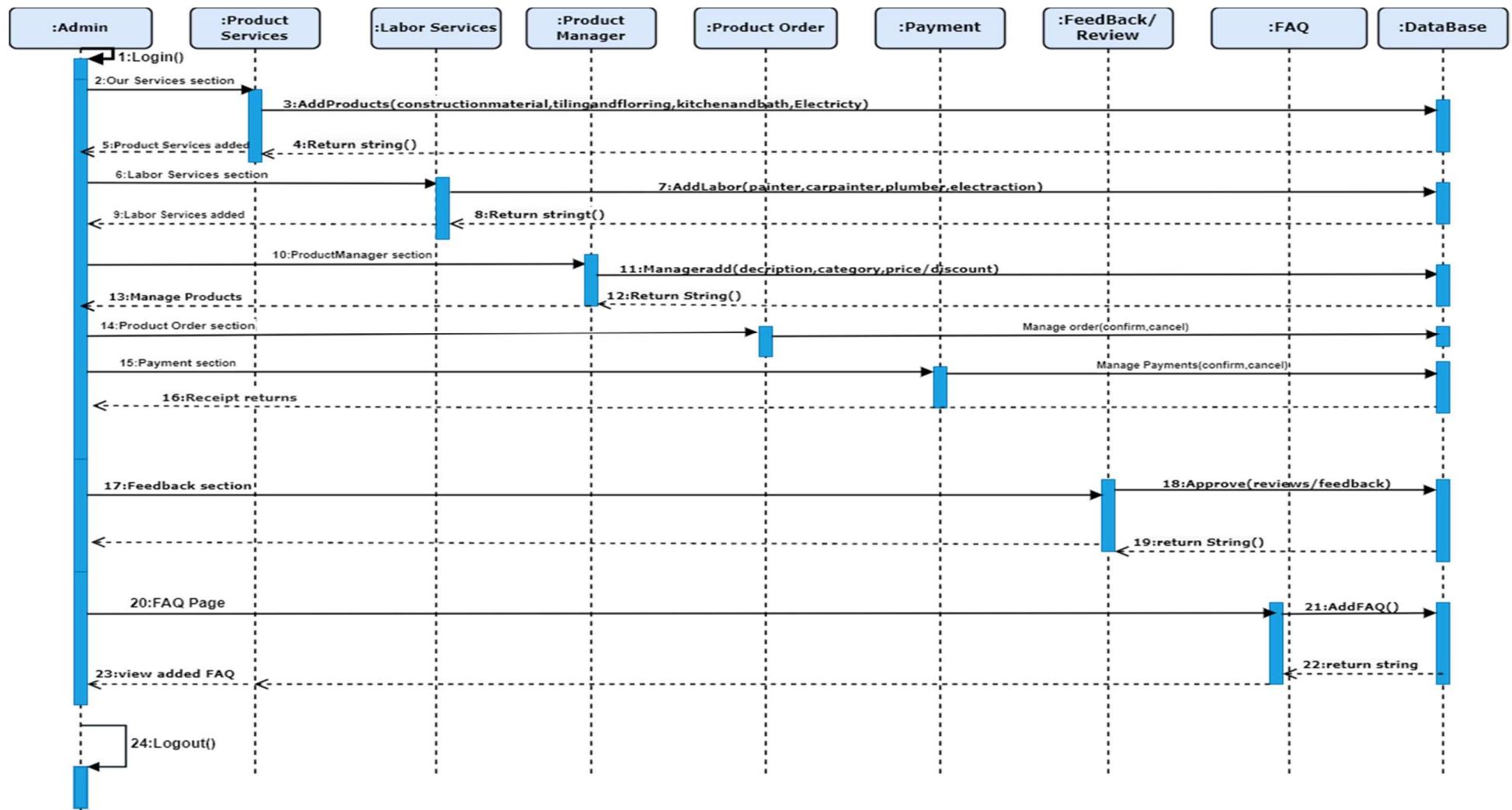


Figure 4-5: Admin sequence

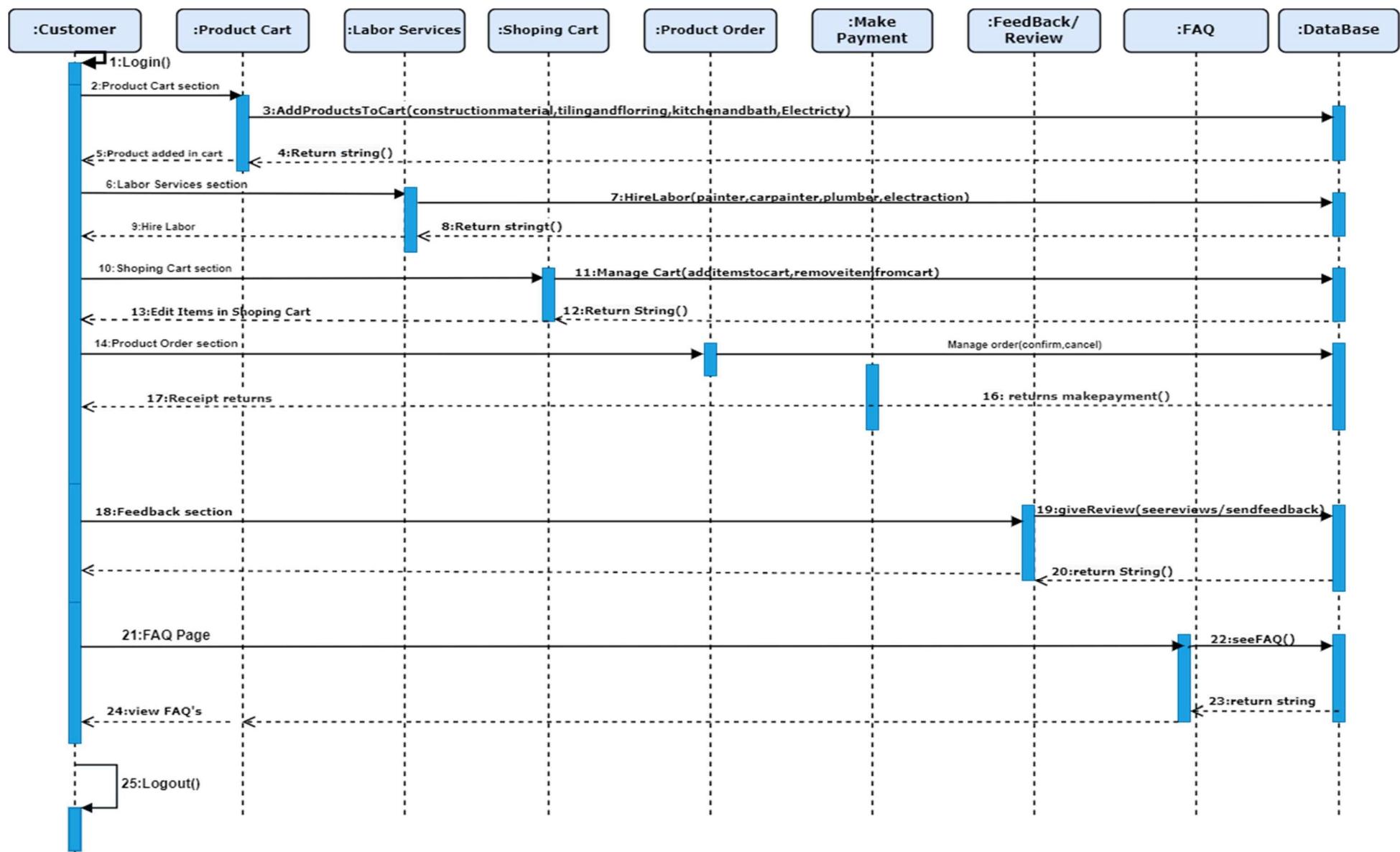


Figure 4-6: Customer sequence

## **CHAPTER 5**

## **IMPLEMENTATION**

## 5.1 Component Diagram

Component diagrams are different in terms of nature and behavior. Component diagrams are used to model the physical aspects of a system. Now the question is, what are these physical aspects? Physical aspects are the elements such as executables, libraries, files, documents, etc. which reside in a node. It does not describe the functionality of the system but it describes the components used to make those functionalities.

The model above shows the interior parts of a bigger segment:

The information (record and review ID) streams into the part through the port on the right-hand side and is changed over into a configuration the inward segments can utilize. The interfaces on the right are known as required interfaces, which address the administrations the segment required to do its obligation.

## 5.2 Screenshots

### 5.2.1 Admin Login

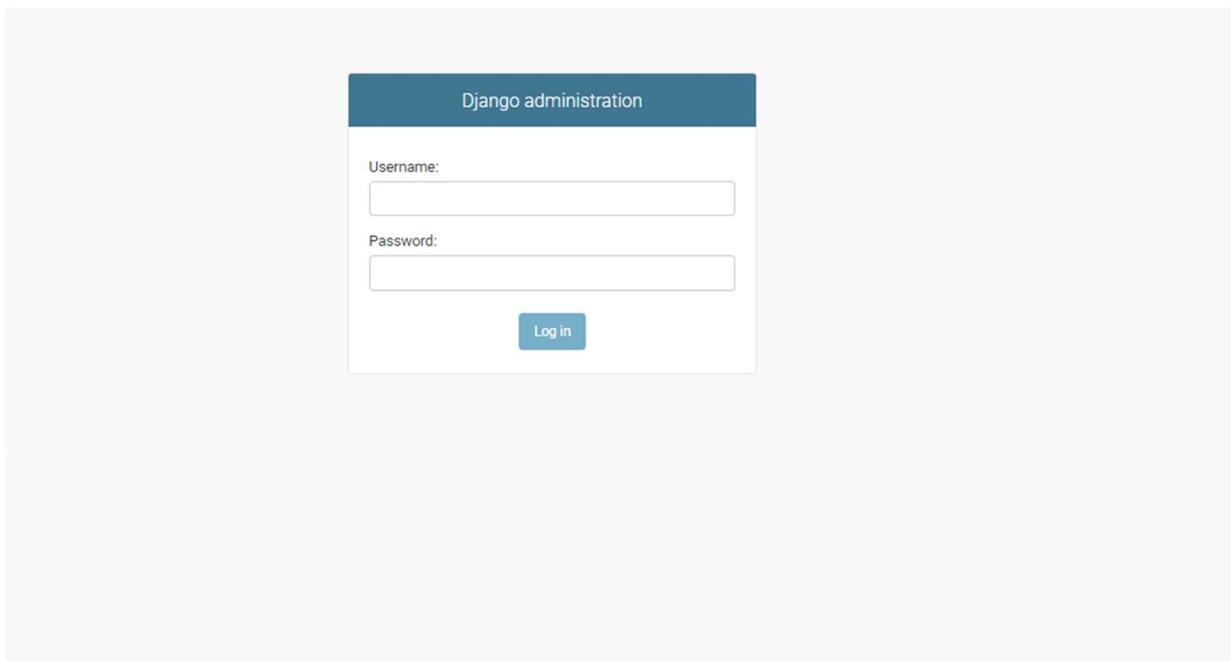


Figure 5-1.1: login

#### Explanation:

This is the login page of our site. Login page includes:

- Username
- Password
- Login

For login into the software we need a Username and password of the user then click on login button. After this process user will be able to enter in the software.

In this part the customer can login by putting the right credential which he/she gave at the time of the creation of the account. Through this the customer can book an event of its own choice and could avail the opportunity to get the services from the Ghar Banao.

In this part the client can login by putting the right accreditation which he/she gave at the hour of the production of the record. Through this the client can book an occasion willingly and could benefit the chance to get the administrations from the Ghar Banao.

### 5.2.2 Signup

The screenshot shows the 'Sign-up' page for the 'GHAR BANAO' platform. The page has a dark background with a light-colored sign-up form in the center. On the left side, there is a logo featuring a stylized house with a hammer and a wrench inside it, with the text 'GHAR BANAO' below it. The sign-up form is titled 'Sign-up' in English and 'سائن اپ کریں' in Urdu. It includes fields for 'Customer Name' (with placeholder 'Enter Customer Name'), 'Address' (with placeholder '...'), 'Home Address' (with placeholder 'Enter your home address'), and 'Contact Number' (with placeholder 'Enter your Contact Number'). A yellow 'SIGN-UP' button with the same text in Urdu is at the bottom. Below the button, there is a link 'a member? Log-in'.

Figure 5-1.2: Signup

## **Explanation:**

This is the registration page of our site. Registration page includes:

- User Name
- Customer Name
- Password
- Home Address
- Contact Number
- Sign Up

For registration into the software we need a user name, full name, house address, contact number and password of the user then click on registration button. After this process user will be able to enter in the site.

In this part the customer can sign up by putting the right credential according to the requirement of the account by the Ghar Banao. Through this the user can update all his information of its own choice and could avail the opportunity to get the services from the Ghar Banao. Further, by signing up the Customer can become a part of the Ghar Banao. And then can able to order a products that he want and also he get our services as there are some authentication requirement for the services and changes.

For enlistment into the product we need a full name, username and secret phrase of the client then, at that point click on enrollment button. After this cycle client will actually want to enter in the site.

### 5.2.3 Home page Before Signup



Figure 5.1.3 Home Page before Signup

## **Explanation:**

Before registration user should redirect to the home page.

In this part user can see what we are serving and. The home page basically is our shortcut page of redirecting to any of the desired page of the site. It shows each category of the website there could be by which it makes easy to choose for the customer according to his/her desired. And could order and avail the reservation services from us.

In this part client can perceive what we are serving and. The landing page fundamentally is our alternate way page of diverting to any of the ideal page of the site. It shows every class of the Event there could be by which it makes simple to decide for the client as indicated by his/her ideal. Furthermore, could book and benefit the administrations from us.

There are following categories that a customer could choose for their event.

- Company
- Labor Services
- Construction Material
- Buy/Sell House
- About
- Contact Us
- Give feedback
- Search products

## 5.2.4 After Login Home Page

The screenshot shows the Ghar Banao website's homepage after a user has logged in. At the top right, the user's name "faraz12" is displayed with a dropdown arrow, accompanied by a shopping cart icon and a heart icon.

The main banner features a collage of construction images and the tagline "AB GHAR BANANA HUWA ASAN..." in English and "کیا آپ کہر یا بلڈنگ تعمیر کر رہے ہیں...؟ اب تعمیراتی سامان منگوائیے اپنے گھر کی دلیل پر..". Below the banner are two buttons: "BUY NOW" and "CONTACT NOW".

The page title "WHAT WE DO" is centered above a grid of service categories:

- CONSTRUCTION MATERIAL**: Includes images of various materials like pipes and tiles.
- ELECTRIC PRODUCTS**: Includes images of electrical tools and equipment.
- TILLING & FLOORING**: Includes images of flooring materials.
- PAINT MATERIAL**: Includes images of paint cans and brushes.
- KITCHEN & BATH**: Includes images of kitchen and bathroom fixtures.
- DOOR & WINDOW**: Includes images of doors and windows.

Below these categories are four buttons: "GET Labor Services", "Daily Price List", "Calculate Cost", and "Buy Ready made House".

A section titled "Best Selling Cement Products" displays four bags of cement:

- PAK CEMENT**: Bag labeled "PAKCEM" with "BESTWAY CEMENT BUILDING ON STRENGTH" and "ISQ 9001".
- BESTWAY CEMENT**: Bag labeled "BESTWAY CEMENT" with "TAKNEED CEMENT" and "BESTWAY CEMENT LIMITED".
- DG CEMENT**: Bag labeled "DG CEMENT" with "CIVIL BOARD" and "D.G. KHAN CEMENT CO. LTD".
- FLYING CEMENT**: Bag labeled "FLYING PAKISTAN" with "PAKISTAN" and "FLYING CEMENT COMPANY LTD".

Each cement product has a star rating and price information below it:

Product	Rating	Price
PAK CEMENT	★★★★★	RS : 1160.0
BESTWAY CEMENT	★★★★★	RS : 1180.0
DG CEMENT	★★★★★	RS : 1030.0
FLYING CEMENT	★★★★★	RS : 1000.0

Figure 5.1.4 After Login Home Page

## **Explanation:**

After registration user should redirect to the home page.

In this part user can see what we are serving and. The home page basically is our shortcut page of redirecting to any of the desired page of the site. It shows each category of the website there could be by which it makes easy to choose for the customer according to his/her desired. And could order and avail the reservation services from us.

In this part client can perceive what we are serving and. The landing page fundamentally is our alternate way page of diverting to any of the ideal page of the site. It shows every class of the Event there could be by which it makes simple to decide for the client as indicated by his/her ideal. Furthermore, could book and benefit the administrations from us.

There are following categories that a customer could choose for their event.

- Labor Services
- Construction Material
- Contact Us
- Buy House
- About Us
- Cart
- Give feedback
- Search products
- Sell houses

## 5.2.5 Labor Services

**Carpenter**



**Bilal Ahmed**

**Rs = 500/- per hour**

A Carpenter is a construction professional who works with construction crews to build, adj

[Book Now](#)

**Carpenter**



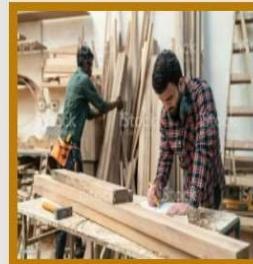
**Amjad Ali**

**Rs = 450/- per hour**

A Carpenter is a construction professional who works with construction crews to build, adj

[Book Now](#)

**Carpenter**



**Umar**

**Rs = 600/- per hour**

A Carpenter is a construction professional who works with construction crews to build, adj

[Book Now](#)

**Figure 5.1.5 Labor Services**

### Explanation:

User can choose category as their event for making their day Special.

In this portion if the customer, wants to select design from one of our own designed setups he/she could easily as the thing they have to do is to make up their mind for what event they want our services and can direct get into the category where the different planned event as a category is available according to their own prices by which customer could select according to their ranges.

The best part of this the customer, can view the particular category they thought it seems better for their event which includes the different images of the chosen planned event which helps them as either their decision is correct or not.

In this bit if the client, needs to choose plan from one of our own planned arrangement he/she could undoubtedly as what they need to do is to decide for what occasion they need our administrations and can coordinate get into the classification where the distinctive arranged occasion as a classification is accessible as indicated by their own costs by which client could choose as per their reaches.

The most awesome aspect of this the client, can see the specific class they thought it appears to be better for their occasion which incorporates the various pictures of the picked arranged occasion which helps them as either their choice is right or not.

### 5.2.6 Construction Services

**CEMENT PRODUCTS**  
سیمنٹ کی مصنوعات.....

**Pak CEMENT**  
★★★★★  
**Buy Now**  
RS: 1200.0

**Bestway Cement**  
★★★★★  
**Buy Now**  
RS: 1220.0

**DG Cement**  
★★★★★  
**Buy Now**  
RS: 1050.0

**Table 5.1.6 Construction Services**

#### Explanation:

User can choose category as their event for making their day Special.

In this portion if the customer, wants to select design from one of our own designed setups he/she could easily as the thing they have to do is to make up their mind for what event they want our services and can direct get into the category where the different planned event as a category is available according to their own prices by which customer could select according to their ranges.

The best part of this the customer, can view the particular category they thought it seems better for their event which includes the different images of the chosen planned event which helps them as either their decision is correct or not.

In this bit if the client, needs to choose plan from one of our own planned arrangement he/she could undoubtedly as what they need to do is to decide for what occasion they need our administrations and can coordinate get into the classification where the distinctive arranged occasion as a classification is accessible as indicated by their own costs by which client could choose as per their reaches.

The most awesome aspect of this the client, can see the specific class they thought it appears to be better for their occasion which incorporates the various pictures of the picked arranged occasion which helps them as either their choice is right or not.

### 5.2.7 Buy/Sell Houses



BUY OUR READYMADE HOUSE  
BY GHAR BANAO

**House Owner Name and Contact**  
zeehan Butt  
56545454567  
Date Sept. 26, 2022

**Description & Address**  
its a five(5) marla house located in ichra  
near hassan center,Street#3 famous by bata  
street Lahore

**Price Demanded**  
80 LAC

[See More photos](#)

**Figure 5.1.7 Buy/Sell Houses**

#### Explanation:

User can choose category as their event for making their day Special.

In this portion if the customer, wants to select design from one of our own designed setups he/she could easily as the thing they have to do is to make up their mind for what event they want our services and can direct get into the category where the different planned event as a category is available according to their own prices by which customer could select according to their ranges.

The best part of this the customer, can view the particular category they thought it seems better for their event which includes the different images of the chosen planned event which helps them as either their decision is correct or not.

In this bit if the client, needs to choose plan from one of our own planned arrangement he/she could undoubtedly as what they need to do is to decide for what occasion they need our administrations and can coordinate get into the classification where the distinctive arranged occasion as a classification is accessible as indicated by their own costs by which client could choose as per their reaches.

The most awesome aspect of this the client, can see the specific class they thought it appears to be better for their occasion which incorporates the various pictures of the picked arranged occasion which helps them as either their choice is right or not.

### 5.2.8 Booking

The image shows a booking form titled 'BOOK CARPENTER'. It contains three input fields: 'Username', 'Your Name', and 'Enter home address'. Below these is a dropdown menu labeled 'Choose a Payment method' with 'JAZZCASH' selected. A large yellow 'SUBMIT' button is centered at the bottom.

**Figure 5.1.8 Booking**

#### Explanation:

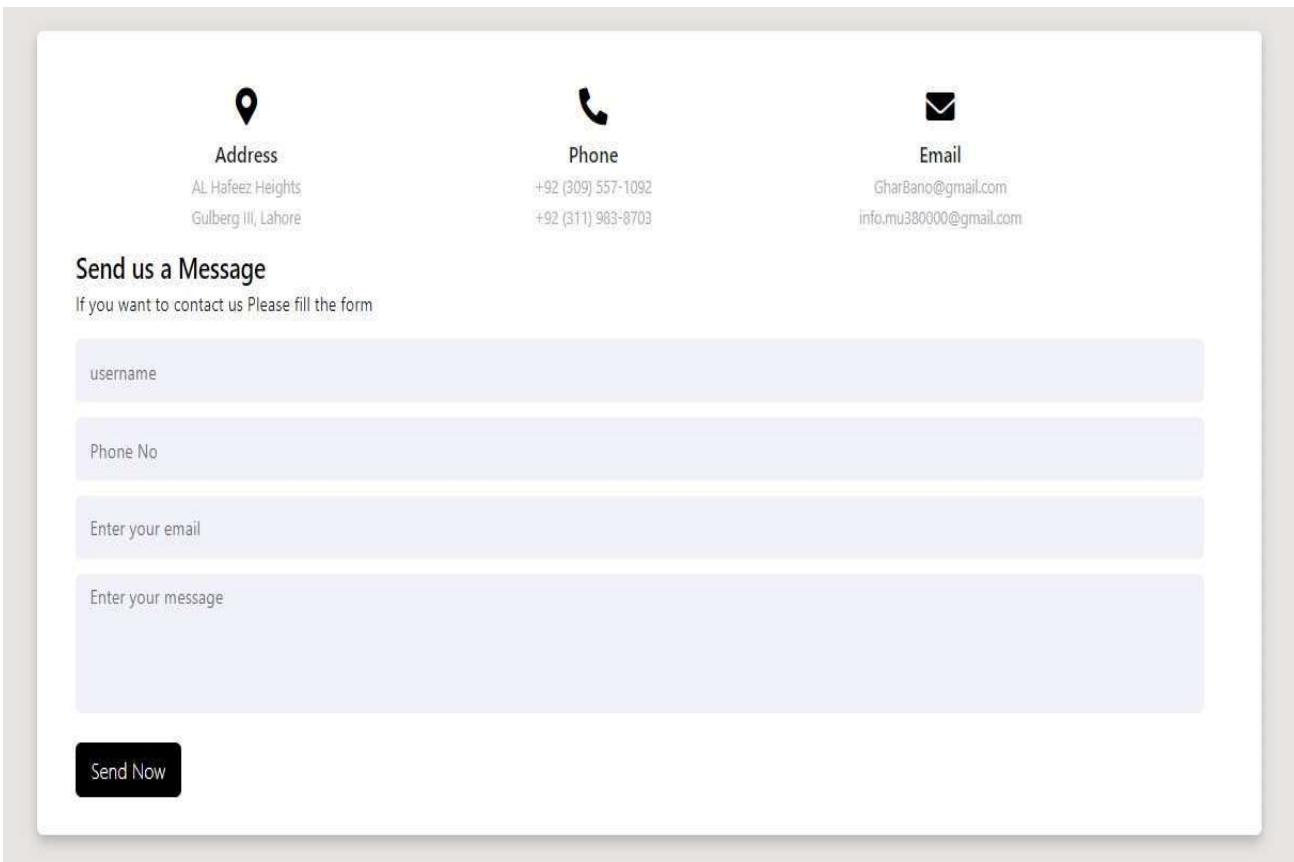
This is the booking page of our site. Booking page includes:

- User Name
- Customer name
- Home Address
- Payment Mode
- Submit

For order into the software we do not need a Username and password of the user then click on order button. After this process user will be able to order in the site.

In this section the customer, can decide for how many people they want to order their Labor and on what address the Product should be delivered. There are some credentials required which should be perform to get the order on time.

### 5.2.9 Contact Us



The contact page features three sections: Address (location: Al Hafeez Heights, Gulberg III, Lahore), Phone (numbers +92 (309) 557-1092 and +92 (311) 983-8703), and Email (addresses GharBano@gmail.com and info.mu380000@gmail.com). Below these are fields for 'Send us a Message' (username, Phone No, Enter your email, Enter your message) and a 'Send Now' button.

**Figure 5.1.9 Contact Us**

#### Explanation:

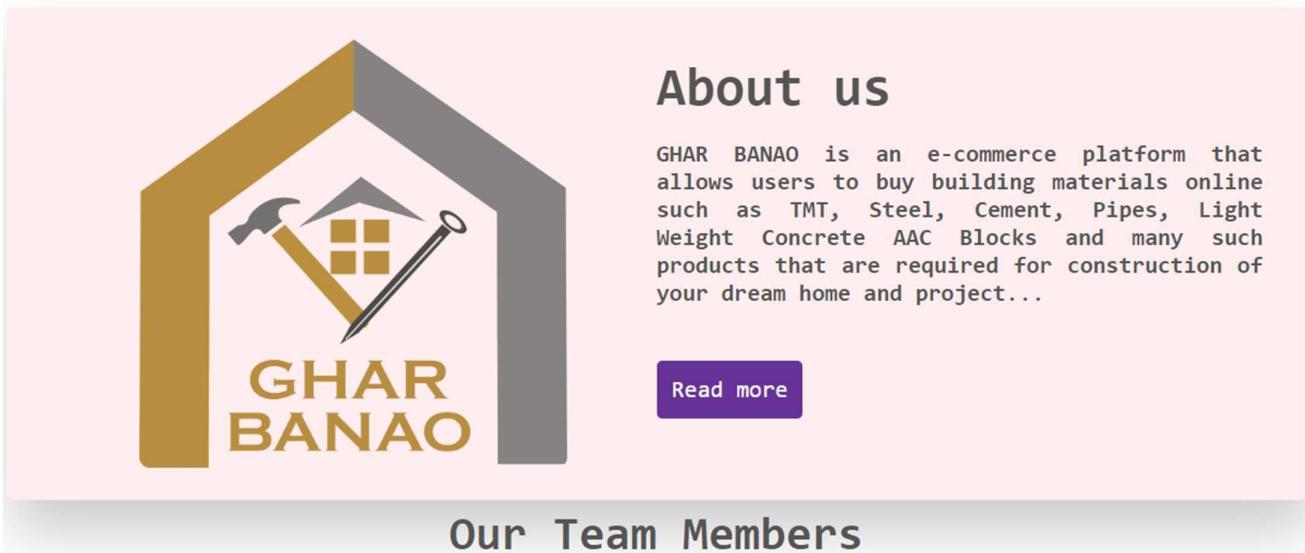
This is the contact page of our site. Contact page includes:

- Name.
- Email.
- Phone.
- Message.
- Send.

For contact into the software we need email, name, contact Subject and Message then click on submit button. After this process user will be able to enter in the site. And the customer, concern was able to for us to read and to do according to the concern.

By sending us a message the customer, could receive the thank you email which indicating to the customer that his/her concern was properly send to team and could wait for the response from our concern department. This is for engaging customer with our team to build a strong and trustful relation in this full of fraud world.

### 5.2.10 About Us



**Figure 5.1.10 About Us**

#### Explanation:

In this page the customer can get known about the company and its motive. User can view our events which we organized and make our customer event memorable. And the mindset of the team to get known about the investment the customer is doing with us could be beneficial or good for them or not.

The about us page is generally utilized by a wide range of organizations to give clients more knowledge into who is associated with a given business and precisely what it does. The historical backdrop of a business is frequently given, and the chronicles of individuals in control are generally communicated through short articles, typically joined by photos.

Contingent upon the particular organization, some data about objectives, mentality or different parts of culture that aren't rigorously attached to strategic approaches are incorporated also. The about us page is regularly an impression of the reason and character of the business and its proprietors or top workers. At long last, the page can likewise consolidate contact or locational data. One approach to see the about us idea is as a book self-representation or short self-portrayal made by a business.

In this page the client can get thought about the organization and its intention. Client can see our occasions which we coordinated and make our client occasion significant. Also, the mentality of the group to get thought about the venture the client is doing with us could be advantageous or useful for them or not.

## 5.2.11 Home Page

The screenshot shows the homepage of the Ghar Bananah website. At the top, there is a navigation bar with a logo, LOGIN, REGISTER, HOME, COMPANY, LABOR SERVICES, CONSTRUCTION MATERIAL, BUY HOUSE, and CONTACT buttons. A search icon is also present. The main banner features three images: concrete blocks, electrical wiring, and a large pile of sand. The central text in English reads "AB GHAR BANANA HUWA ASAN..." and in Urdu, "کیا آپ کھر یا بلڈنگ تعمیر کر رہے ہیں؟ اب تعمیراتی سامان منگوانیے اپنے کھر کی دلیل پر۔" Below the banner are sections for "WHAT WE DO" with categories like CONSTRUCTION MATERIAL, TILLING & FLOORING, KITCHEN & BATH, ELECTRIC PRODUCTS, PAINT MATERIAL, and DOOR & WINDOW. There are also buttons for "GET Labor Services", "Daily Price List", "Calculate Cost", and "Buy Ready made House". A section for "Best Selling Cement Products" displays four bags of cement: PAK CEMENT, BESTWAY CEMENT, DG CEMENT, and FLYING CEMENT, each with a star rating and price.

**CONSTRUCTION MATERIAL**

We provide the best Construction Material at your door step in easy process.

**TILLING & FLOORING**

We provide the best Construction Material at your door step in easy process.

**KITCHEN & BATH**

We provide the best Construction Material at your door step in easy process.

**ELECTRIC PRODUCTS**

We provide the best Construction Material at your door step in easy process.

**PAINT MATERIAL**

We provide the best Construction Material at your door step in easy process.

**DOOR & WINDOW**

We provide the best Construction Material at your door step in easy process.

**Best Selling Cement Products**

Product	Rating	Price
PAK CEMENT	★★★★★	RS : 1160.0
BESTWAY CEMENT	★★★★★	RS : 1180.0
DG CEMENT	★★★★★	RS : 1030.0
FLYING CEMENT	★★★★★	RS : 1000.0

Figure 5.1.11 Homepage  
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WE ARE SPECIALISTS IN  
**WHAT WE DO**



**CONSTRUCTION MATERIAL**

We provide the best Construction Material at your door step in easy process.



**TILLING & FLOORING**

We provide the best Construction Material at your door step in easy process.



**KITCHEN & BATH**

We provide the best Construction Material at your door step in easy process.



**ELECTRIC PRODUCTS**

We provide the best Construction Material at your door step in easy process.



**PAINT MATERIAL**

We provide the best Construction Material at your door step in easy process.



**DOOR & WINDOW**

We provide the best Construction Material at your door step in easy process.



**Figure 5.1.12 Our Services**

**GET Labor Services**

**Daily Price List**

**Calculate Cost**

**Buy Ready made House**

**Best Selling Cement Products**

**PAK CEMENT**

Add To Wishlist

**BESTWAY CEMENT**

**DG CEMENT**

**FLYING PAKISTAN CEMENT**

**Figure 5.1.13 Products**

**WORK OF EXCELLENCE**  
**RECENT PROJECTS**

WE JUST READY 2.5 MARLA WELL FURNISHED HOUSE IN SHABBAGH LAHORE  
JULY 20, 2017

[SEE MORE PHOTOS](#)

THANDER AIRPORT WATER RECLAMATION FACILITY EXPANSION PROJECT NAMED  
JUNE 17, 2017

[SEE MORE PHOTOS](#)

SILICON BENCH AND CORNIKE BEGIN CONSTRUCTION SOLAR FACILITIES  
AUG 13, 2017

[SEE MORE PHOTOS](#)

**Figure 5.1.14 Complete Projects**

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## **CHAPTER 6**

### **TESTING AND EVALUATION**

## Testing and Evaluation

In this chapter, we can test and evaluate our application and write the results which are taken during the testing. Through this, we can know where our system lacks and how does it behave when modules interact with each other.

### 6.1 Use Case Testing

Use case testing is a procedure that assists with distinguishing experiments that cover the whole framework, on an exchange by exchange premise, beginning to end. It is a portrayal of a specific utilization of the framework by a client. It is utilized generally in creating tests or frameworks for satisfactory levels.

In this technique, we will perform testing on each use case of the system so we can see if their workflow is normal and we will write them in form of a use case.

Use case testing is a methodology that helps with recognizing tests that cover the entire structure, on a trade by trade premise, start to finish. It is a depiction of a particular usage of the system by a customer. It is used commonly in making tests or systems for palatable levels.

In this strategy, we will perform testing on each utilization instance of the framework so we can check whether their work process is ordinary and we will think of them in type of a utilization case.

#### 6.1.1 Register

Test Case: Register		
	Steps	Description
<b>Main success scenario</b>  <b>A: Actor</b>  <b>S: System</b>	1	A: open our site.
	2	S: Show the main page with the login and register option.
	3	A: Use the register option if you don't have an account On the system.
	4	S: Show Register/Login page.
	5	A: Use the register option if you don't have an account on the System.
	6	A: Fill in all the required information and press the signup Button.
	7	S: Information stored in the database and go back to the home Page.
<b>Extensions:</b>	2a	Slow/ no internet connection. S: the main page will not be opened.
	6a	The email should be valid. S: the message will be displayed as an invalid email.

Table 6.1.1: TC Register

### 6.1.2 Login

#### 7 Test Case: Login

	Steps	Description
<b>Main success scenario</b>	1	A: Open website and select the login/register option.
<b>A: Actor</b>	2	S: Display login/signup page.
<b>S: System</b>	3	A: Enter the valid email and password of the account.
	4	S: Validate email and password.
	5	S: Allow access to the account.
<b>Extensions:</b>	2a	Slow/ no internet connection. S: the main page will not be opened.
	4a	Email and password are invalid. S: the message will be displayed of invalid email and enter pin again.

**Table 6.1.2 TC Login**

### 6.1.3 Contact Us

#### Test case: Contact Us

	Steps	Description
<b>Main success scenario</b>	1	A: Open the website.
	2	S: Display the main page.
<b>A: Actor</b>	3	A: Select the contact us option.
<b>S: System</b>	4	S: Input the whole information in the form.
	5	A: Click on submit.
	6	S: Information store in the database.
	7	A: The user gets an Auto to message send Successfully.
<b>Extensions:</b>	1a	Slow/ no internet connection. S: the main page will not be opened.
	4a	Slow internet connection. S: Map will not be displayed.

**Table 6.1.3 TC Contact Us**

#### 6.1.4 Select Categories

Test case: Select Categories		
	Steps	Description
<b>Main success scenario</b>  <b>A: Actor</b>  <b>S: System</b>	1	A: Open the website.
	2	S: Display the main page.
	3	A: Select the categories in navbar option.
	4	S: Display sub-categories category.
	5	A: Select the category option.
	7	A: Go to the booking page.
<b>Extensions:</b>	1a	Slow/ no internet connection.  S: the main page will not be opened.
	4a	Slow internet connection.

Table 6.1.4 TC Select Categories

#### 6.1.5 Order

Test case: Booking:		
	Steps	Description
<b>Main success scenario</b>  <b>A: Actor</b>  <b>S: System</b>	1	A: Open the website.
	2	S: Display the category page.
	3	A: Click on the booking button.
	4	S: Fill in the whole information in the form.
	5	A: Go to the next process
	6	S: Information store in the database.
<b>Extensions:</b>	1a	Slow/ no internet connection.  S: the main page will not be opened.

Table 6.1.5 TC Booking

### 6.1.5 Payment

Test case: Payment:		
	Steps	Description
<b>Main success scenario</b>  <b>A: Actor</b>  <b>S: System</b>	1	A: Open the website.
	2	S: Display the payment page.
	3	A: Fill in the whole information in the form.
	4	S: By clicking on Checkout. And turn to home page
	5	A: And payment information store in the database.
<b>Extensions:</b>	1a	Slow/ no internet connection. S: the main page will not be opened.
	4a	Slow internet connection.

**Table 6.1.6 TC Payment**

### 6.1.6 User Name

On our website, the username is used. If the username contains alphabets and numbers, it is considered valid otherwise it is invalid.

Invalid	Valid
Aleeza@...	Aleeza
Username: alphabets	Username: alphabets
Enter Valid User-Name	Valid

**Table 6.1.7 EP User Name**

### 6.1.7 Password

On our website, the password is used to login into a system. The password should have a length of letter and alphabets so, it is considered valid otherwise it is invalid.

Invalid	Valid	Invalid
-----	nofe123456	-----
Enter Valid Input	Valid	Enter Valid Input

**Table 6.1.8 EP Password**

## **6.2 Black Box Test Cases**

A simple login screen of software or a web application will be tested for seamless user login. The login screen has two fields, username and password as an input and the output will be to enable access to the system. A black box testing will not consider the specifications of the code, and it will test the valid username and password to login to the right account.

This form of testing technique will check the input and output.

- A user logged in when inputs a present username and correct password.
- A user receives an error message when enters username and incorrect password.

Black Box Testing is also called behavioral/ Specification-Based/ input-output Testing. Black Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure and implementation details. This test case is done by mainly focusing on the input and output of AMS.

Following are the prominent Test Strategy amongst the many used in Black box Testing

- Boundary Value Analysis
- Equivalence Class Partitioning
- State Transition Testing
- Decision Table Testing
- Graph Base Testing

### **6.2.1 BVA or Boundary Value Analysis**

Boundary value testing is focused on the values at boundaries. This technique determines whether a certain range of values is acceptable by the system or not. Using this technique, we have taken the test conditions as partitions and designed the test cases by getting the boundary values of the partition. We have gotten both valid boundaries (from the valid partitions) and invalid boundaries (from the invalid partitions).

On us “Apply” page, there is a number field, which will accept a number only of 11 digits, no more, no less. It will also not accept the alphabets in that field.

### **6.2.2 Equivalence Class Partitioning**

Using this technique, we have divided the test conditions of our project into groups, and from each group, we have tested only one condition by keeping in mind that if a condition from a group works then all the conditions from the same group will work.

By using this method, we have saved a lot of time by reducing the total number of test cases

On us “Apply” page, there are some fields that will collect data from the user. “First Name” and “Last Name” fields will only accept the numeric value.

### 6.2.3 Decision Table Testing

Decision Table Testing is a software testing methodology used to test system behavior for various input combinations. In this systematic approach, the several input combinations and their corresponding system behavior are represented in tabular form. Decision Table testing is used for testing two or more inputs that have a logical relationship. A decision table puts causes and their effects in a matrix. There is a unique combination in each column.

The decision table for the login page is given below. A user with a valid email and password can log in. If the email or password is not given correctly, it will generate an error message.

#### Conditions

Enter valid email

Enter valid password

#### Actions

Show user portal

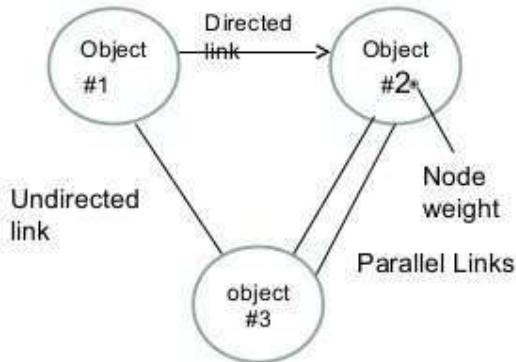
Show error message

ID	Condition/Action	Test case 1	Test case 2	Test case 3	Test case 4
Condition 1	Valid user email	T	T	F	F
Condition 2	Valid password	T	F	T	F
Action 1	User portal	Execute			
Action 2	Show error message		Execute	Execute	Execute

#### 6.2.4 Graph Base Testing

This technique of Black box testing involves a graph drawing that depicts the link between the causes (inputs) and the effects (output), which trigger the effects. This testing utilizes different combinations of output and inputs. Let us explain graph box testing and how we have implemented it on our login module.

## Graph based testing



#### 6.2.5 Graph-based testing

If a user enters an invalid email or password, it will generate an error message and relocate to the login page. If a user enters a valid email and password then it will open the respected user portal. Through that portal, users can change their email and password.

## 6.3 Equivalence Class Partitioning

The equivalence Partitioning Method is otherwise called Proportionality class dividing (ECP). It is a product testing method or discovery testing that partitions input area into classes of information, and with the assistance of these classes of information, experiments can be determined. An ideal experiment recognizes a class of blunder that may require numerous subjective experiments to be executed before the broad mistake is noticed. In identicalness dividing, equality classes are assessed for given information conditions. At whatever point any information is given, then, at that point kind of info condition is checked, then, at that point for this information conditions, Equality class addresses or portrays set of legitimate or invalid states. Equivalencepartitioning is also a testing technique to check a site. It is used when random values are inserted in a system to show how it behaves during wrong inputs.

## 6.4 Data Flow Testing

Data Flow Testing is a particular technique of programming testing that spotlights information factors and their qualities. It utilizes the control stream diagram. With regards to classification Information, stream testing will be considered as a sort of white-box testing and primary kinds of testing. It keeps a check at the information getting focuses by the factors and its utilization focuses. It is done to cover the way testing and branch testing hole.

The cycle is directed to recognize the bugs as a result of the erroneous use of information factors or information esteems. For example, Introduction of information factors in programming code, and so on.

### 6.4.1 Online Registration

Module: Registration				
Description: The data flow testing shows the flow of data through input fields to the database during Registration.				
Step No.	Step Description	Expected Result	Actual Result	Status
1	Click on Registration form	Data inserted	Data inserted	Pass
	{email=nofe@gmail.com, username=Nofe, password=123456}			

Table 6.4.1: DFT Online Registration

## 6.4.2 Login

<b>Module:</b> Staff Login				
<b>Description:</b> The data flow testing shows the flow of data through input fields to the database during login.				
<b>Step No.</b>	<b>Step Description</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
1	Login {email= <u>hira@gmail.com</u> , password=123456}	Check database	Login	Pass

**Table 6.4.2 DFT Login**

## 6.4.3 Contact Us

<b>Module:</b> Contact				
<b>Description:</b> The data flow testing shows the flow of data through input fields to the database during Inserting contact data in the database.				
<b>Step no</b>	<b>Step Description</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
1	Add contact data {name=Wahab, <u>Email=awramzani@gmail.com</u> , number= 03228812986, subject= order for home sampling,city=Lahore, Message= hi I visit your site I want to get information about medical test and your services}	Data inserted	Data inserted	Pass

**Table 6.4.3 DFT Contact Us**

## 6.5 Unit Testing

Unit Testing is a software testing technique by means of which individual units of software i.e. group of computer program modules, usage procedures and operating procedures are tested to determine whether they are suitable for use or not. It is a testing method using which every independent module is test to determine if there are any issue by the developer himself. It is correlate with functional correctness of the independent modules.

Unit testing is defined as a type of software testing where individual components of a software are tested. Unit testing of software product is carrying out during the development of an application. An individual component may be either an individual function or a procedure. The developer typically performs unit testing.

In SDLC or V Model, Unit testing is first level of testing done before integration testing. Unit testing is such type of testing technique that is usually perform by the developers. Although due to reluctance of developers to tests, quality assurance engineers also do unit testing.

### 6.5.1 Registration

<b>Test type</b>	Unit testing
<b>Test case number</b>	1
<b>Test case name</b>	Registration
<b>Test case description</b>	The user should insert a valid email- address, username, and phone number.
<b>Items to be tested</b>	All the fields should be filled and the data should be stored in the database.
<b>Specifications:</b> <b>All field must fill</b> <b>Can't fill all field</b>	Successful registration. Failure message.

Table 6-12: UT Registration

### 6.5.2 Login

<b>Test type</b>	Unit testing
<b>Test case number</b>	2
<b>Test case name</b>	Login
<b>Test case description</b>	The user should insert a valid email address and Password.
<b>Items to be tested</b>	Verification of username and password from the Database.
<b>Specifications:</b> <b>All field must fill</b> <b>Can't fill all field</b>	Successful login. Failure message.

Table 6.5.2 UT Login

### 6.5.3 Contact Us

<b>Test type</b>	Unit testing
<b>Test case number</b>	4
<b>Test case name</b>	contact us
<b>Test case description</b>	The user should insert a valid name, email, number, subject, city, and message.
<b>Items to be tested</b>	The data should be inserted into the database.
<b>Specifications:</b> <b>All field must fill</b> <b>Can't fill all field</b>	Data stored. Failure message.

Table 6.5.3 UT Contact Us

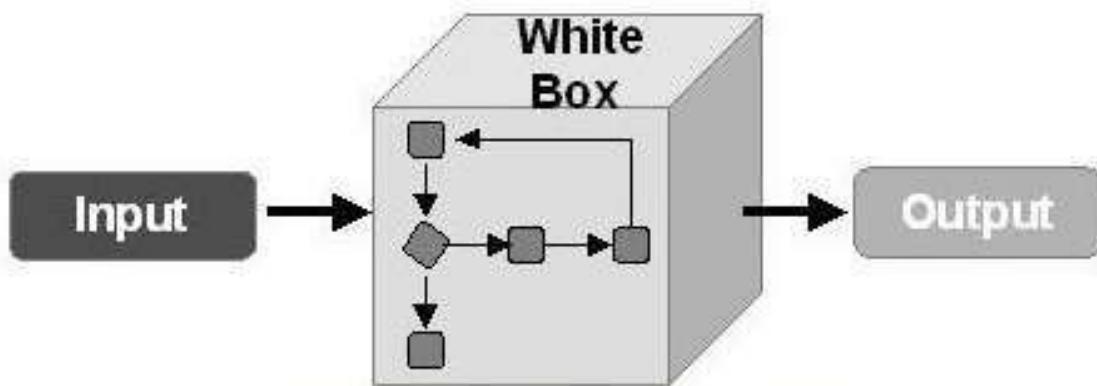
#### 6.5.4 Logout

<b>Test type</b>	Unit testing
<b>Test case number</b>	5
<b>Test case name</b>	Logout
<b>Test case description</b>	The user should press the logout button.
<b>Items to be tested</b>	The account running on-site should be logged out.
<b>Specifications: Press the logout button</b>	Logout successfully and the main page is opened.

Table 6.5.4 UT Logout

#### 6.6 White Box Testing

White Box Testing is a software testing technique in which internal structure, design, and coding of software are tested to verify the flow of input-output and to improve design, usability, and security. In white-box testing, code is visible to testers so it is also called Clear box testing, Open box testing, transparent box testing, Code-based testing, and Glass box testing.



## 6.7 Statement Coverage

Statement Coverage is a white box testing technique in which all the executable statements in the source code are executed at least once. It is used for the calculation of the number of statements in the source code that have been executed.

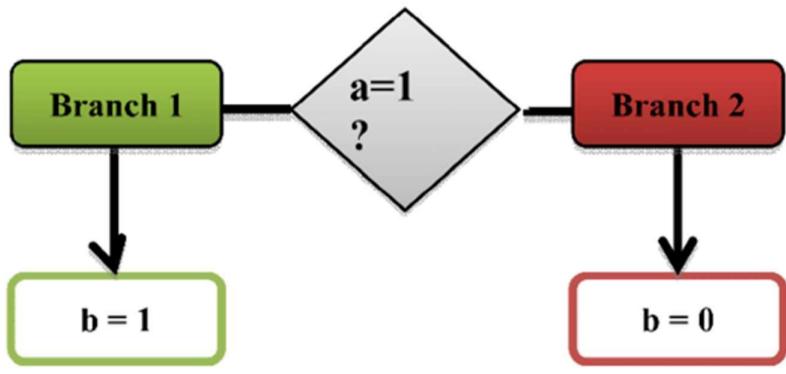
The main purpose of Statement Coverage is to cover all the possible paths, lines, and statements in the source code. Statement coverage is used to derive scenarios based upon the structure of the code under test.

$$\text{Statement coverage} = \frac{\text{Number of statements exercised}}{\text{Total number of statements}} \times 100\%$$

## 6.8 Branch Coverage

The branch coverage technique is used to cover all branches of the control flow graph. It covers all the possible outcomes (true and false) of each condition of the decision point at least once. The branch coverage technique is a white box testing technique that ensures that every branch of each decision point must be executed. However, branch coverage technique and decision coverage technique are very similar, but there is a key difference between the two. The decision coverage technique covers all branches of each decision point whereas branch testing covers all branches of every decision point of the code.

```
module statement_test;
reg a, b;
initial begin
if(a)
b = 1; // Line 1
else
b = 0; // Line 2
end
endmodule
```



## **6.9 Path Coverage**

Path coverage testing is a specific kind of methodical, sequential testing in which each individual line of code is assessed.

As a type of software testing, path coverage testing is in the category of technical test methods, rather than being part of an overarching strategy or "philosophy" of code. The way that path coverage testing works are that the testers must look at each individual line of code that plays a role in a module and, for complete coverage, the testers must look at each possible scenario so that all lines of code are covered.

Integration testing (in some cases called mix and testing, contracted I&T) is the stage in programming testing wherein singular programming modules are joined and tried collectively. It happens after unit testing and before approval testing. Joining testing takes as its information modules that have been unit tried, bunches them in bigger totals, applies tests characterized in a reconciliation test plan to those totals, and conveys as its yield the incorporated framework prepared for framework testing.

## **6.10 Stress Testing**

Stress Testing is a kind of programming testing that checks the solidness and unwavering quality of programming applications. The objective of Stress testing is estimating programming on its vigor and mistake dealing with abilities under amazingly substantial burden conditions and guaranteeing that

Product doesn't crash under crunch circumstances. It even tests past typical working focuses and assesses how the product functions under outrageous conditions.

In Programming, Stress Testing is otherwise called Perseverance Testing. Under Pressure Testing, AUT is be pushed for a brief timeframe to know its withstanding limit. The most conspicuous utilization of stress testing is to decide the cutoff, at which the framework or programming, or equipment breaks. It additionally checks whether the framework exhibits viable blunder the board under outrageous conditions.

In Programming, Stress Testing is generally called Perseverance Testing. Under Tension Testing, AUT is be pushed for a short period of time to realize its withstanding limit. The most obvious use of pressure testing is to choose the cutoff, at which the system or programming, or hardware breaks. It moreover checks whether the structure shows reasonable botch the board under unbelievable conditions.

## 6.11 Performance Testing

Performance Testing is a product testing measure utilized for testing the speed, reaction time, steadiness, dependability, adaptability, and asset utilization of a product application under a specific responsibility. The fundamental motivation behind execution testing is to recognize and wipe out the exhibition bottlenecks in the product application. It is a subset of operational efficiency and furthermore known as "Perf Testing".

Execution Testing is an item testing measure used for testing the speed, response time, unfaltering quality, reliability, versatility, and resource use of an item application under a particular duty. The crucial inspiration driving execution testing is to perceive and clear out the presentation bottlenecks in the item application. It is a subset of operational productivity and moreover known as "Perf Testing".

The focal point of Execution Testing is checking a product program

- **Speed** - Decides if the application reacts rapidly
- **Adaptability** - Decides the most extreme client load the product application can deal with.
- **Dependability** - Decides whether the application is steady under fluctuating burdens

### 6.11.1 Registration

<b>Test Title</b>	Registration/
<b>Description</b>	This test case simulates the actions that user would use to perform registration
<b>Pre-Condition</b>	User must be connected to the internet
<b>Test Case Steps</b>	1- open Website 2- Click on login 3- Click on signup 4- Fill Registration Form 5- Click on Registration button
<b>Expected Result</b>	4.0 sec
<b>Response Time</b>	3.0 sec
<b>Average Load Time</b>	2.0sec
<b>Concurrent User</b>	200 users at a time
<b>Transaction Result</b>	Passed

Table 6.11.1 PT Registration

## 6.11.2 Login

<b>Test Title</b>	Login
<b>Description</b>	This test case simulates the actions that user would use to perform Login
<b>Pre-Condition</b>	User must be connected to the internet and have a valid account
<b>Test Case Steps</b>	1-open Website 2- Click on login 3-Fill Login Form 4- Click on Login button
<b>Expected Result</b>	4.0 sec
<b>Response Time</b>	3.0 sec
<b>Average Load Time</b>	2.0sec
<b>Concurrent User</b>	200 users at a time
<b>Transaction Result</b>	Passed

Table 6.11.2 PT Login

## 6.11.3 Payment

<b>Test Title</b>	Payment
<b>Description</b>	This test case simulates the actions that user would use to perform Payment
<b>Pre-Condition</b>	User must be connected to the internet and must be go to booking process
<b>Test Case Steps</b>	1- open Website/App 2- Click on Continue to Checkout Button 3-Fill Payment Form
<b>Expected Result</b>	4.0 sec
<b>Response Time</b>	3.0 sec
<b>Average Load Time</b>	2.0sec
<b>Concurrent User</b>	200 users at a time
<b>Transaction Result</b>	Passed

Table 6.11.3 PT Login

## 6.11.4 Contact

<b>Test Title</b>	Contact
<b>Description</b>	This test case simulates the actions that user would use to perform Contact
<b>Pre-Condition</b>	User must be connected to the internet
<b>Test Case Steps</b>	1- open Website 2- Click on Contact us Button3-Fill Contact Us Form 4- Click on Send button
<b>Expected Result</b>	3.0 sec
<b>Response Time</b>	2.0 sec
<b>Average Load Time</b>	1.0sec
<b>Concurrent User</b>	200 users at a time
<b>Transaction Result</b>	Passed

**Table 6.11.4 PT Contact**

## 6.11.5 Logout

<b>Test Title</b>	Logout
<b>Description</b>	This test case simulates the actions that admin would use logout
<b>Pre-Condition</b>	Logged in and must be connected to the internet
<b>Test Case Steps</b>	1-Open mobile application 2-Account logged in 3-Select the logout option from menu
<b>Expected Result</b>	3.0 sec
<b>Response Time</b>	2.0 sec
<b>Average Load Time</b>	1.5 sec
<b>Concurrent User</b>	200 users at a time
<b>Transaction Result</b>	Passed

**Table 6.11.5 PT Logout**

## **CHAPTER 7**

### **TOOLS AND TECHNOLOGIES**

## **7.1 Programming Languages:**

### **7.1.1 HTML**

The Hypertext Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags but use them to interpret the content of the page. HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.<sup>[2]</sup> A form of HTML, known as HTML5, is used to display video and audio, primarily using the `<canvas>` element, in collaboration with JavaScript.

### **7.1.2 CSS**

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.<sup>[3]</sup> This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .CSS file, which reduces complexity and repetition in the structural content; and enable the .CSS file to be cached to improve the page load speed between the pages that share the file and its formatting. The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) `text/css` is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents. In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

### **7.1.3 JavaScript**

JavaScript often abbreviated to JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS.<sup>[11]</sup> As of 2022, 98% of websites use JavaScript on the client side for webpage behavior,<sup>[12]</sup> often incorporating third-party libraries.<sup>[13]</sup> All major web browsers have a dedicated JavaScript engine to execute the code on users' devices. JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard.<sup>[14]</sup> It has dynamic typing, prototype-based object-orientation, and first-class functions. It is multi-paradigm, supporting event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM). The ECMAScript standard does not include any input/output (I/O), such as networking, storage, or graphics facilities. In practice, the web browser or other runtime system provides JavaScript APIs for I/O.

### **7.1.4 Python**

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Python is dynamically-typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its comprehensive standard library.<sup>[34][35]</sup> Guido van Rossum began working on Python in the late 1980s as a successor to the ABC programming language and first released it in 1991 as Python 0.9.0.<sup>[36]</sup> Python 2.0 was released in 2000 and introduced new features such as list comprehensions, cycle-detecting garbage collection, reference counting, and Unicode support. Python 3.0, released in 2008, was a major revision that is not completely backward-compatible with earlier versions. Python 2 was discontinued with version 2.7.18 in 2020. Python consistently ranks as one of the most popular programming languages.

### **7.1.5 Django**

Django is a free and open-source, Python-based web framework that follows the model-template-views (MTV) architectural pattern. It is maintained by the Django Software Foundation (DSF), an independent organization established in the US as a 501(c)(3) non-profit. Django's primary goal is to ease the creation of complex, database-driven websites. The framework emphasizes reusability and "plug ability" of components, less code, low coupling, rapid development, and the principle of don't repeat yourself.<sup>[9]</sup> Python is used throughout, even for settings, files, and data models. Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via admin models. Some well-known sites that use Django include Instagram, Mozilla, Bit bucket, Next-door and Clubhouse.

### **7.1.6 SQLite**

**SQLite** is a database engine written in the C programming language. It is not a standalone app; rather, it is a library that software developers embed in their apps. As such, it belongs to the family of embedded databases. It is the most widely deployed database engine, as it is used by several of the top web browsers, operating systems, mobile phones, and other embedded systems. Many programming languages have bindings to the SQLite library. It generally follows PostgreSQL syntax, but does not enforce type checking by default. This means that one can, for example, insert a string into a column defined as an integer.

### **7.1.7 IDE**

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality. In the Stack Overflow 2021 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool among 82,000 respondents, with 70% reporting that they use it.

## **7.2 Operating Environment**

- Window 10

### **Minimum hardware requirements:**

- RAM :2GB
- Hard drive :8GB

### **The project build within**

#### Front End

- HTML
- CSS
- JavaScript
- Bootstrap

#### Backend

- Python (Django)

#### Database

- SQLite

#### **IDE**

- Pycharm
- VS Studio

#### **For Documentation**

- Ms word
- Designing illustration on Photoshop
- Diagram on ‘Click diagram’

### **7.2.1 Feasibility Study**

An achievability study is a significant level case variant of the whole Framework examination and Configuration Interaction. The examination starts by grouping the difficult definition. Achievability is to decide whether it merits doing. When an acknowledgment issue definition has been produced, the expert fosters an intelligent model of the framework. A quest for options is broke down cautiously. There are 3 sections in achievability study.

### **7.2.2 Operational Feasibility**

Operational plausibility is the proportion of how well a proposed framework takes care of the issues and makes the most of the chances recognized during extension definition and how it fulfills the necessities distinguished in the prerequisite's examination period of framework improvement. The operational practicality appraisal centers around how much the proposed improvement projects fit in with the current business climate and targets in regards to advancement plan, conveyance date, corporate culture, and existing business measures. To guarantee a good outcome, wanted operational results should be bestowed during plan and improvement. These incorporate plan subordinate boundaries like dependability, viability, legitimacy, ease of use, reproducibility, inability, supportability, moderateness, and others. These boundaries are needed to be considered at the beginning phases of the plan whenever wanted operational practices are to be figured it out. A framework plan and improvement require the proper and ideal use of designing and the executive's endeavors to meet the recently referenced boundaries. A framework may fill its expected need most successfully when its specialized and working qualities are designed into the plan. Consequently, operational plausibility is a basic part of frameworks designing that should be an essential piece of the early plan stages.

### **7.2.3 Technical Feasibility**

This includes questions, for example, regardless of whether the innovation required for the framework exists, how troublesome it will be to construct, and whether the firm has sufficient experience utilizing that innovation. The appraisal depends on the layout plan of framework necessities as far as information, measures, yield, fields, projects, and methodology. This can be qualified as far as volume of information, patterns, recurrence of refreshing in order to give a prologue to the specialized framework. The application is the way that it has been created on windows XP stage and a high arrangement of 1GB Smash on Intel Pentium Double center processor. This is actually practical. The specialized plausibility appraisal is centered on acquiring a comprehension of the current specialized assets of the association and their appropriateness to the normal necessities of the proposed framework. It is an assessment of the equipment and programming and how it addresses the issue of the proposed framework.

### **7.2.4 Economic Feasibility**

Setting up the expense adequacy of the proposed framework for example in the event that the advantages don't exceed the expenses, it does not merit going on. In the high-speed world today, there is an extraordinary need of online person to person communication offices. Hence the advantages of this venture in the current situation make it financially achievable. The motivation behind the monetary possibility appraisal is to decide the positive financial advantages to the association that the proposed framework will give. It incorporates evaluation and ID of the multitude of advantages anticipated. This appraisal normally includes an expense/benefits examination. The website & app should show the exact theme of the searched event for the client who organizing the events. The website & app should work properly according to the requirements given by the stakeholder. Nowadays, if you want to make platform progress, you must have to plan, get requirements, and make decisions about your platform according to the current market.

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## **Appendix A**

### **Bootstrap Introduction**

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components. As of July 2022, Bootstrap is the eighth most starred project on GitHub, with over 158,000 stars. Bootstrap is an HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent pull quotes, and text with a highlight.

---

## **SOURCE CODE**

## **models.py**

```
from django.db import models
from django.contrib.auth.models import User

# Create your models here.
class customer(models.Model):
    cus_name = models.CharField(max_length=50)
    contact = models.CharField(max_length=11)
    address1 = models.CharField(max_length=100)
    address2 = models.CharField(max_length=100)
    user = models.OneToOneField(User, on_delete = models.CASCADE)

class contactus(models.Model):
    nameofcus = models.CharField(max_length=50)
    contact = models.CharField(max_length=11)
    msg = models.CharField(max_length=500)
    email = models.EmailField(max_length=254)

def save(self, *args ,**kwargs):
    super(contactus , self).save(*args ,**kwargs)
```

## **views.py**

```
from audioop import add
from ctypes import addressof
import email
from email import message
from http.client import HTTPResponse
from django.shortcuts import HttpResponseRedirect
import imp
from logging import logProcesses
from pickle import TRUE
from unicodedata import name
from django.shortcuts import render , redirect
from django.http import HttpResponseRedirect
from django.contrib.auth.models import User
from django.contrib.auth import authenticate , login , logout
from django.contrib import auth
from django.contrib import messages
from core.models import *
from django.contrib.auth.hashers import make_password , check_password
from products.models import *

def home(request):
```

```

Cement = GS_product.objects.all()
return render(request , 'core/index.html' , {'Cement':Cement})
def cus_login(request):
    if not request.user.is_authenticated:
        if request.method == "POST":
            logusername = request.POST['logusername']
            logpass = request.POST['logpass']
            user = auth.authenticate(username = logusername , password = logpass)
            if user is not None:
                login(request , user)
                return redirect('/')
            else:
                return render(request , 'core/login.html' , {'error': "wrong credentials"})
        else:
            return render(request , 'core/login.html')
    else:
        return redirect('/')

def cus_logout(request):
    logout(request )
    return redirect('/')

cus_name = 0
contact = 0
address1 = 0
username = 0

def sign_up(request):
    if request.method == "POST":
        try:
            user = User.objects.get(username = request.POST.get('logusername')).exists()
            messages.warning(request , 'username already exist try differ')
        except User.DoesNotExist:
            return render(request , 'core/signup.html')

```

```

cus_name = request.POST['cus_name']
contact = request.POST['contact']
address1 = request.POST['address1']
if(not cus_name.isalpha()):
    messages.add_message(request , messages.ERROR , 'username not include number or special
character')

elif(not contact.isnumeric()):
    messages.add_message(request , messages.ERROR , 'contact does not include special character')

elif(len(contact) > 11):
    messages.add_message(request , messages.ERROR , 'Enter correct number')
elif(len(contact) < 11):
    messages.add_message(request , messages.ERROR , 'Enter correct number')

else:
    user = User.objects.create_user(username = request.POST['username'] , password =
request.POST['password'])

    customerobj = customer(cus_name = cus_name , contact = contact , address1 = address1 , user =
user )

    messages.add_message(request , messages.SUCCESS , 'Account Created successfully')
    customerobj.save()

return render(request , 'core/signup.html')

def cus_profile(request):
    cusprofileobj = customer.objects.all()

    return render(request , 'core/profilepage.html' , {'profilepage': cusprofileobj})

def faq(request):
    return render(request , 'core/faq.html')

# def contactus(request):
#     return render(request , 'core/contactus.html')

```

```

def contact_us(request):
    if request.user.is_authenticated:
        if request.method == "POST":
            nameofcus = request.POST['cusname']
            contact = request.POST['phoneno']
            email = request.POST['email']
            msg = request.POST['msg']

            if(nameofcus != request.user.username):
                messages.add_message(request , messages.ERROR , 'Enter correct username')

            elif(not contact.isnumeric()):
                messages.add_message(request , messages.ERROR , 'contact does not include special character')

            elif(len(contact) > 11):
                messages.add_message(request , messages.ERROR , 'Enter correct number')
            elif(len(contact)< 11):
                messages.add_message(request , messages.ERROR , 'Enter correct number')

            else:
                contactobj = contactus(nameofcus =nameofcus , contact = contact , email = email , msg = msg )

                messages.add_message(request , messages.SUCCESS , 'msg sent successfully')
                contactobj.save()

            else:
                return render(request , 'core/contactus.html')

        else:
            return redirect('/')

    return render(request , 'core/contactus.html')

```

## **models-1.py**

```
from django.db import models
```

```

# Create your models here.
class dailypricelst(models.Model):
    proserialnum = models.IntegerField(primary_key=True) #daily price product_serialnumber
    probrand = models.CharField(max_length=50)
    prodate = models.DateField()
    prounit = models.CharField(max_length=30)
    proprice = models.DecimalField(max_digits=10, decimal_places=2)

```

## **views-1.py**

```
from django.shortcuts import render
from dailypricelist.models import dailypricelst

# Create your views here.
def dailyprice_list(request):
    dpl = dailypricelst.objects.all() #dpl dail price list object
    return render(request , 'dailypricelist/Dailypricelist.html' , {'dailyprice':dpl})
```

## **urls.py Main APPS**

```
urlpatterns = [
    path('admin/' , admin.site.urls),
    path('dailypricelist/' , include('dailypricelist.urls') ),
    path('carp/' , include('laborervices.urls')),
    path('gb/' , include('gb_readymadehouse.urls')),
    path('pp/' , include('publiclhome.urls')),
    path('cus/' , include('core.urls')),

    path(" , views.home , name='home'),
    path('logout/' , views.cus_logout , name='logout'),
    path('product/' , include('products.urls')),
```

## **urls.py Sub APPS.**

```
from . import views
from django.urls import path
urlpatterns = [
    path('gsproduct/' , views.productviewMainpage.as_view() , name = 'gsproduct'),
    path('gsproductpage/' , views.productview.as_view() , name = 'gsproductpage'),
    path('prod_det<int:pk>' , views.prod_detView.as_view() , name = 'prod_det'),
    path('add-to-cart/' , views.addtocart , name = 'add-to-cart'),
    path('cart/' , views.showcart , name = 'showcart'),
    path('delete/<str:id>' , views.remove_cart , name = 'delete'),
    path('checkout/' , views.checkout , name = 'checkout'),
    path('procedtopay/' , views.procedtopay , name = 'procedtopay'),
    path('removecart/' , views.removecart , name = 'removecart'),
```