Specification Document

Website Name: Private Sale Site

1. Introduction

The Private Sale Site is an e-commerce platform designed to facilitate exclusive, members-only sales of clothing items from top brands. The website serves as an intermediary between brand manufacturers and registered users, offering a secure and user-friendly environment for conducting time-limited sales at significant discounts. The platform caters to both customers, who can browse and purchase items from current and upcoming sales, and professionals, who can manage and analyze their sales events. The website aims to streamline the private sale process, providing a seamless shopping experience for users while offering brands a powerful tool to clear excess inventory efficiently.

2. Project Background

The rise of e-commerce has led to a significant increase in demand for specialized online shopping platforms that cater to specific market needs. With more consumers seeking exclusive deals and discounts, private sale websites have become increasingly popular, offering brands an effective way to clear excess inventory. This project was assigned to meet the growing need for secure, user-friendly platforms that facilitate these types of sales, reflecting the current trends in the e-commerce industry.

3. Team Members

Sowrya Teja CHUNDURU - 63285
Anusha EAGALA - 63286
Punitha KARMEGAM - 63293
Meghana SIVAJIRAO -63308

Individual Work Responsibilities:

Date	Facilitator	Scribe	Referrent
07/08 - 10/08	Meghana SIVAJIRAO	Anusha EAGALA	Sowrya Teja CHUNDURU
11/08 - 14/08	Punitha KARMEGAM	Sowrya Teja CHUNDURU	Meghana SIVAJIRAO
15/08 - 18/08	Anusha EAGALA	Punitha KARMEGAM	Sowrya Teja CHUNDURU
19/08 - 21/08	Sowrya Teja CHUNDURU	Meghana SIVAJIRAO	Anusha EAGALA

4. Detailed Requirements

The Private Sale Site is designed to meet the following detailed requirements:

1. User Registration and Authentication

Customer Registration: Customers must be able to register with their personal information, including first name, last name, date of birth, postal address, email address, and password.

Professional Registration: Professionals must also register, providing details similar to customers, with the addition of selecting their role as a "Professional." Authentication: Both customers and professionals must be able to log in using their email and password. Password recovery options should be available.

2. Sales Management

Add New Sale: Professionals must be able to create new sales by specifying a sale title, description, start date, and end date.

Manage Sales: Professionals should have the ability to view, edit, or delete existing sales. The system must enforce that sales cannot be edited after they have started unless updating stock or minor details.

Item Management: Professionals must be able to add items to sales, including details such as brand, category, sub-category, size, color, description, photo, price, and stock quantity.

3. Sales Viewing

Current Sales: Customers must be able to view ongoing sales, including a detailed list of items available, with filters for brand, category, size, and color.

Upcoming Sales: Customers should be able to preview sales that are scheduled to start soon.

4. Account Management
Edit Account Details: Both customers and professionals must have the option to update their personal information, including their name, address, email, and password.
User Preferences: Customers should be able to set preferences for receiving alerts about specific brands or categories.

5. Notifications and Alerts
Sale Alerts: The system must notify customers of new sales or items matching their preferences via email or in-site notifications.
Promotional Offers: Professionals should be able to send promotional alerts to customers who have shown interest in similar products or brands.

6. Analytics
Professional Analytics: Professionals must have access to analytics tools that track the performance of their sales. Metrics should include the number of items sold, total page visitors, revenue generated, and other relevant statistics.

7. Security
Data Protection: The website must ensure that all user data is securely stored and handled in compliance with relevant data protection regulations.
Secure Transactions: All transactions, including user registration, login, and payment processes, must be securely encrypted.

8. User Interface
Responsive Design: The website must be accessible and fully functional across all devices, including desktops, tablets, and smartphones.
**User-Friendly Navigation:** The interface should be intuitive, making it easy for users to navigate between different sections of the site.

5. Use Case Diagram

This use case diagram represents the interactions between two primary actors—**Customer** and **Professional**—with a system that manages various functionalities. The Customer can log in or register, browse available sales, purchase items, check notifications, manage account settings, and log out. The Professional has additional capabilities, such as managing sales, viewing sales analytics, creating alerts, managing account settings, and logging out. All these actions are encapsulated within the system boundary, which indicates that they are performed within the system environment. Implicitly, the system handles database interactions, such as saving data or triggering notifications, whenever these use cases are executed. The diagram provides a clear overview of how different users interact with the system and what functionalities are available to them.

6. Activity Diagram
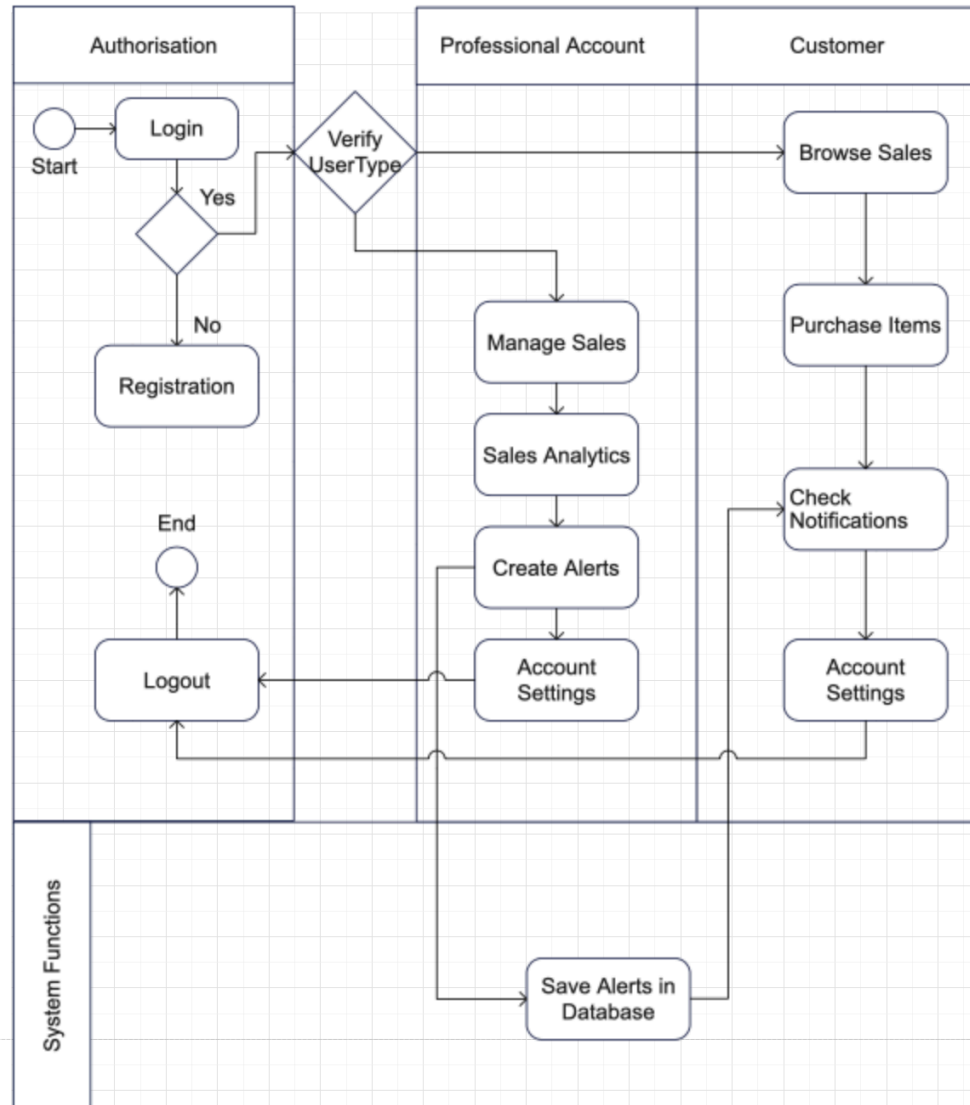
This activity diagram illustrates the system's flow, starting with a login process where user type is verified. If successful, Professional users can manage sales, view analytics, create alerts, and access account settings, while Customer users can browse sales, purchase items, and check notifications. Both user types share a common logout process, and alerts created by Professionals are saved in the database. The diagram also includes a registration path if login fails, ensuring all user interactions are efficiently handled within the system.

7. Technical Architecture

System Architecture:
Client-Side (Frontend): Developed with HTML, CSS, and JavaScript, ensuring responsive and interactive user experiences across all devices, communicating with the server via AJAX.
Server-Side (Backend): Built using PHP on a XAMPP server, which handles application logic, processes requests, and serves web content efficiently.
Database Layer: Utilizes MySQL for data storage and management, with MySQL Workbench for design and PHPMyAdmin for administration, ensuring robust data handling.

Programming Languages and Technologies:
HTML/CSS/JavaScript: Provides the structure, styling, and interactivity for the website, ensuring a modern and responsive design.
PHP: Powers the server-side logic, handling everything from user authentication to sales management.
MySQL: Stores all persistent data, managed through MySQL Workbench and PHPMyAdmin for effective database design and maintenance.
XAMPP: Serves as the development environment, combining Apache, MySQL, and PHP to create a cohesive and efficient platform for building and running the website.

8. Data Structures

The private_site_sale database is composed of several relational tables, each serving a specific function in managing the data for the Private Sale Site:

Users Table: Manages user data, including personal information and user type (customer or professional).
Brands, Categories, and Subcategories Tables: Organize the items sold on the site into brands, categories, and subcategories.
Sales Table: Stores details about each sale, including its title, description, dates, and associated professional user.
Items Table: Contains information about the items in each sale, including their brand, category, size, color, description, and stock quantity.
**Orders and Order Items Tables:** Track customer orders, linking users to specific sales and the items they purchased.
Sale Analytics Table: Captures analytical data about sales performance, such as the number of items sold, visitors, and revenue generated.

Alerts Table: Manages notifications and alerts related to brands and sales.
Page Visits Table: Records the number of visits to specific pages on the site, helping track user engagement.
User Preferences Table: Stores customer preferences for specific brands and categories, used to tailor notifications and recommendations.
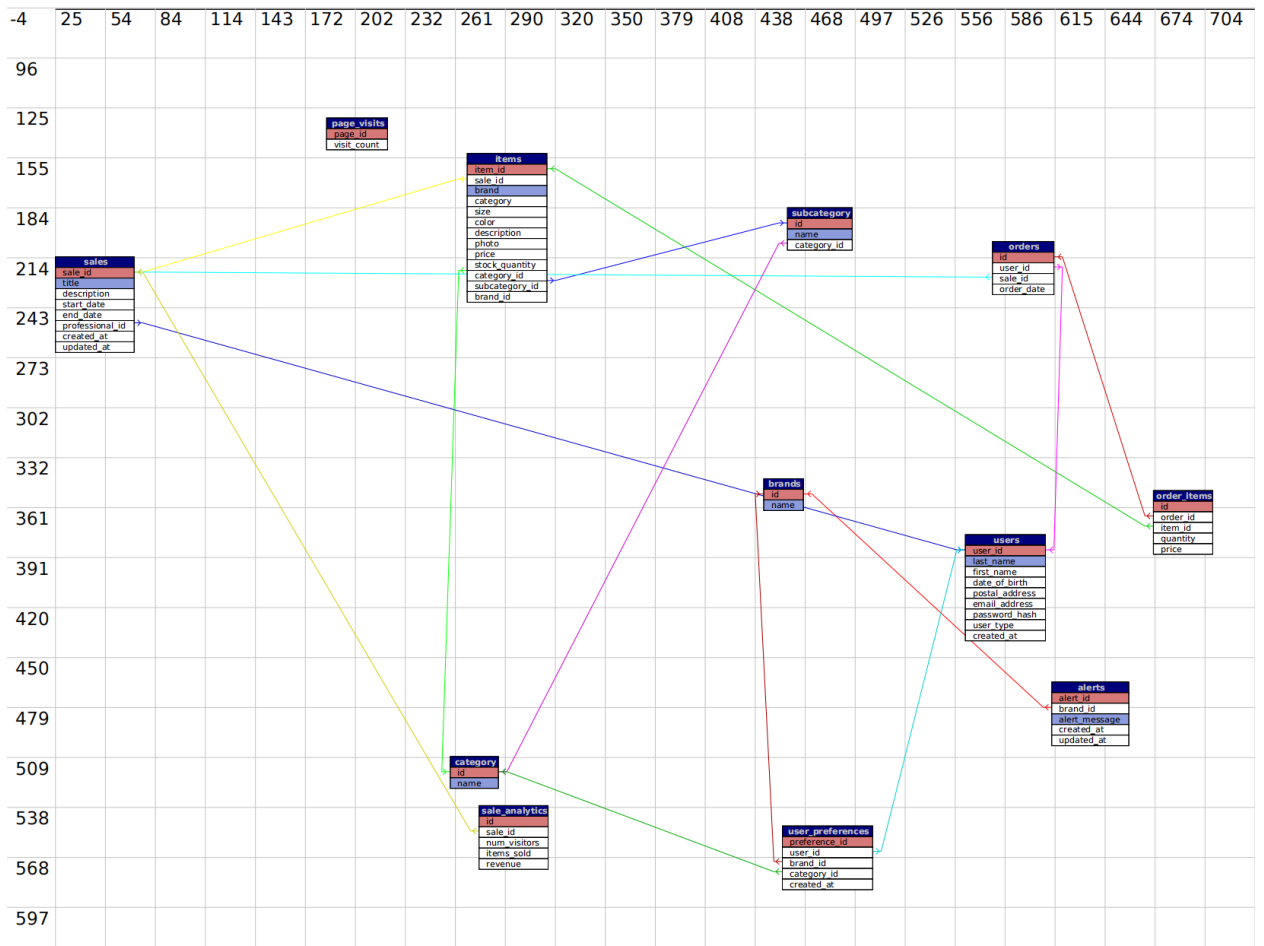
9. User Interface

The Private Sale Site user interface (UI) is designed to be intuitive, responsive, and user-friendly, ensuring a seamless experience for both customers and professionals.

Main Page: The entry point for all users, featuring options to log in or register. It provides a clear introduction to the site and its purpose.

Registration Page: A straightforward form for new users to create an account, collecting essential information such as name, email, password, and user type (customer or professional).

Login Page: Allows existing users to securely access their accounts by entering their email and password.

Customer Dashboard: After logging in, customers are greeted with a dashboard displaying current and upcoming sales, account settings, and notifications. It provides easy navigation to view and manage their shopping activities.

Professional Dashboard: Professionals access a dashboard that allows them to manage their sales, add new items, view analytics, and update account settings. The layout is tailored to their specific needs, focusing on sales management and performance tracking.

Add New Sale Page: A simple form for professionals to create new sales by entering details like the sale title, description, and dates. This page is optimized for quick and easy sale creation.

Add New Items Page: Professionals can add items to their sales by filling out fields for item details such as brand, category, size, color, and price. The form is designed to ensure all necessary information is captured.

View Existing Sales Page: Provides professionals with an overview of their sales, including options to edit or delete sales and view items within each sale. It offers clear and organized access to manage ongoing and upcoming sales.

Account Settings Page: Available to both customers and professionals, this page allows users to update their personal information, change their password, and manage other account-related settings.

10. Requirements

Performance Requirements
The website is designed to load quickly, function smoothly across various devices, and handle multiple users simultaneously without significant slowdowns. The database has been optimized to ensure efficient access to data, particularly during periods of high activity

Testing Requirements

We have conducted thorough testing to ensure all features work as expected, including user registration, login, and sales management. The site has been tested on multiple browsers and devices to ensure consistent performance.

11. Delivery and Delivery Standards

As part of this project, we have provided a comprehensive user manual that details how to navigate and use the Private Sale Site effectively. This manual includes step-by-step instructions for both customers and professionals, covering everything from account registration to sales management. Additionally, we have delivered a complete and functional website, with all required features implemented according to the project specifications. The deliverables also include the database schema, source code, and relevant documentation necessary for future maintenance and updates.

12. Progress and Schedule - Gantt Chart

II.2302 – Web Development Project: Private Sale Site

Project start date: 05/08/24

Project End date: 25/08/24

Milestone description	Assigned to	Progress	Start	Days
Task 1	Meghana Sivaji Rao			
Home Page		100%	07/08/24	15
Registration Page		100%	07/08/24	15
Login Page		100%	07/08/24	15
Task 2	Anusha Eagala			
Dashboard Page		100%	07/08/24	15
Current Sales Page		100%	07/08/24	15
Upcoming Sales Page		100%	07/08/24	15
Task 3	Sowrya Teja Chunduru			
Database Creation		100%	05/08/24	1
Professional Page		100%	07/08/24	15
Add New Sale Page		100%	07/08/24	15
Edit/Delete Sale Page		100%	07/08/24	15
Task 4	Punitha Karmegam			
Account Settings Page		100%	07/08/24	15
Analytical Queries Page		100%	07/08/24	15
Task 5 PPT		100%	21/08/24	3
Final Discussion and Submission		100%	25/08/24	1