

Point of Sale

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project titled “**Poin of Sale**”, submitted by Abu Darda Shamaun, ID No:191-15-2620 and Md.Waliul Islam, ID No:191-15-2621 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 04 February 2023.

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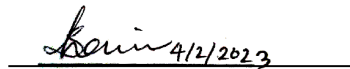


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We hereby declare that, this project has been done by us under the supervision of **Nadira Anjum Nipa, Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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Abstract

“Point of Sale” is the topic of this project. Today, there are a lot of Super Stores and Independent Companies who work together online and use a lot of data innovation. Organizations and individual businesses are transitioning to paperless business practices. Point of sale becomes extremely important for sound and efficient administration. Although there are many different Point of Sale Systems available online, our project is entirely focused on the perspectives of Bangladeshi customers. We made an effort to create such a Point of Sale for the development of this system. The need for such a system was gathered from several Super Stores, Small Business Organizations, and private shops. The proposed system's design was carried out in accordance with user requirements. Tools and technologies from open source are used to implement the system. The system passed tests for a variety of tasks and was deemed adequate. The system will eventually include integration for users of smart phones.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Point of Sale is an internet business endeavor run by executives that benefits sellers and administrators. Only enrolled users are permitted to log in, and new users are not permitted to register for the application. It is suggested that this be a web application.

1.2 Objectives

The primary goal of web-based point of sale systems is to give shop managers and sellers an excellent dashboard for tracking sales (s). Every registered user has access to managing their store. It operates automatically. The primary goal of this system is to offer organized and thorough control over the business, reports, summery, etc

Our system's objectives are:

- To offer an event Point of Sale dashboard that is perfect.
- The admin/seller will have complete authority over the sale and management of the other portion.
- The system administrator has complete control.
- Reporting
- Online Registration & Payment
- Seller Add
- Manage accounts and transactions.

1.2 Motivation

In this world, numerous technologies have been created. The most effective of these is the computer. For writing documents in the past, people utilized pens and paper.

However, modern automated systems are being created to address this problem.

Observing Point of Sale at Shwapno, Prince the superstore, has motivated us. The application is quite sturdy and wide-ranging. Therefore, we decided to create this cost-effective application.

Tomorrow will become today, and today will become yesterday. We believe that the small- or medium-sized enterprise organization will benefit from our application. The project effort focuses on creating, implementing, and hosting the Point of Sale for commercial use. The system has been created using MySQL as the database with HTML, CSS, PHP, jQuery, and other technologies.

1.3 Expected Outcome

Our project's primary goal is to give an administrator a one-stop dashboard for managing, controlling, and administering the accounts of a store or corporation. But the seller will have options as well; he can send a damaged product to the head office and view a branch-by-branch stock report, for example. The vendor can provide a sales report or an overall report. The system will be accessible from anywhere in the world over the internet and will be able to run on any platform with a web browser. The system will also be secure because it will efficiently safeguard the privacy and confidentiality of data.

1.4 Report Layout

As a whole, we are aware that reasonable knowledge can effectively contrast with a theory. In pursuit of our graduation degree, we learn a great deal of stuff. This project extends our ability to use and share our ideas. By undertaking this project, we can more effectively put our skills to use. Our task's presentation, destinations, inspiration, anticipated outcome, and report format are all included in the first section. The task presentation, related works, close examinations, the scope of the problem, and our project's challenges are all included in the second section. The Use Case Demonstrating and Portraying, Consistent Information Display, and Plan Necessities are covered in our third section, which is about Prerequisite Determination. The fourth section shows how our entire website appears and is related to Plan Specifics such Frontend Configuration, Back-end Structure, and Connection. Prerequisites for usage include structure and UX.

Usage and testing is the topic of our fifth section. This includes Front-end Plan, Connections, Testing Execution, Test Results, and Reports as well as Database Usage. Our final component includes the completion of the entire work. This report includes information about our web framework, including its purpose, setup, and application.

CHAPTER 2

BACKGROUND

2.1 Introduction

The use of business management at the point of sale includes creating sellers, adding products, generating sales reports and summaries, and managing tasks linked to accounts, among other things.

Identifying the target market, researching the nuances of the brand, and other tasks are all part of point of sale.

before the event is launched, the concept is developed, the logistics are planned, and the technological components are coordinated. The event sector is now heavily influenced by post-event analysis and assuring a return on investment. The management can no longer be ad hoc due to the recent global expansion of events as an industry. Events like the Asian Games have a significant effect on their local communities and, in some cases, the entire nation.

Events of various sizes, including the Olympics and smaller ones, are now part of the industry meeting over breakfast with ten business folks. Many businesses, charities, and interest groups host large-scale events to promote their brands, forge commercial ties, generate money, or just celebrate.

2.2. Organization Events Scenario

Various national and international events were organized by numerous organizations. An organization created numerous departments, each with their own timetable and event calendar. Due to improper communication, there is a communication gap between the departments .As a result, there is an accident when scheduling the event. Therefore, it is impossible for all of the events to take place.

2.3 Sales Collaboration

Points of Sale automate transactions and keep track of crucial deals information to streamline retail processes. An electronic cash register and software to manage data gathered from daily purchases are essential frameworks. Retailers can increase utility by implementing a system of data-catch devices, such as card readers and standardized tag scanners. Retailers can watch estimating accuracy, stock fluctuations, net profits, and deal designs depending on the product highlights. Retailers might identify anomalies in pricing or revenue by utilizing coordinated innovation to follow information that can impede agreements or cause beneficial hardship. Retailers may prevent client administration concerns like out-of-stock deals by using POS frameworks that monitor stock and purchasing trends. They can also better target their advertising and acquisition strategies to the behavior of their customers.

2.4 Related Works

Online Shopping Management System, Sales automation Software, Square point of sale ,G2 deals, Light speed Retail, Shopify POS, Heartland Retail ,QuickBooks of POS etc.

2.4.1: Syntech solutions Electronic Store Point-of-Sale System

With the help of this POS, businesses can manage their business operations and provide a distinctive shopping experience for their customers. The client ling solution offered by Computer Shop POS indicates that repeat consumers are drawn in.

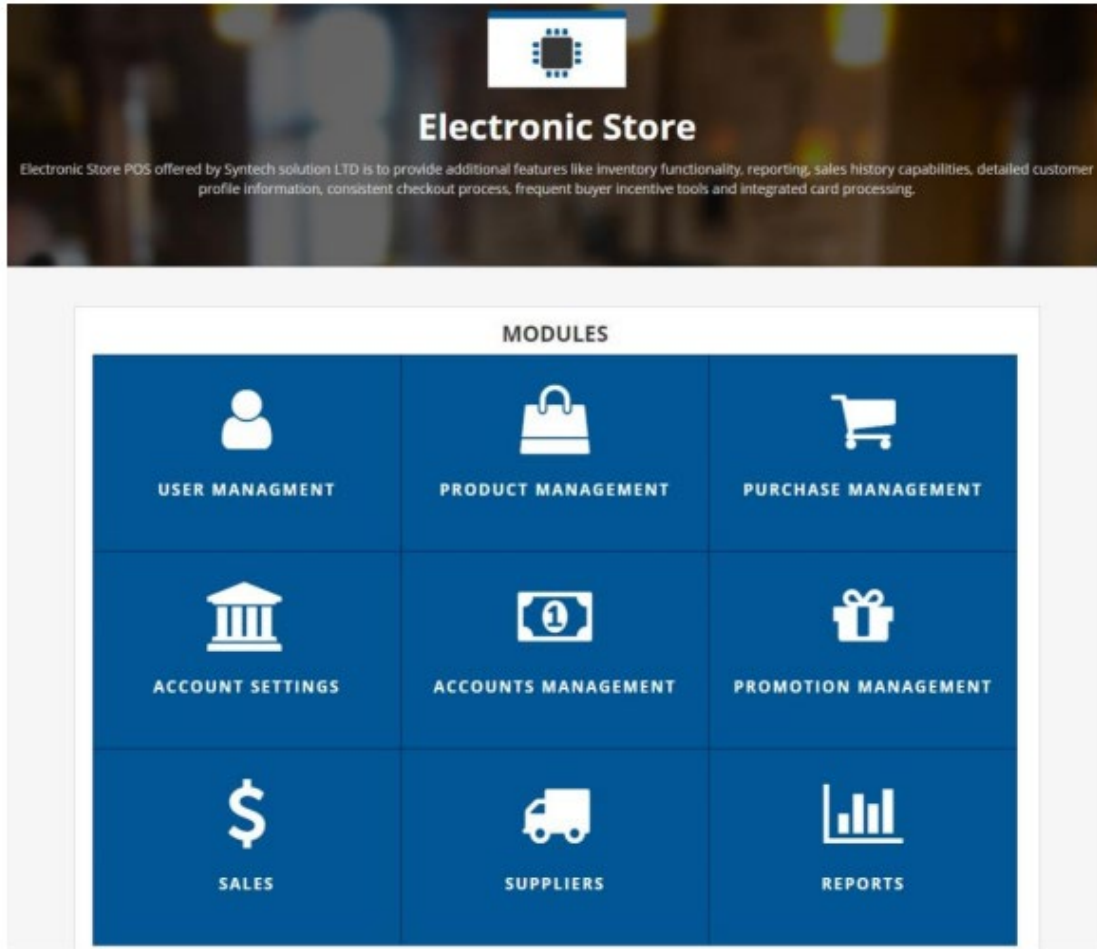


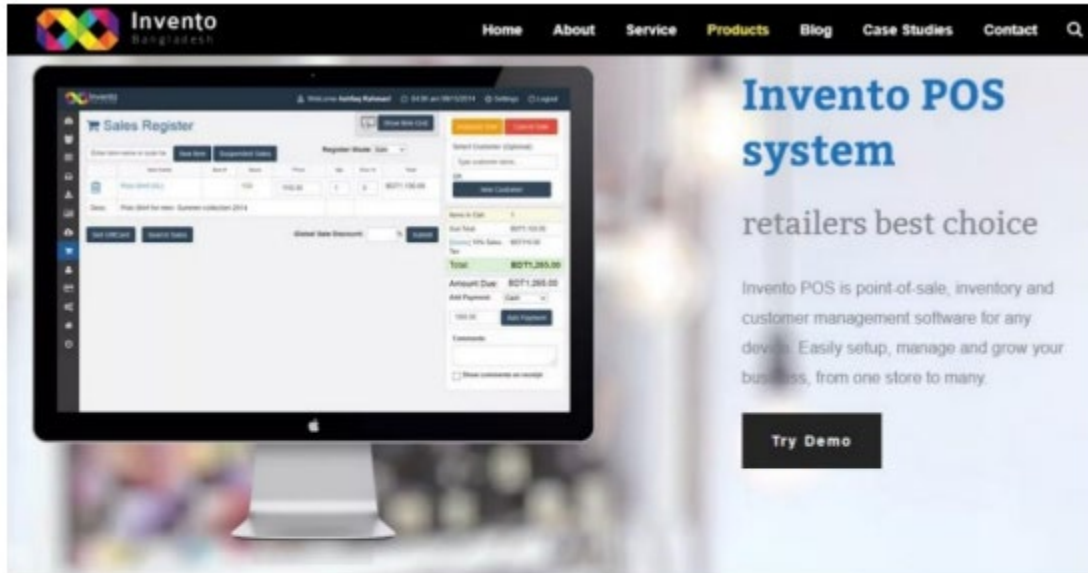
Figure: 2.1 Syntech Solutions Ltd site

Syntech products POS for electronic stores It can be purchased as a standalone system that interfaces with your current website and is a monthly subscription-based solution. Gold, Silver, and Basic are the available subscription plans. This system is capable of handling customer reporting, engagement with clients, tracking vendor-specific sales, and delivery management.

2.4.2 Invento's POS system

Leading IT and digital marketing firm in Bangladesh is Invento's Bangladesh. For retail stores, big-box stores, and restaurants, Invento's Point of Sale is an easy to use Point of Sale system.

It features nearly every office feature, such as a stock administration system, a deals and buys board, and a client and worker executive system that can automate an association.



What is Invento POS ?

Invento POS is a easy to use point of sales system for retail store, super shop and restaurants. You can use it in any device such as your phone , laptop or desktop computer. By connecting POS printer, bar-code scanner and cash drawer you can make it a full functional Point Of Sales system. It has almost all the facility including inventory management system, sales and purchase management system, customer and employee management system which can automate your organization



Figure: 2.2 invento Bangladesh web site

2.5 Comparative Studies

To begin with, Syntech Solutions offers two point-of-sale systems: the Electronic Store POS System and the Invento POS System. They also offer application modules for installing these systems in computers, but users must also have other prerequisites and systems installed. Users of Point of Sale can access it from anywhere using a browser because it is not affected by these issues. Second, other websites offer the chance to manage, control, and handle an account for a store or corporation. But the seller will have options as well; he can send a damaged product to the head office and view a branch-by-

branch stock report, for example. Sellers can produce sales reports or summary reports as well. Thus, Collision regarding a product-related concern does not exist. It is a system that is run by one person for their own store and vendors.

2.6 Scope of the Problems

- 1) Multiple reports or summaries can be created for each each shop sale. The centralized software can therefore be demoralizing.
- 2) As the system is designed for a single business, initial allocation to several companies is not feasible.

2.7 Challenges

- **Multiple shop management:**

It will be quite difficult to manage every shop that a company or organization has at once equally because there may be a sales plan, an annual report, and many other tasks.

Now, each of these stores may offer a variety of goods at various places. The loss of shop data records is unaffordable to the organizations. Now, this record keeping begins at individual stores and costs money that the head office bears. The ability of the point-of-sale system to handle everything politely could be seen as a major hurdle.

- **Allocation of Resources:**

Now that Head Office has close to 5–10 shops, it means that resources must be distributed in accordance with the product capability. It is difficult for the POS to focus on customer happiness while using all resources effectively. Managing each individual store for all business-related goals is crucial when resources are being allocated.

CHAPTER 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 Business Process Model

Our strategy will involve a monthly or yearly permit-based fee. On request, we will also grant custom licenses. The two main licensing types will be "Silver" and "Gold." There will be an unusual discount on "Basic" licenses, which will only be given to the extremely little shop, and according to confirmation, a new company.

3.2 Use Case Model

A use-case model is a representation of how unusual clients work with the system to resolve a problem. As a result, it illustrates the goals of the clients, the relationships between the clients and the framework, and the actions the framework must take to achieve these goals. A use-case display is made up of different model parts. Use cases, on-screen characters, and the links between them are the three model elements that are most crucial. To enhance correspondences, a subset of the model is graphically delineated using a use-case outline. A given model will typically be associated with a number of use-case graphs, each of which shows a subset of the model components that are crucial for a particular purpose.

The same model component may appear in multiple use-case graphs, but each one must be stable.

If tools are used to maintain the utilization case display, this consistency requirement is automated such that any changes to the model component (such as altering the name) will be immediately taken into account across all utilization case graphs that represent that component.

The bundles used to organize the use case model can be used to separate examination, interchanges, route, improvement, support, and arranging. The substance of the usage case show, which is largely literary in nature, is captured in the utilization case decisions that are associated with each component of the utilization case show. These conclusions illustrate the usage case's series of events.

The use case demonstration serves as a unifying thread throughout framework development. It serves as the crucial component of the framework's practical requirements, the impetus for the inquiry and the structure, and a means of emphasizing certain points. Arranging, as the foundation for experiments to be described, and as the justification for client documentation.

System Use Case:

The following list of use cases pertain to the system. The System use case is depicted in Figure 3.1.

By logging in, the admin can perform the tasks of master setup, configuration, manage accounts, and report generation. Real-time updates for each individual seller from each shop are available.

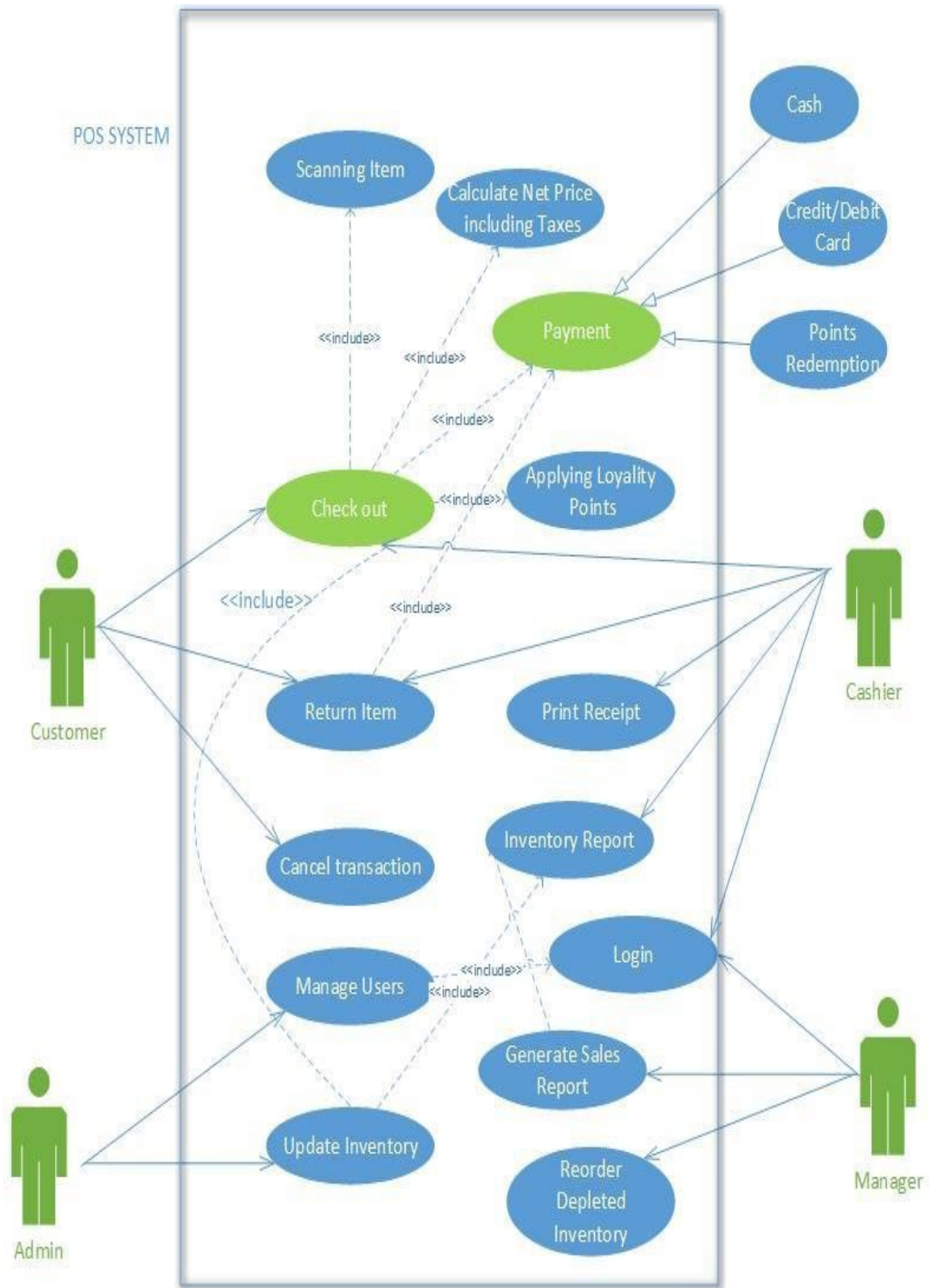


Figure: 3.1 System Use Case

Use Case of LOG IN for Admin:

When admin want to login into the system first verify the password. If password is correct then user can login successfully or if fail to login then display show login error.

Figure: 3.2 Log in for manage POS system or Sell

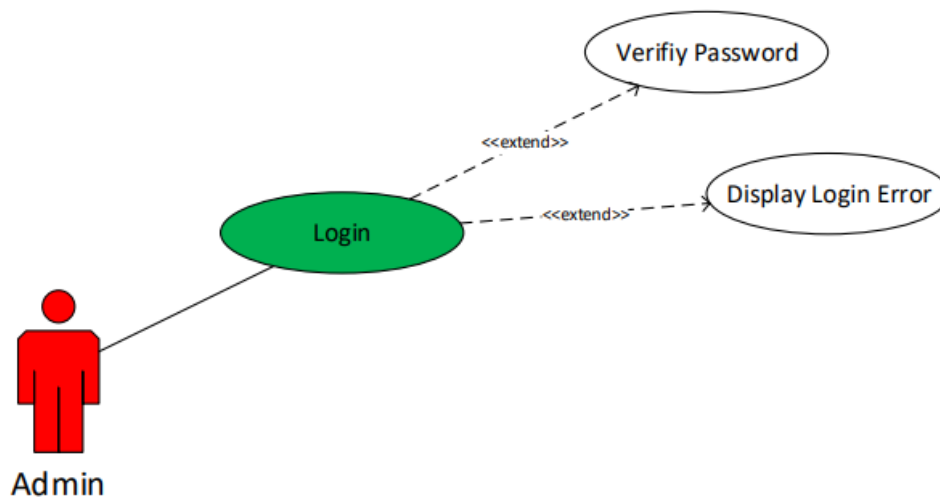


Figure: 3.2 Log in for manage POS system or Sell

Use Case Details:

Use case name : Login, use case name (For Manage POS System)

Prerequisite : None

Player : Admin

First Step : 1. Type Your Login ID
2. Type in a Password
3. select the "Login" link.

Excellent route: If your login ID or password is invalid, go back to step 1 or 2.

Use case Branch Create and Company Create:

The registered Admin can create a Branch/Company after logging in. Describe the Create Company/Branch use case using Figure 3.3. The user must verify the company name or current branch. When a schedule is available, the user books it with a location and submits it for approval. They can then discuss the event after that.

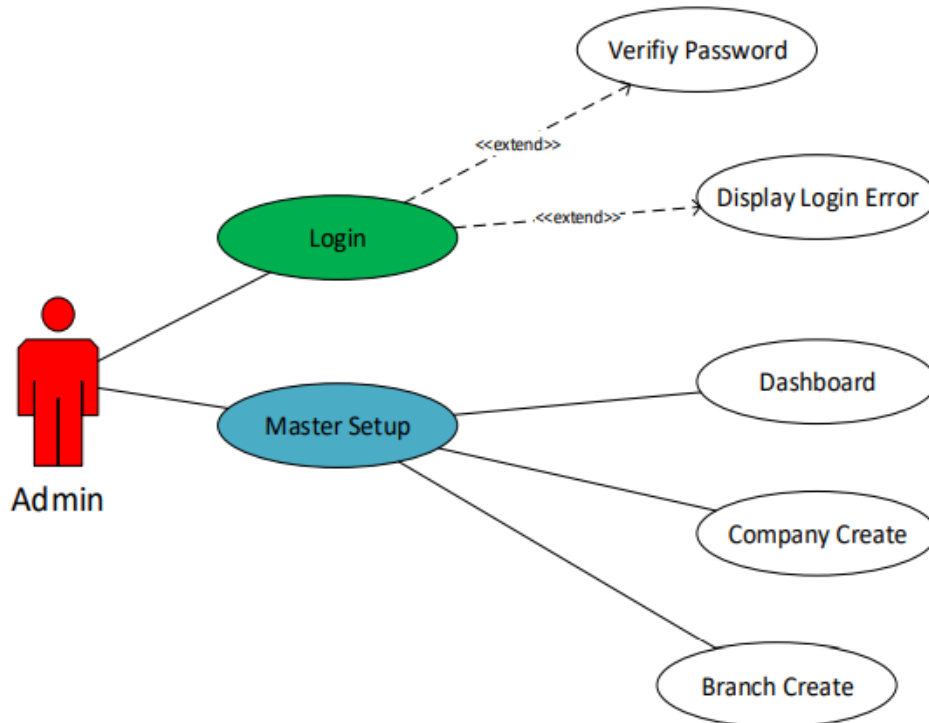


Figure: 3.3 Company Create and Branch Create

Use Case Details:

Case name to use :Make an event and a business. Develop a precondition Register

Actor : Admin

Primary Route :1. Business Name
2. Business ID
3. E-mail

Excellent route: 2.1: The business is already established; return to Step 1

Use case Local Purchase:

The registered Admin can enter Local Purchase into the system after logging in. The use case for local purchases is described in Figure 3.4. After entering the necessary information, the user must double-check.

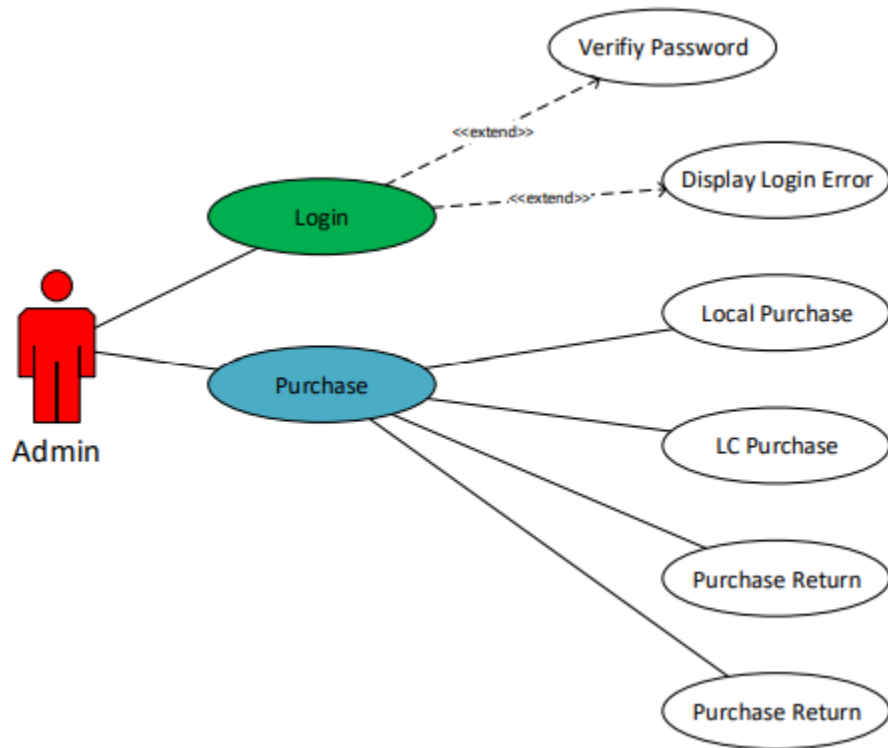


Figure: 3.4 Local purchase Use Case

Use Case Details:

Case in point : Local buy
Precondition : Admin Log In
Actor : Date, Supplier Name, Supplier Invoice Number, Unit Type, Group, Brand, and Product Description are the primary paths. Sales Cost
Excellent route: Back to Step 1 in 2.1: Duplicate Invoice Number

Use case Branch Stock In:

The registered Admin can move stock to the branches after logging in. Describe the Stock Transfer using Figure 3.5. The administrator must check again after entering the necessary data.

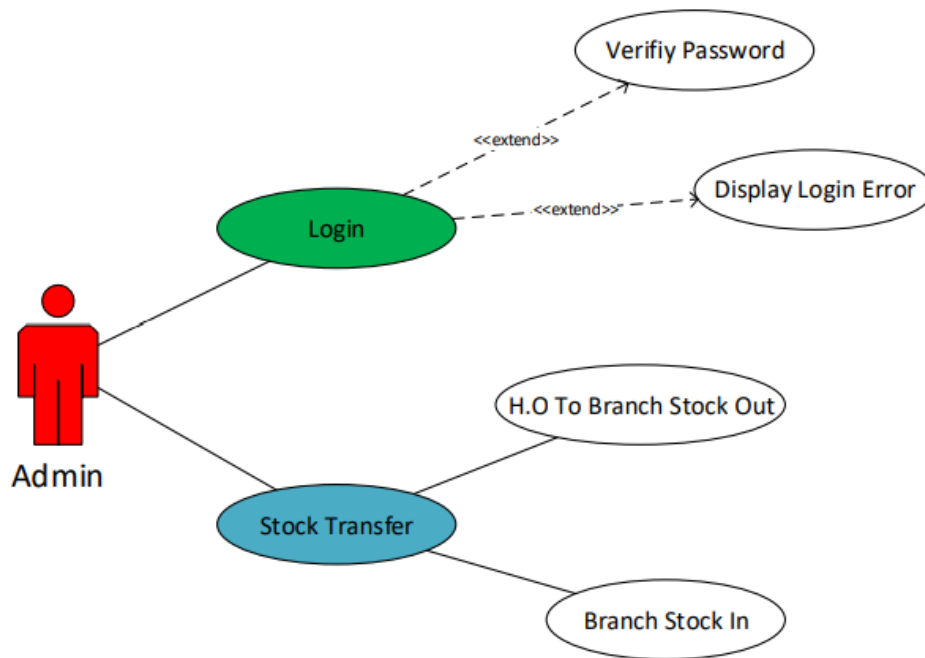


Figure: 3.5 Branch Stock in Use Case

Use Case Details:

Case name to use :regional buy

Precondition :Admin Log In

Actor :1. Branch Name, Primary Path 2. The supplier's invoice number.

2.1 Invoice for product not found; return to Step 1

3.3 Implementation Requirements

Prior to beginning any programming, decisions have to be taken regarding the technologies that should be used to develop the project. The many programming languages that could be used to create such an internet application are evaluated critically in the paragraphs that follow.

- **Back-End (HTML):**

HTML is a markup language used to create web pages and apps. The HTML archives are obtained by web browsers from a web server or from nearby storage, and they are then rendered into media pages.

The content is saved in a document with outstanding organization when a standard archive is created using a word processor like Microsoft Word/Office. It is not simply the words that are saved since the record also needs to save the textual style that was chosen, the amount of content, the words that are in bold, the words that are in italics, etc. When Word opens the archive, it will automatically display the words as well as this additional information thanks to the inventive layout. It can display the archive in exactly the same form as it did in the past. Similar to this, website pages and entrances are essentially collections of text arranged in a specific order that web browsers may display. While the arrangement of Word archives is simply referred to as "Word organization" (or "doc position"), one may readily claim that pages are created using "HTML".

- **jQuery:**

John Regis created the rapid and small JavaScript library known as jQuery in 2006.

It streamlines Ajax interactions, event handling, and HTML report navigation for Rapid Web Development. The way that many people create JavaScript has altered as a result of jQuery's combination of flexibility and extensibility. There are two ways to use jQuery: locally installed, where you may download the library and include it in your HTML code on a local system, and CDN-based, where you can properly include the library in your HTML code from a content delivery network (CDN).

- **PHP:**

PHP is an open source scripting language that preprocesses text. Object Orientation has been actualized with the introduction of PHP (Version 7.1). This was taken into account for the project because just as a necessity to expand and increase knowledge and comprehension of the language, of some prior learning of the scripting language. Despite having prior language knowledge, this was fairly limited because the most of the PHP destinations we have produced have only been basic. putting the approaching qualities into a database and using the language to create some fundamental info structures.

Based on this fundamental understanding of PHP, it was thought that, with further investigation and testing, this would be a fantastic language to employ to create the framework for online ticket sales. The majority of Web hosting companies pre-install PHP on their servers, and they also provide a MySQL database, so the program will be built in PHP and work with a MySQL database to store and retrieve data that is necessary for the program's operation.

- **MySQL:**

The most popular open source database in the world, MySQL allow the cost-effective delivery of easily, superior, and adaptable Web-based and embedded database applications. Structure question language (SQL), which is used to add, remove, and modify data in the database, may be relevant. With MySQL, you can use common SQL commands like ADD, DROP, INSERT, and UPDATE. Although it has many applications, MySQL is most frequently used on web servers. A site that makes use of MySQL may have Web pages that access database data. These pages are usually referred to as "dynamic," which simply implies that each page's content is built as the page loads from a database.

The term "database-driven sites" is frequently used to refer to websites that use dynamic Web pages. Many MySQL-powered websites that are database-driven also access data from the database using a Web scripting language like PHP. PHP code can incorporate MySQL instructions, allowing part or all of a Web page to be generated from database information. The PHP/MySQL combination has become a popular choice for database-

driven websites since both MySQL and PHP are open source (i.e., free to download and use).

- **CSS:**

The unique methods that Cascading Layout Sheets (CSS) could be used to manage the site's format and style were investigated. Similar to using tables to regulate design, there was some experimentation with using div> labels and CSS to adjust elements like layout and shading using CSS. The two techniques provide web designers a lot of control over the appearance of websites. However, table-based design does not address complete separation of the two, whereas pure CSS format allows the author to completely separate style and design from content. The website "CSS Zen Garden," created by CSS expert Eric Meyers, is a real example of how much control engineers using pure CSS format have. In addition to being jam-packed with CSS practice exercises, it also uses its landing page to highlight various CSS designers, ensuring that no two visits to the site are ever the same. Currently, using table format has one notable advantage over pure CSS design, and that is the cross-program compatibility. A site that uses tables will appear nearly identical to the majority of commonly used internet browsers due to its increasingly solid and sturdy structure.

This is due to the fact that, even though every current version of internet browsers supports CSS design and each program's development team understands the CSS measures for format somewhat better, if engineers wish to use pure CSS format they must present

"hacks" into their CSS using scripting languages, like PHP, to check which program a client is using and, on that information, choose which parts of the CSS to present. Following research into CSS, particularly its application for formatting, it was determined that it is best to use pure CSS design to govern the site since this will make extending and refreshing the site easier over time.

3.4 Logical Data Model or, ER diagram :

It is the POS's Data model that is the simplest. Data about items are kept in the item table. A customer type table can show you the type of client you have, such as a walk-in or regular client, or a client you have a rapport with like a group on. Table of payment types reveals the such as cash, credit cards, a voucher, or even a coupon; sort of installment. It can be expanded as necessary. Since everything is identifiable by a request, the Orders table is crucial because it holds remote keys for all the other tables. It is possible to successfully produce a wide range of data, including total deals, all out requests, items per person, maximum deal time, and others. Off-kilter, it isn't flawless, but it is straightforward and spreads a common POS. It is never advisable to choose complex solutions when simple solutions are effective and persuasive.

Entity Relationship Diagram - POS TRANSACTION and INVENTORY MANAGEMENT

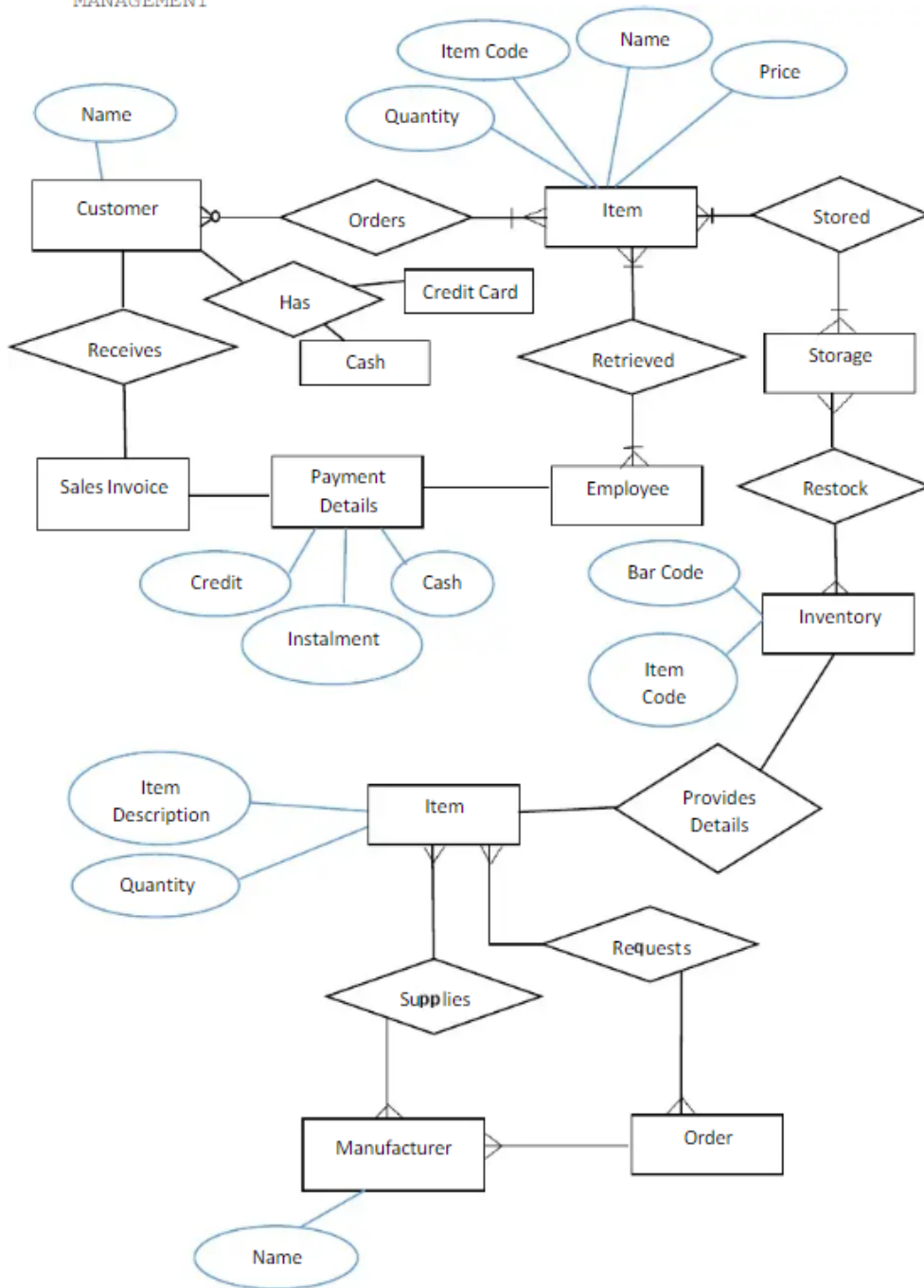


Figure: 3.6 ER-Diagram

CHAPTER 4

DESIGN SPECIFICATION

4.1 System Environment

There are two active actors in the design and development of the online point of sale. The environment of the system is shown in Figure 4.1. The seller and the admin. Through a web link, all actors can access the system. Each branch administrator only needs one login name and password to access the system.

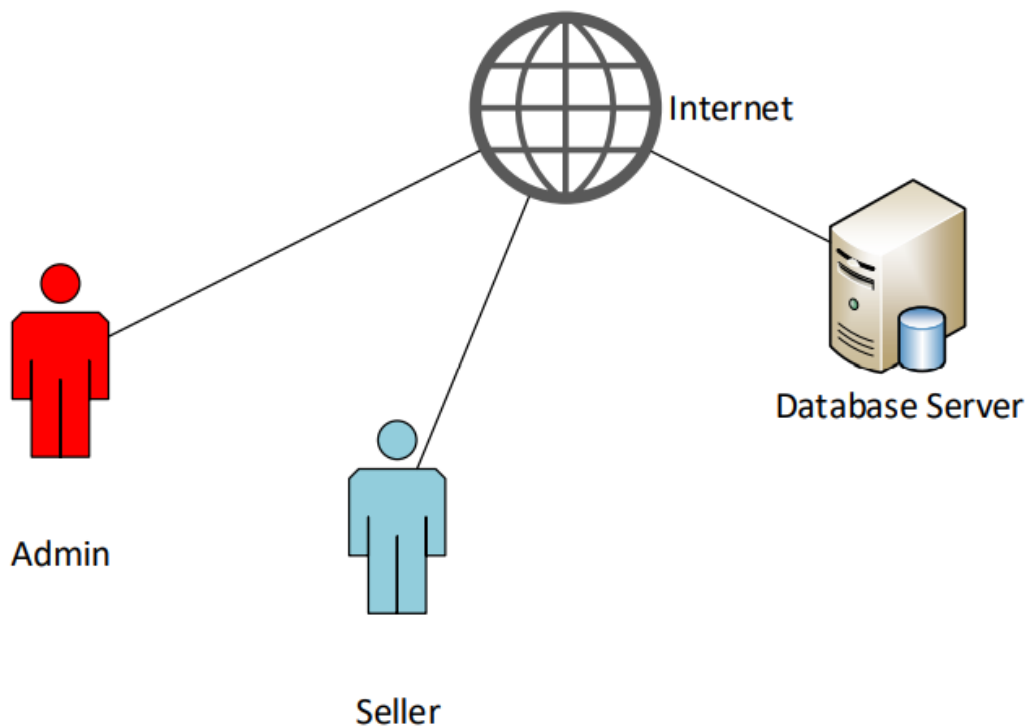
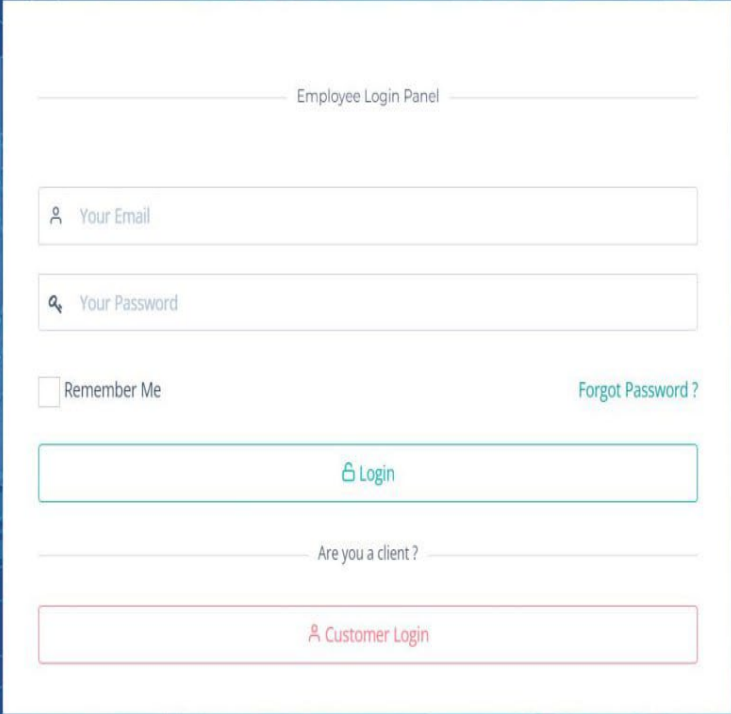


Figure: 4.1 System Environment

4.2 Front-end Design

Login Panel

In this page authorized user use their email and password to enter this system.



The image displays a login panel with a white background and a blue border, set against a dark blue background with technical icons. The panel is titled "Employee Login Panel" at the top. It features two input fields: "Your Email" with an envelope icon and "Your Password" with a magnifying glass icon. Below these is a "Remember Me" checkbox and a "Forgot Password?" link. A green "Login" button with a lock icon is positioned below the password field. At the bottom, a section titled "Are you a client?" contains a red "Customer Login" button with an envelope icon.

Figure 4.2 shows the Login Panel of the system

Home Page:

When an authentic user login this system then user can operate dashboard, sales, stocks, project, account promo code. In this page user can see graphically presentation of invoice and sales done in a month. The user also can see the total income, total expenses, total profit, total revenue.

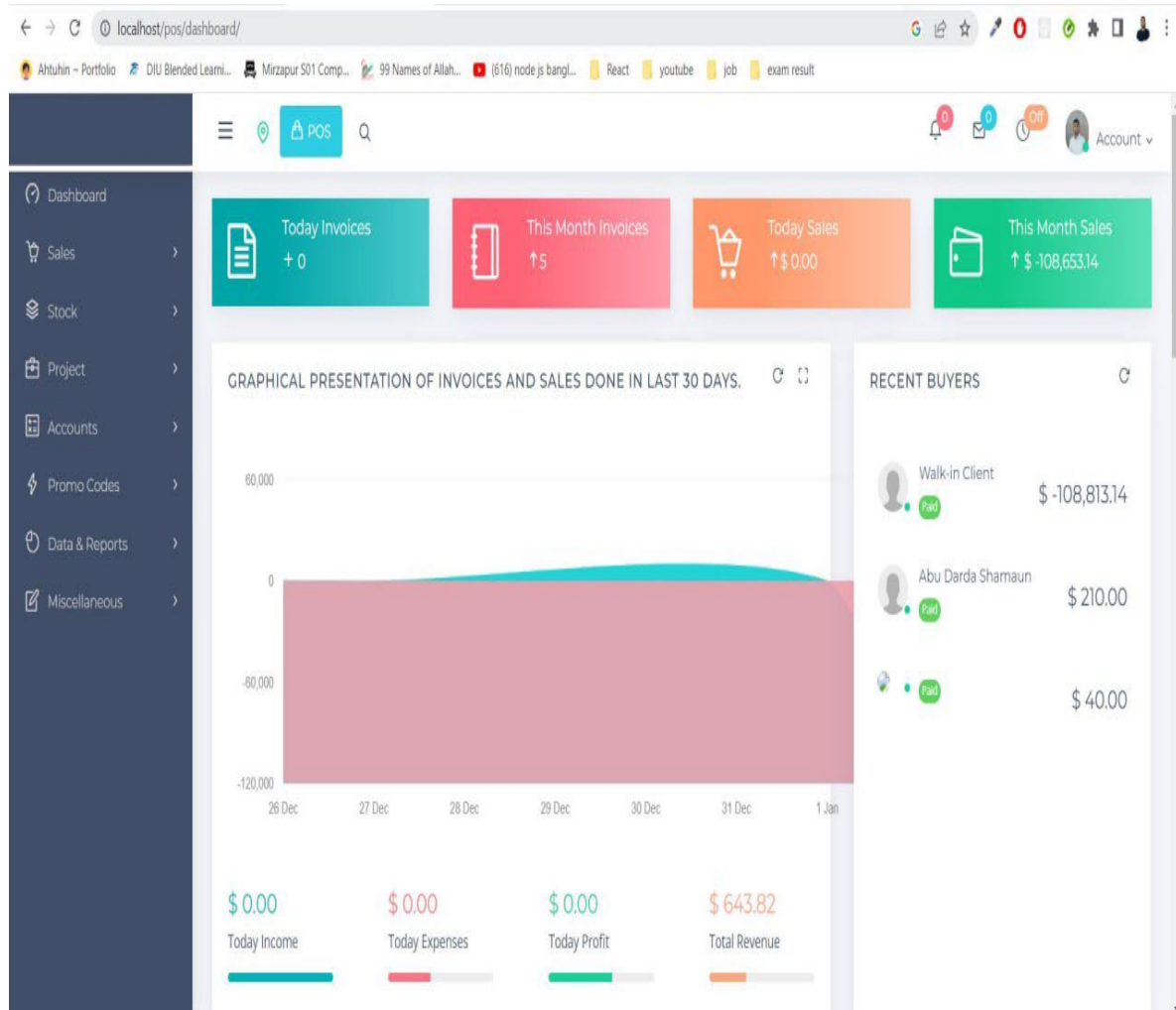


Figure 4.3 shows the Home Page of the system

Creation Of Branch:

In this page only product manager can create product branch for operate all type of product.

#	Name	Total Products	Stock Quantity	Worth (Sales/Stock)	Action
1	Main WareHouse	5	129	\$ 904,210.00/\$ 903,850.00	View Reports Edit Delete
2	Cotton Products	1	10	\$ 1,500.00/\$ 1,550.00	View Reports Edit Delete
3	Drinks Items		0	\$ 0.00/\$ 0.00	View Reports Edit Delete
4	Pizza		0	\$ 0.00/\$ 0.00	View Reports Edit Delete

Figure 4.4 shows the creation of Branch section of the system

Inventory Stock Report:

In this page user can see the product stock.

Figure 4.5 shows the inventory stock report section of the system.

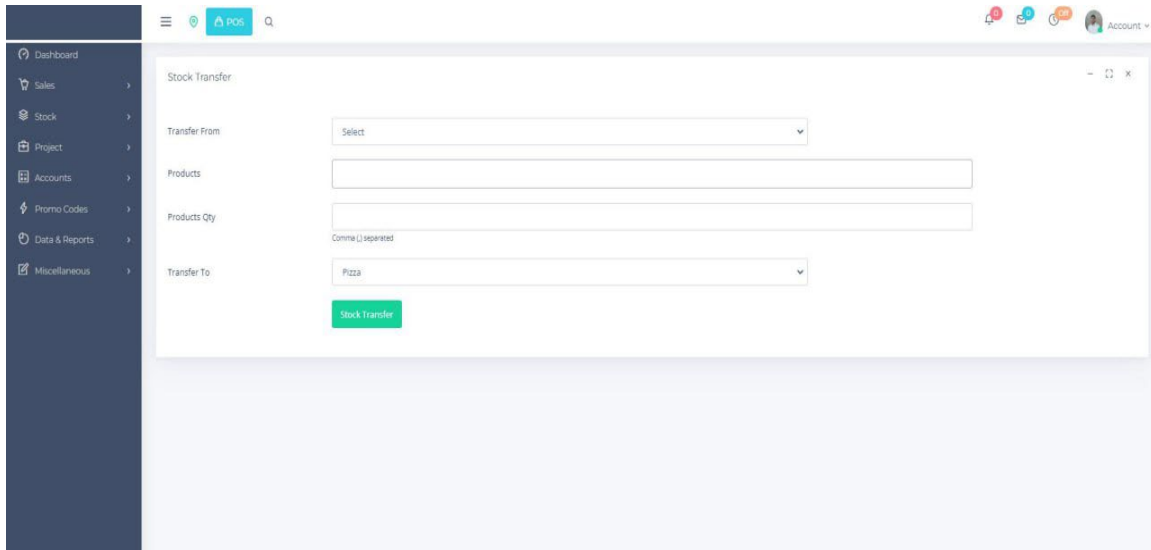
#	Name	Qty	Code	Category	Warehouse	Price	Settings
1	Camera	13	001	Hot Delling	Main WareHouse	\$ 200.00	View Print Reports Delete
2	Mens T Shirt	10	001	Hot Delling	Cotton Products	\$ 150.00	View Print Reports Delete
3	drink	10	1	General	Main WareHouse	\$ 10.00	View Print Reports Delete
4	pizza	6	123456	General	Main WareHouse	\$ 100.00	View Print Reports Delete
5	laptop	9	1	General	Main WareHouse	\$ 100,000.00	View Print Reports Delete
6	Test Potato	91	test-001	General	Main WareHouse	\$ 10.00	View Print Reports Delete

Figure 4.5: Current Stock

Sales by Branch:

Only product manager can transfer the product branch.

Figure 4.6 shows the sales by branch section of the system.



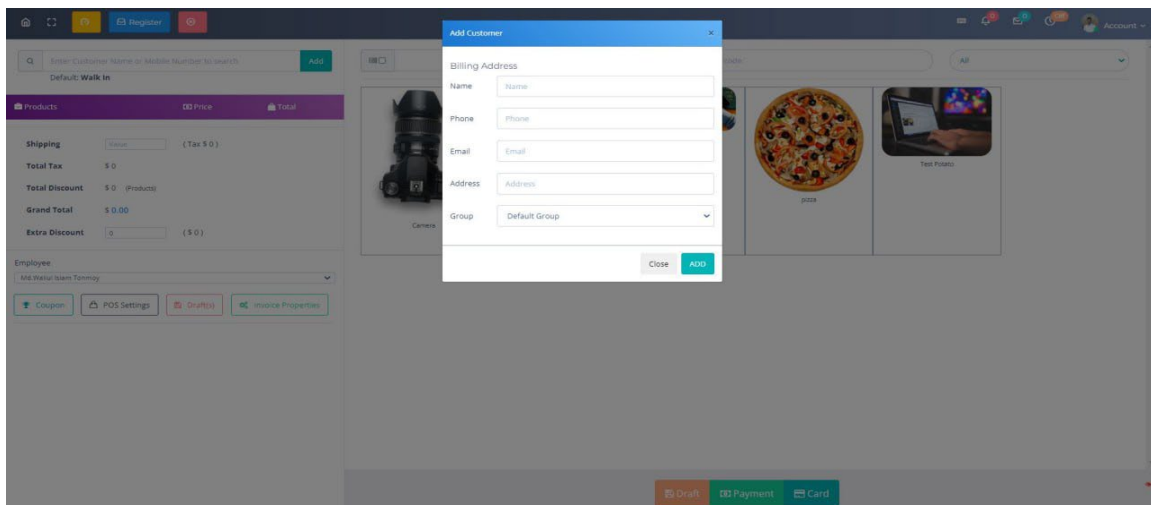
The screenshot shows a 'Stock Transfer' form within a POS application. On the left is a dark blue sidebar with navigation options: Dashboard, Sales, Stock, Project, Accounts, Promo Codes, Data & Reports, and Miscellaneous. The main content area is titled 'Stock Transfer' and contains the following fields: 'Transfer From' (a dropdown menu with 'Select' as the current value), 'Products' (a text input field), 'Products Qty' (a text input field with a note 'Comma (,) separated' below it), and 'Transfer To' (a dropdown menu with 'Pizza' as the current value). A green 'Stock Transfer' button is located at the bottom of the form. The top of the application shows a search bar with 'Pos' and a user account icon.

Figure 4.6 Sales portion

Customer Entry:

Product manager/sales executive can add new user to sale the item.

Figure 4.7 shows customer entry section of the system.



The screenshot shows a POS application interface with a modal dialog box titled 'Add Customer'. The dialog box is centered and contains a 'Billing Address' section with the following fields: 'Name', 'Phone', 'Email', 'Address', and 'Group' (a dropdown menu with 'Default Group' as the selected value). There are 'Close' and 'Add' buttons at the bottom of the dialog. The background shows a blurred view of the POS interface, including a search bar, a 'Default: Walk In' status, a product list with columns for 'Products', 'Price', and 'Total', and a summary section with 'Shipping', 'Total Tax', 'Total Discount', 'Grand Total', and 'Extra Discount'. There are also buttons for 'Draft', 'Payment', and 'Card' at the bottom of the screen.

Figure 4.7 Customer Create portion

Stock Transfer:

Only product manager can stock transfer.

Figure 4.8 shows transfer stock in section of the system

The screenshot shows a 'Stock Transfer' form within a POS application. The form is located in the main content area, with a dark sidebar on the left containing navigation options like Dashboard, Sales, Stock, Project, Accounts, Promo Codes, Data & Reports, and Miscellaneous. The form itself has a white background and contains the following elements:

- Transfer From:** A dropdown menu currently showing 'Select'.
- Products:** A text input field.
- Products Qty:** A text input field.
- Transfer To:** A dropdown menu currently showing 'Pizza'.
- Stock Transfer:** A green button at the bottom of the form.

At the top of the form, there is a small note: 'Comma (,) separated'.

Figure 4.8 Stock Transfer portion

Purchase Figure:

In this page prepare the bill based on selected product for user.

4.9 Local purchase section of the system.

The screenshot displays the 'Local Purchase' section of the POS system. It features a 'Bill To' section on the left with a search client field containing 'abu' and client details for 'Abu Darda Shamaun Rajshahi'. The 'Invoice Properties' section on the right includes fields for Invoice Number (1001), Invoice Date (03-01-2023), Tax (H01), Reference, Invoice Due Date (03-01-2023), and Discount (-% Discount After TAX-). Below these sections is a table with the following data:

Item Name	Quantity	Rate	Tax(%)	Tax	Discount	Amount (\$)	Action
Camera	1	200.00	5.00	10.00	0.00	\$ 210.00	

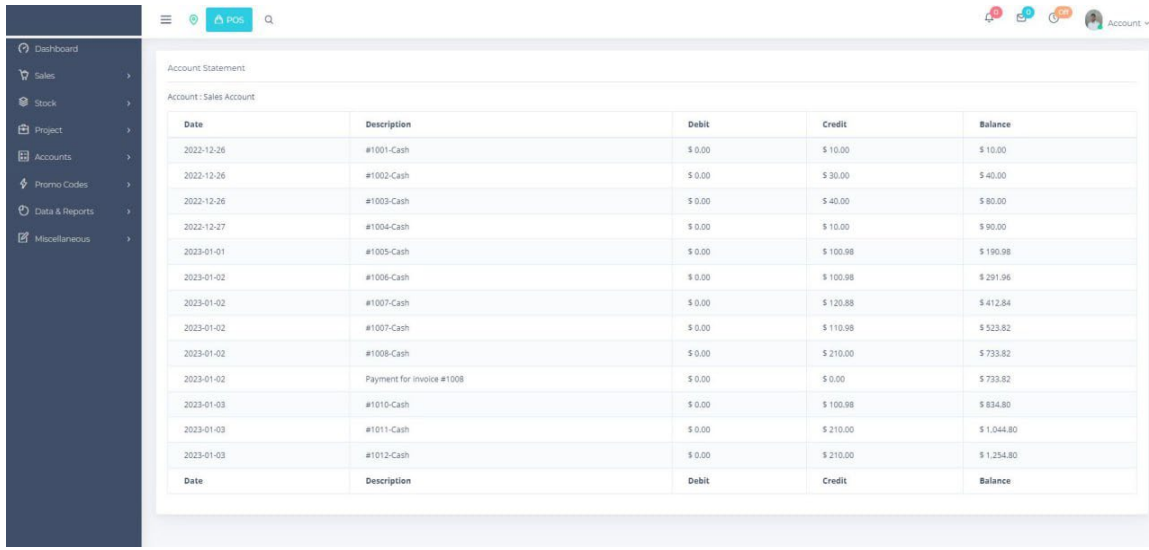
Below the table, there is an 'Add Item' button and a text area containing 'Best Camera Ever'. At the bottom right, there is a summary section with 'Total Tax \$ 10.00', 'Total Discount \$ 0.00', and 'Shipping (Tax \$ 0.00)'.

Figure 4.9: Local Purchase portion

Report Figure:

Summary report for sale item.

4.10 Summary report section of the system



Date	Description	Debit	Credit	Balance
2022-12-26	#1001-Cash	\$ 0.00	\$ 10.00	\$ 10.00
2022-12-26	#1002-Cash	\$ 0.00	\$ 30.00	\$ 40.00
2022-12-26	#1003-Cash	\$ 0.00	\$ 40.00	\$ 80.00
2022-12-27	#1004-Cash	\$ 0.00	\$ 10.00	\$ 90.00
2023-01-01	#1005-Cash	\$ 0.00	\$ 100.98	\$ 190.98
2023-01-02	#1006-Cash	\$ 0.00	\$ 100.98	\$ 291.96
2023-01-02	#1007-Cash	\$ 0.00	\$ 120.88	\$ 412.84
2023-01-02	#1007-Cash	\$ 0.00	\$ 110.98	\$ 523.82
2023-01-02	#1008-Cash	\$ 0.00	\$ 210.00	\$ 733.82
2023-01-02	Payment for invoice #1008	\$ 0.00	\$ 0.00	\$ 733.82
2023-01-03	#1010-Cash	\$ 0.00	\$ 100.98	\$ 834.80
2023-01-03	#1011-Cash	\$ 0.00	\$ 210.00	\$ 1,044.80
2023-01-03	#1012-Cash	\$ 0.00	\$ 210.00	\$ 1,254.80
Date	Description	Debit	Credit	Balance

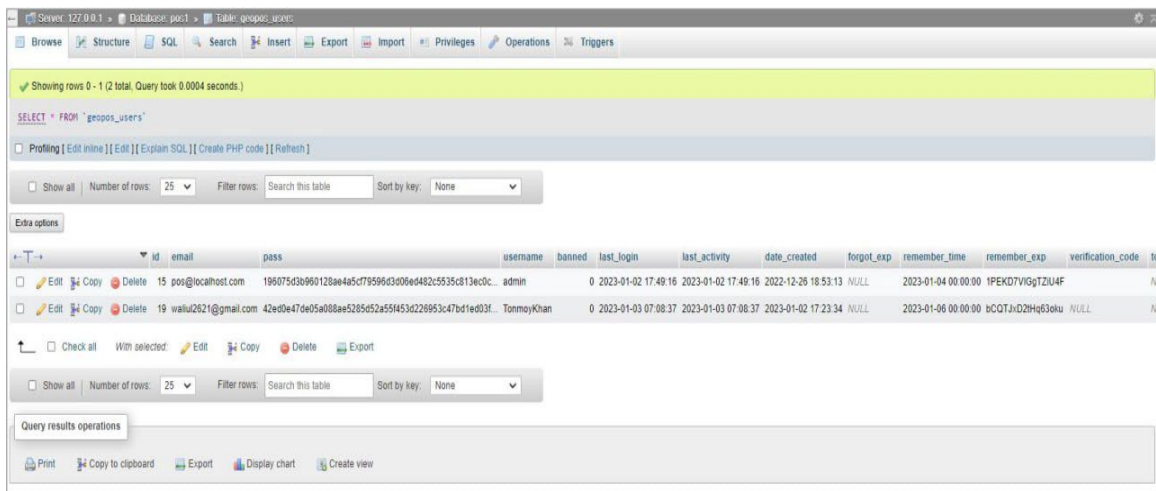
Figure 4.10: Summary Report portion

4.3 Back-end Design

Users:

In this page show the active number of user using database system.

Figure 4.11 shows the Users table of the system user



id	email	pass	username	banned	last_login	last_activity	date_created	forgot_exp	remember_time	remember_exp	verification_code
15	pos@localhost.com	196075426960128ae4a5c7f9596c3d06e482c5535cd13ec0c	admin	0	2023-01-02 17:49:16	2023-01-02 17:49:16	2022-12-26 18:53:13	NULL	2023-01-04 00:00:00	1PEKD7VIGyTZLUF	N
19	waiu2021@gmail.com	42e0e47de05a008ae5265d52a55f453d226953c47bd1e403f	TommyKhan	0	2023-01-03 07:08:37	2023-01-03 07:08:37	2023-01-02 17:23:34	NULL	2023-01-06 00:00:00	bcQTJhD2Hh63oku	NULL

Figure 4.11: System user

Options:

Each and Every type of system are shown here.

Figure 4.12 shows the all options table of the system

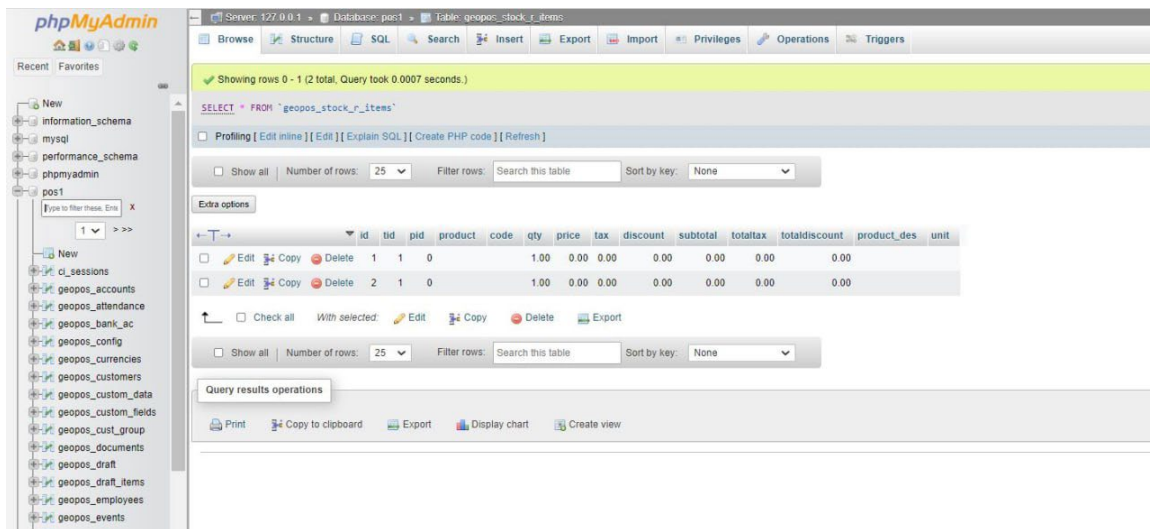
Table	Action	Rows	Type	Collation	Size	Overhead
ci_sessions	19	InnoDB	utf8mb4_general_ci	32.0 K	B	
geopos_accounts	1	InnoDB	utf8_general_ci	48.0 K	B	
geopos_attendance	0	InnoDB	utf8_general_ci	32.0 K	B	
geopos_bank_ac	0	InnoDB	utf8_general_ci	16.0 K	B	
geopos_config	0	InnoDB	utf8_general_ci	32.0 K	B	
geopos_currencies	1	InnoDB	utf8_general_ci	16.0 K	B	
geopos_customers	3	InnoDB	utf8_general_ci	32.0 K	B	
geopos_custom_data	0	InnoDB	utf8_general_ci	32.0 K	B	
geopos_custom_fields	0	InnoDB	utf8_general_ci	32.0 K	B	
geopos_cust_group	1	InnoDB	utf8_general_ci	16.0 K	B	
geopos_documents	0	InnoDB	utf8_general_ci	16.0 K	B	
geopos_draft	0	InnoDB	utf8_general_ci	96.0 K	B	
geopos_draft_items	0	InnoDB	utf8_general_ci	48.0 K	B	
geopos_employees	2	InnoDB	utf8_general_ci	16.0 K	B	
geopos_events	0	InnoDB	utf8_general_ci	48.0 K	B	
geopos_gateways	8	InnoDB	latin1_swedish_ci	16.0 K	B	
geopos_goals	1	InnoDB	utf8_general_ci	16.0 K	B	
geopos_hrm	0	InnoDB	utf8_general_ci	16.0 K	B	
geopos_invoices	12	InnoDB	utf8_general_ci	96.0 K	B	
geopos_invoice_items	14	InnoDB	utf8_general_ci	48.0 K	B	
geopos_locations	0	InnoDB	utf8_general_ci	16.0 K	B	
geopos_log	64	InnoDB	utf8_general_ci	16.0 K	B	
geopos_login_attempts	0	InnoDB	latin1_swedish_ci	16.0 K	B	
geopos_metadata	13	InnoDB	utf8mb4_general_ci	48.0 K	B	
geopos_milestones	0	InnoDB	utf8_general_ci	16.0 K	B	
geopos_movers	6	InnoDB	utf8_general_ci	32.0 K	B	

Figure 4.12: All Components list

Stock Report:

In this database system show every type of product information. As like product price, quantity, discount, description etc.

Table Figure 4.13 shows the stock report table of the system



The screenshot shows the phpMyAdmin interface for the 'geopos_stock_r_items' table. The table structure is as follows:

id	tid	pid	product	code	qty	price	tax	discount	subtotal	totaltax	totaldiscount	product_des	unit
1	1	0			1.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	1	0			1.00	0.00	0.00	0.00	0.00	0.00	0.00		

Figure 4.13: Purchase product for Stock table

4.4 Testing and Integration

A crucial step is system testing. A fascinating irregularity for the product is revealed through testing. As a result, the proposed system undergoes a series of tests before being ready for client acknowledgment testing. As a result, the goal is to test the internal logic of the modules. Unit testing is essential for the review of the code given during the coding stage. The nitty-gritty structure portrayal is used as a guide, and crucial methods are tried to expose errors within the module limit. These tests were finished concurrently with the programming phase. All requirements for practical social performance as well as the errors that were discovered during the testing are revised. Field level and structure level approvals are carried out in each of the screens for the information section. Program testing consists of merely experimenting with different projects that organize a team to achieve a particular goal. During software testing, two types of errors will occur in particular: sentence construction errors and actual errors.

There are two active actors in the design and development of the online point of sale. The environment of the system is shown in Figure 4.1. The seller and the admin. Through a web link, all actors can access the system. Each branch administrator only needs one login name and password to access the system.

- Before the program is run, syntax errors need to be corrected.
- Information handling, improper program announcement arrangement, and similar issues.

The various steps in the testing procedure are listed below.

- **Black Box Testing:**

In this testing, we offer to an infrastructure and evaluate the output. Here, we avoid looking at the system's internal variables and how changes to them have been made to produce the desired yield because any incorrect input for the aforementioned causes failure in creating the connection between the front end and the back end

- **White Box Testing:**

Only the White Box testing is conducted in reverse. While testing, we don't observe the internal factors there. This provides a clear understanding of what is happening while the framework is being executed. All of the obvious locations where the bug occurs were evacuated.

- **Stress Testing:**

Stress testing is done to ensure that the structure won't malfunction under heavy loads. We are exposed to a lot of information in a short amount of time. This resembles a situation where a lot of exercises are performed online in bursts.

- **Cross-Browser Compatibility Testing:**

This is done to ensure that the web framework functions and appears comparable on a variety of applications. The most well-known programs are tested, including:

- ✓ Mozilla Firefox
- ✓ Chrome
- ✓ Microsoft Internet Explorer Version 7
- ✓ Opera
- ✓ Safari
- ✓ Netscape

The majority of writing computer systems operate in a manner that is identical to that of the web system. The server is where applications are maintained. Anyhow, because of ongoing program battles, their differences in how the applications interpret and display the HTML and CSS given to them can differ.

Additionally, the system is tested at multiple screen resolutions to ensure that the At different goals, the substance's location and positioning are relatively constant. The website is evaluated at the seek goals on the screen.

- 1324px by 768px
- 1920px by 1080px

CHAPTER 5

SUMMARY & FUTURE PERSPECTIVE

5.1 Summary

The strategy behind this project with the aid of HTML, CSS, jQuery, PHP, and MySQL Database, the Event Management System has been completed. Here, the administrator can modify, transfer, and incorporate the intricacies of the events and members. After processing each stage of the system development cycle, the system is created. With the use of an internet browser, the system is accessible from anywhere. The site details, future events, and other features, such as participant comments, are all accessible to registered users. They can also respond to participant feedback. The organization administration must give their approval before making any additional changes to the site. Nowadays, planning events for various purposes is a basic practice that benefits both the organizer and the attendees, but planning the complete process takes a lot of time and is long. Our project's goal was to create a time-saving platform where all events could be controlled.

5.2 Future Perspective

The "Point-of-Sale" concept is practical enough to make events portable so that attendees can manage them from any location and lessen the burden on the business admin and sellers. Although there are similar initiatives around the world where events from various organizations and countries take place, this will be Bangladesh's first time featuring one site for one organization. Future improvements to this project could include:

- 1) It tends to be made into a system (supporting every level). It can be delivered for use globally.
- 2) It will be useful for both the private organizer and the government's event management purposes.

The refurbishment will take place at a nucleus site where all the Any other affiliated site may be used.

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Point Of Sale

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