Software Design Specification

WIDEHEAVEN
Quality is our priority

Project Code:
BS-212332

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Definition of Terms, Acronyms and Abbreviations

Term	Description
SRS	Software requirement specification
OSS	Online shopping system
SDLC	Software Development life cycle
CUST	Customer
VP	Verify Payment`
HTTP	Hypertext Transfer Protocol
CSS	Cascading Style Sheet
HTML	Hyper Text Markup Language

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1. Introduction

The WideHeaven store allows visitors to collect items in a virtual shopping cart. They may view the contents of their shopping cart at any time and may add or delete items at will. The program automatically calculates the subtotal, shipping charges, and total. This is software that helps you to do the major part of online shopping by using this site and can be managed online you (or the customer) can securely do all major transactions. To ensure the authentication of the customer one must have to register before proceeding. It provides the following standard features of any e-commerce website.

1.1 Purpose of Document

The purpose of the document is to define the system, and its requirements consuming consumers, admin, and sellers. In addition, the purpose of this design document is to provide a detailed overview of our software product, its parameters, and its goals. It defines how our customers, admin, sellers, and audience see the product and its functionality. Traders, distributors/marketers can sell products/services and the customer can purchase on that website electronically by using the internet on a mobile and computer.

1.2 Project Overview

The objective of our project is to provide easy assistance to both the customer as well as admin with the proper database and information. We develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used in a web app. On our website, we will combine the all products of different brands on one page. Usually, customers face difficulty to search for a product on different websites of different brands but in our project, we will provide all the products of the entire brands on one page.

1.3 Scope

We will provide all brand-new clothes with detailed specifications and customers can search sales of all brand's products on one page. We will provide the service of delivery. This project also provides security with the use of Login-id and Password, so that any unauthorized users cannot use your account. Only Authorized will have proper access authority can access our web app. This system allows the customers to maintain their cart to add or remove the products over the internet. We will not provide service of replicated and old products selling.

2. Design Considerations

The consideration related to design of the project including assumptions and dependencies are provided with the possible risks and violate areas.

2.1 Assumptions and Dependencies

It is assumed that the hardware designed will work correctly with the third-party operating system and the developed software. We assume that the customer has a computer or a smart phone with a browser and has internet.

2.2 Risks and Volatile Areas

Categories		Performance	Support	Cost	Schedule
Catastrophic	1.	The data can be taken over if the system is implemented on a non-encrypted platform.		Security failure results in increased cost and schedule delay that will affect overall system performance.	
	2.	If the system fail to deliver promised services or benefits.	Non responsive and unsupportable.	Significant financial shortages, budget overrun likely.	Unachievable
Critical	1.	If a system does not support a scripting language to store important user information in a database.		There can be a technical problem or the system might not be setup to response to the user query and adequate user satisfaction and budget overrun.	
	2.	If the system does not show appropriate results to user queries, users might stop using the system if the system responds incorrectly.	Minor delay in software modulation	Significant financial shortages, budget overrun likely.	Unachievable
Marginal	1.	A significant risk exists in tools and technologies may replace by other new technologies resulting in a design challenges.		Cost impact and recoverable schedule slips with expected value.	
	2.	If the stakeholders are not collaborating and conducting meetings than there is a risk of project collapsing.	Responsive support	To some extent financial shortages, possible budget overrun.	Realistic achievable
Negligible	1.	If system lacks payment options.		Results in minor cost and schedule impact with expected value.	
	2.	Product details missing.	Easily supportable	Possible budget under run	Early achievable

3. System Architecture

3.1 System Level Architecture
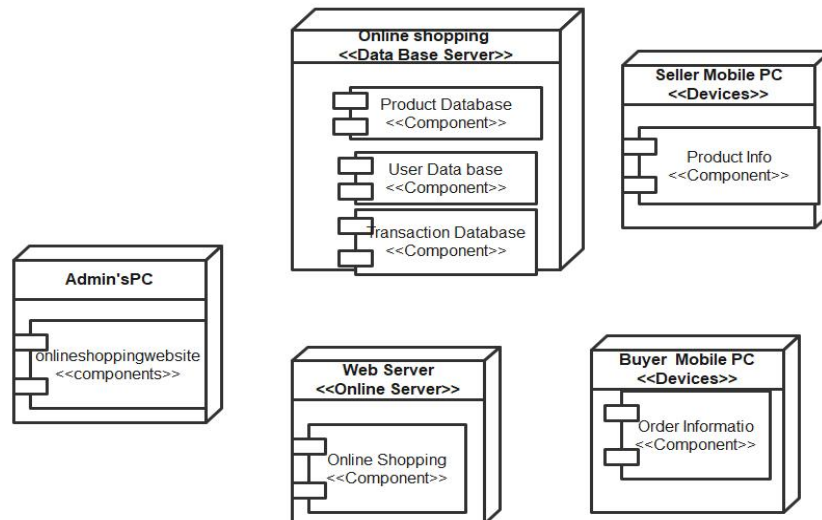
Deployment diagram

Figure 3.1

3.2 Sub-System / Component / Module Level Architecture
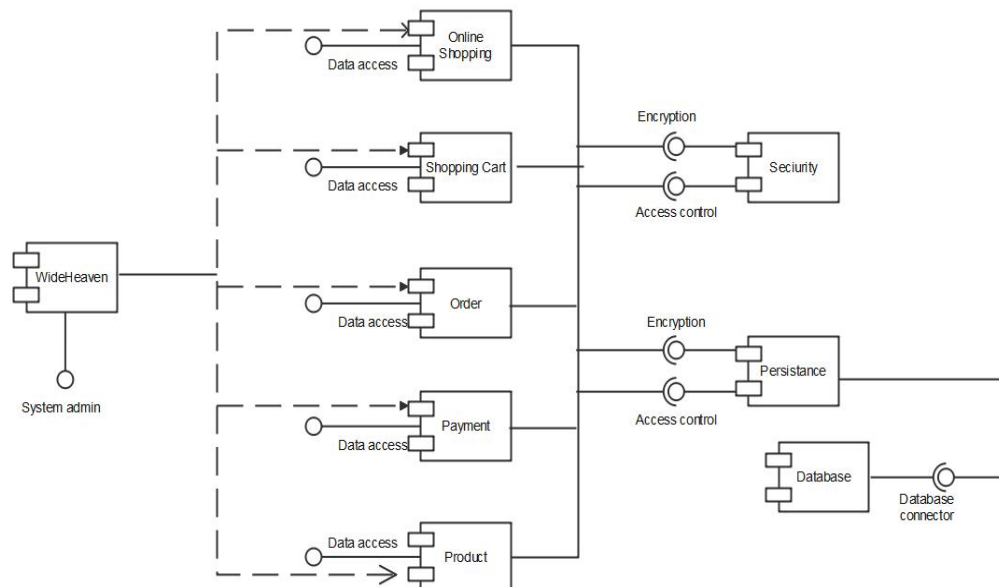
Component diagram

Figure 3.2

4. Design Strategies

In online shopping store we use iterative strategy, our team works to refine and improve our website based on feedback or new information. Changes are normal with the passage of time customer requirement change so we are using iterative strategy if in future customer wants changes.

- **Future system extension or enhancement**: Currently our website is only clothing in future we enhance our website by adding different accessories like shoes, jewelry , cosmetics, fragrance. we can add advanced features like VR base online shopping.

- **System reuse:** We can reuse different codes of pages like Sign up Page, Login Page and User Registration Page from previous project.

- **Data management (storage, distribution, persistence):** In WideHeaven the main purpose of database is store information for retrieving the product details, customer information, track transactions and further maintain the inventory. One of the biggest benefits of using a database in our website is structuring vast amount of our website data.

5. Detailed System Design

5.1 DFD (0 Level/Context Level)
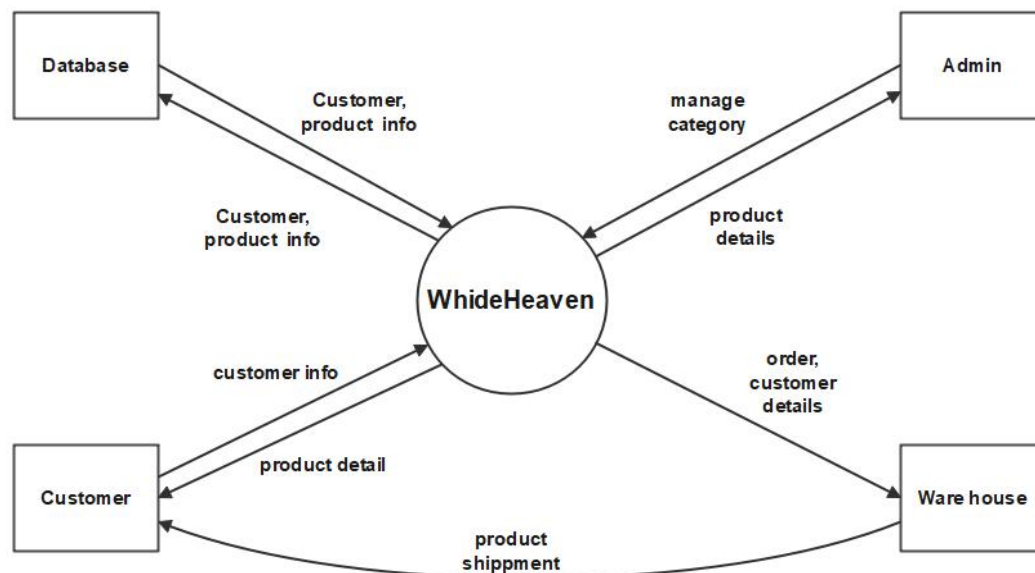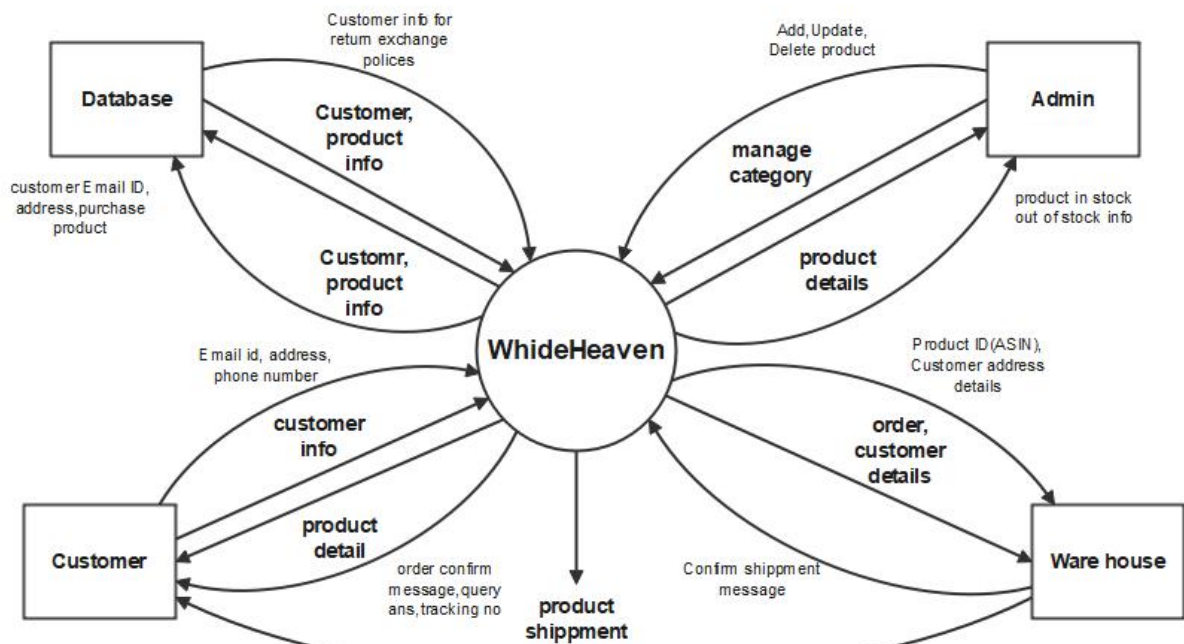

Figure 5.1

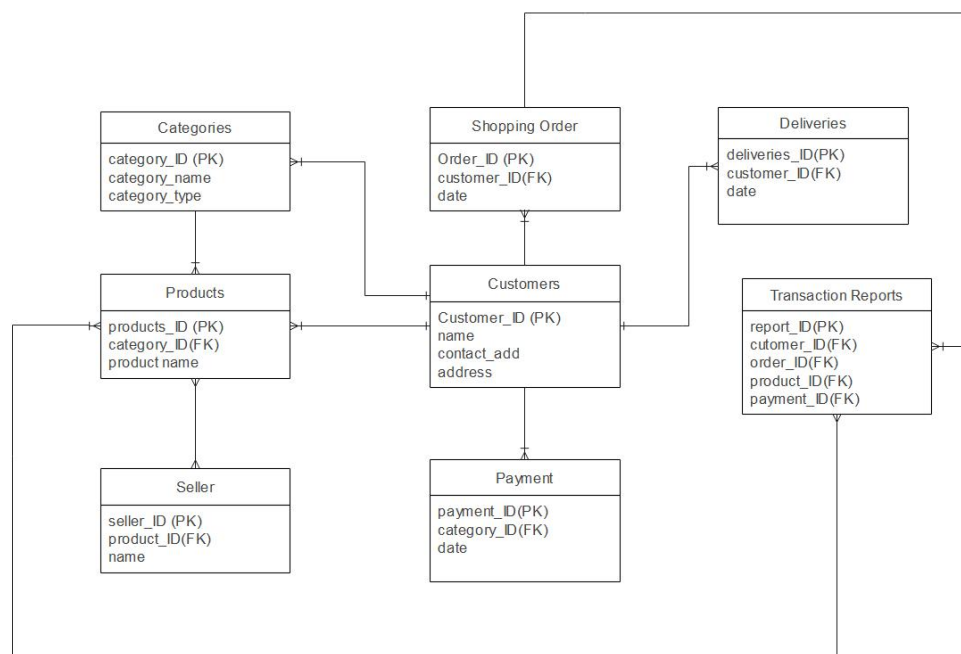## 5.2 DFD (1 Level)

Figure 5.2

5.3 ER Diagram

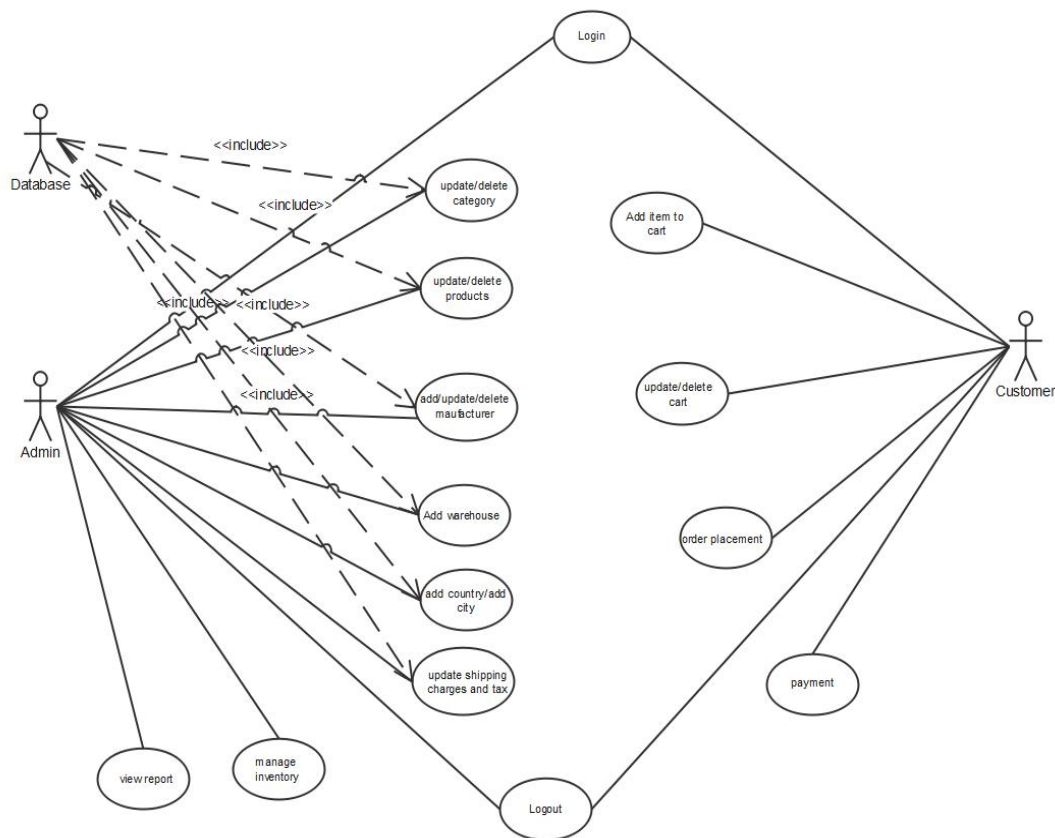

Figure 5.3

5.4 Use Case Diagram
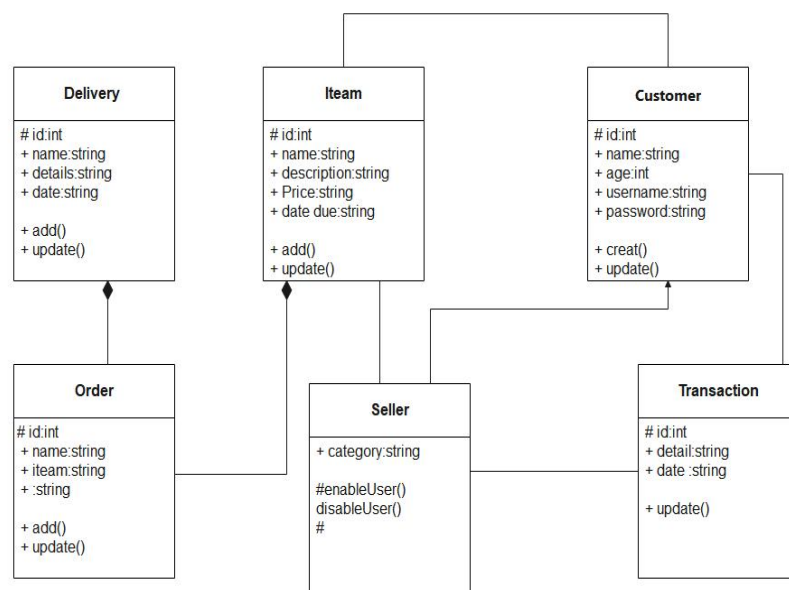

Figure 5.4

5.5 Class diagram
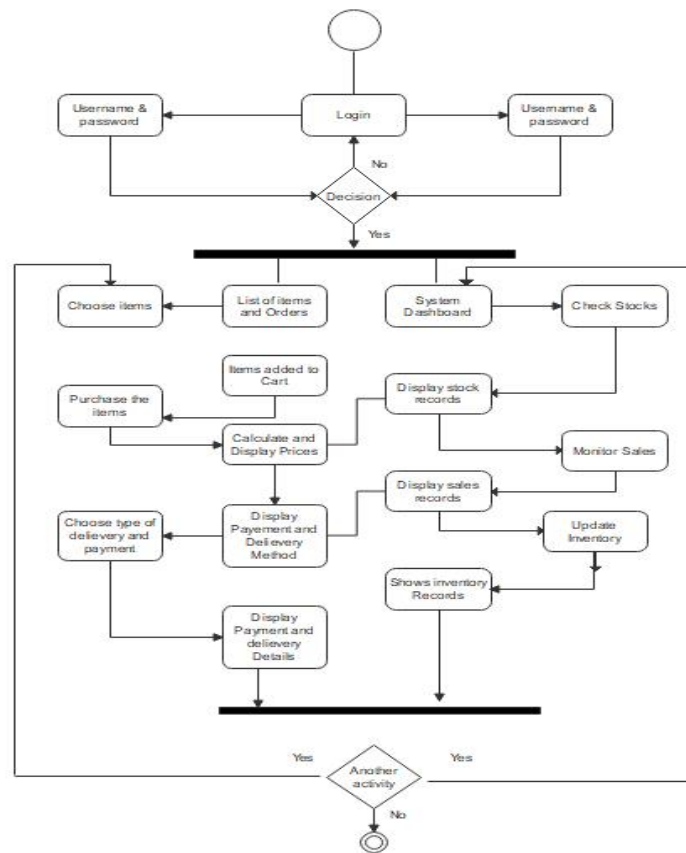

Figure 5.5

5.6 Activity diagram

Figure 5.6

5.7 Sequence diagram
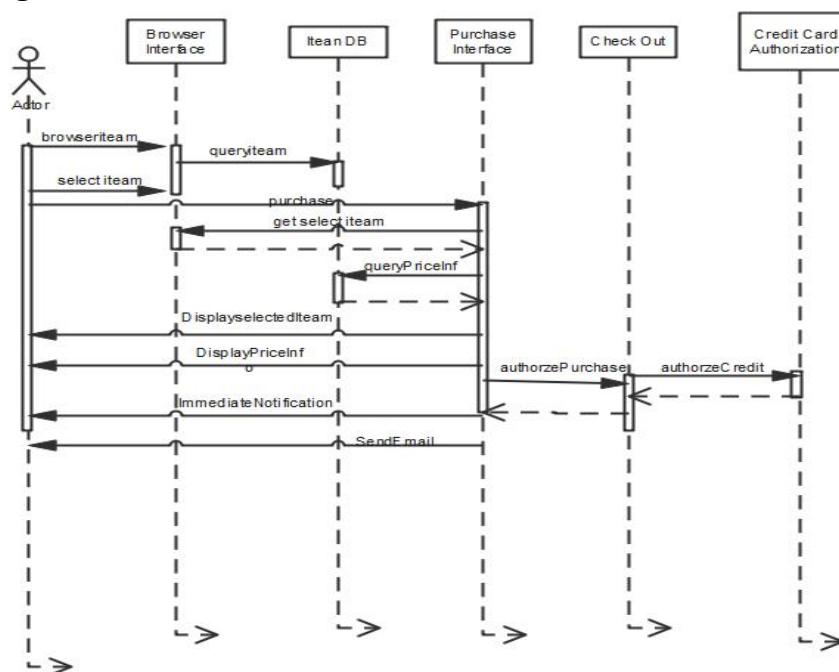
Figure 5.7

5.8 State diagram
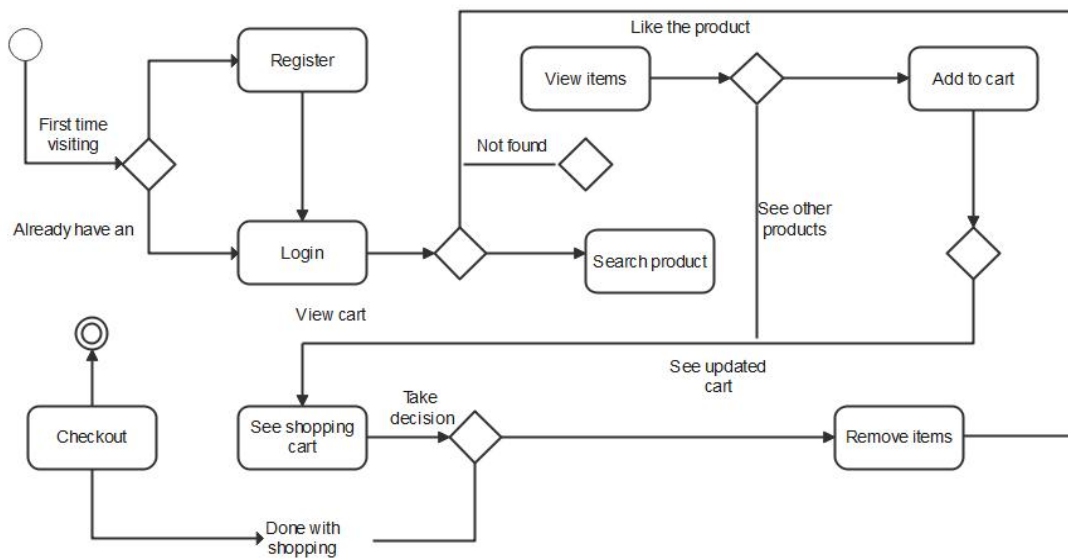
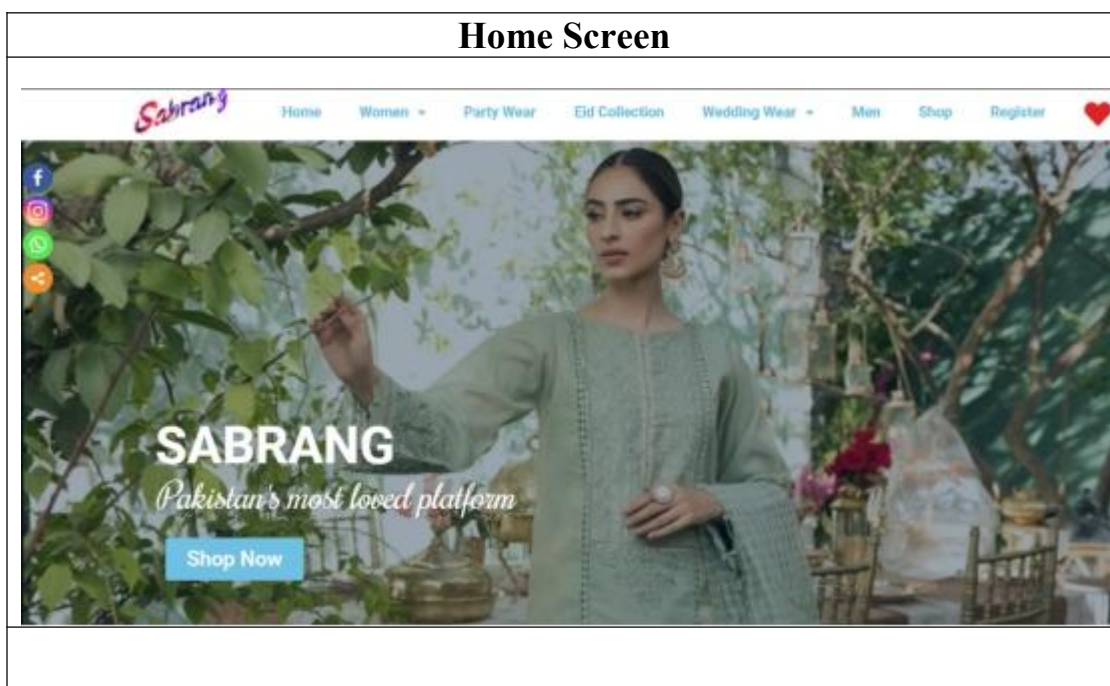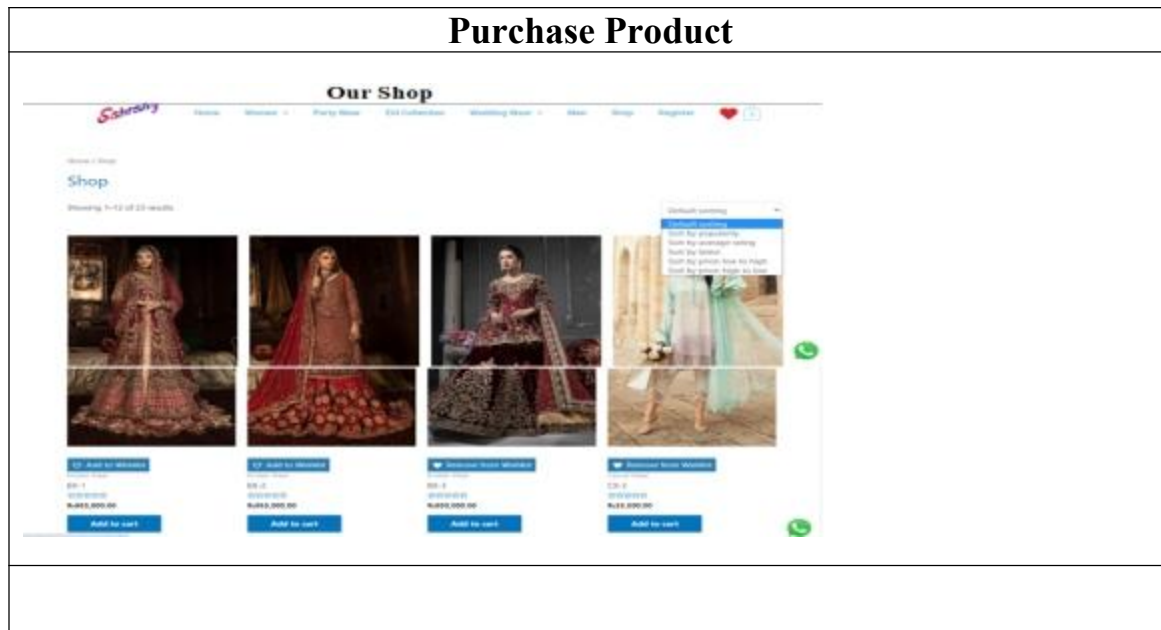Figure 5.8

5.9 Detailed GUI

Purchase Product

6. References

Ref. No.	Document Title	Date of Release/ Publication	Document Source
PGBH01-2022-Proposal	Project Proposal	Oct 11, 2022	D:/Proposal(WideHeaven)
PGBH01-2022-FS	Software Requirement Specification	Nov 15, 2022	D:/SRS(WideHeaven)