SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES

(Affiliated to Bangalore University)

#328, Marsur Gate, Anekal Main Road, Marsur Post,

Anekal Taluk, Bangalore – 562106

A Project Report on

INVENTORY MANAGEMENT SYSTEM

Submitted in partial fulfilment of requirement for the award of the degree

BACHELOR OF COMPUTER APPLICATIONS

For the Academic year 2023-2024

Of

Bangalore University

BY

BY
CHARAN.S. R
(U03KW21S0026)

NAVEEN KUMAR.J
(U03KW21S0004)

Under the Guidance of
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BONAFIDE CERTIFICATE

This is to certify that the project entitled "**INVENTORY MANAGEMENT SYSTEM"**. Is a Bonafede work carried out By **CHARAN.S. R (U03KW21S0026), NAVEEN KUMAR J (U03KW21S0004)** who carried out the project work under my supervision, as part of his sixth semester project. Submitted in partial fulfilment of the requirement of sixth semester Course work of BCA during the academic session 2023- 2024.

<table>
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<td align="center">Mrs. ROJA K
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<td align="center">Mrs. K SANDHYA
HOD of BCA Department
Spurthy College of Science and
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Mr. PRAKASHA V
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GUIDE CERTIFICATE

This is to certify that the project report certified "**INVENTORY MANAGEMENT SYSTEM**" under the guidance of **Mrs. ROJA K**, Assistant Professor. Submitted in the partial fulfilment of the requirement for Bachelor of Computer Applications.

To

Bangalore University

Name: CHARAN.S.R
Register No: U03KW21S0026

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Register No: U03KW21S0004

Has worked under my guidance and that no part of this report has been submitted for the reward of any other degree and has not been published in any journal or magazine.

Date:

Place:

Name of the faculty: ROJA K

Signature
(Academic Guide)

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CERTIFICATE OF EVALUATION

COLLEGE NAME: SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES.

BRANCH: BACHELOR OF COMPUTER APPLICATIONS.

NAME OF THE STUDENT: CHARAN.S.R & NAVEEN KUMAR.J

PROJECT TITLE: INVENTORY MANAGEMENT SYSTEM

This project work report submitted in partial fulfilment for the award of BCA degree in **BANGALORE UNIVERSITY, BANGALORE,** is evaluated and confirmed to be report of the work done by the above student.

Submission for the project viva voice held on   _____

_____   _____

INTERNAL EXAMINER   **EXTERNAL EXAMINER**

SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES
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DECLARATION

I hereby declare that the project work entitled "**INVENTORY MANAGEMENT SYSTEM**" is a genuine work carried out by me under guidance of **Mrs. ROJA K**, of the department of BCA, in partial fulfilment for the award of the degree of "**Bachelor of Computer Applications**" of Bangalore University, Bangalore.

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ACKNOWLEDGEMENT

This satisfaction and euphoria of the successful completion of any would be incomplete without the mention of the people who made it possible.

The constant guidance of these people and encouragement provided by the crown my efforts with success and glory. I consider it as a privilege to express my gratitude to all those who led and guided me during the project.

First and foremost, I would like to thank **BANGALORE UNIVERSITY** for helping us transform the knowledge gained till date into a practical real-world Project.

I extend my heart full thanks to **Sri P GOPALA REDDY** Sir, **Chairman, SPURTHY GROUP OF INSTITUTION** for providing education in his esteemed institution.

I express my sincere thanks to **Sri VINAY REDDY** Sir, **Secretary**, **SPURTHY GROUP OF INSTITUTION** for extra facilities and various formalities needed for successful completion of my Project in his esteemed institution.

I would like to express my gratitude to my Institution **SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES** and **Mr. PRAKASH V**, Principal for making it possible for meto be a part of this Project in the BCA program.

I express my deep sense of gratitude to **Mrs. K.SANDHYA, HOD of BCA, SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES** for giving her valuable guidance and support complete my Project.

I express my deep sense of gratitude to **Mrs. ROJA.K, GUIDE , SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES** for giving her valuable guidance and support complete my internship.

I express my sincere gratitude to **all lecturers of BCA Department** , **SPURTHY COLLEGE OF SCIENCE AND MANAGEMENT STUDIES** for the support to complete this Project.

Finally, I thank my parents and friends who have been a constant source of Inspiration for the completion of this Project.

ABSTRACT

This project is aimed at developing a desktop-based application named Inventory Management System for managing the inventory system of any organization. The Inventory Management System (IMS) refers to the system and processes to manage the stock of organization with the involvement of Technology system.

This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sales details, generate sales and inventory report daily or weekly based. This project is categorize individual aspects for the sales and inventory management system. In this system we are solving different problem affecting to direct sales management and purchase management. Inventory Management System is important to ensure quality control in businesses that handle transactions resolving around consumer goods. Without proper inventory control, a large retail store may run out of stock on an important item.

A good inventory management system will alert the wholesaler when it is time to record. Inventory Management System is also on important means of automatically tracking large shipment. An automated Inventory Management System helps to minimize the errors while recording the stock.

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1.INTRODUCTION

1.1   Inventory management System

Inventory management information system is high performance software, which speed up the business operation of the organization. Every organization, which deals with the raw materials, put its great effort in the efficient utilization of its raw, material according to its need and requirement.

The organization has to perform number of tasks and operations in order to run its business in manual system.

- ❖ Estimation of new raw material required.
- ❖ Preparation of purchase order.
- ❖ Preparation of inward sale invoice.

This Software "Inventory Management System", is used for recording the information about the day-to-day transaction of stock of an organization. It stores purchase information of the products with credit/debit information form the supplier. Similarly, it stores sales information with credit/debit about the customer. If a product is purchased, then the related information is stored in stocks, that is, stocks are up to date. Another part is it prepare sales report after product it sold. in the sales information, the information about who sold the product is also kept, so there is no problem for misunderstandings in future.

Each new stock is created and entitled with the named and the entry date of that stock and it can also be updating any time when required as per the transaction or the sales is returned in case. Here the login page is created in order to protect the management of the stock of organization in order to prevent it from the threads and misuse of the inventory.

1.2 Problem Statement

Inventory control is an essential need for every business organization. The future of business organizations depends upon inventory considered and on the achievements of company's objectives. To know the significant factors that push for a purchasing behaviour and meeting customers' needs remain a critical matter for the growth and survival in the nowadays competitive market. In today's world where rapid developments are taking place in science and technology, mathematical modelling has become a powerful tool to solve complex, interconnected, and interacting phenomena arising from this rapid change. The first step is to define the problem and all of its constraints theoretically. Next, the objective function of this mathematical problem is formed. In most of all industries different departments have a need to optimize their objective function with decision variables, subjected to a set of constraint.

1.3 Objectives

The objectives of an inventory management system in a database management system (DBMS) encompass efficient tracking, monitoring, and optimization of stock levels to ensure adequate supply for production or sales while minimizing carrying costs and obsolescence. Through real-time data updates and analysis, such a system aims to enhance inventory accuracy, streamline procurement processes, reduce stockouts, and improve forecasting accuracy. Additionally, it facilitates effective decision-making by providing insights into inventory turnover rates, lead times, and supplier performance, ultimately contributing to increased operational efficiency and customer satisfaction.

2. LITRATURE SURVEY

2.1 Existing System

The existing system in organisation's was using paperwork and direct human language communication to manage the Customers. This creates problems, in terms of Stocks Sold and their transactions which minimize the overall performance of the system and do not fulfill the requirements. Thus, the work becomes increase.

- ❖ Time consuming.

- ❖ Consumes large volume of paper work.

- ❖ Needs manual calculations

- ❖ No direct role for the higher official.

- ❖ Lack of security of data.

Modules: -

Admin Module:- In Admin Module, Admin can able to access users account and also, Admin can perform some modification like deletion of Products/Stocks, updating in the product or stock and many more. Administrative module is provided for the sake of administrators to manage the site and update the content at regular intervals. The major operations included in this module are: Create and maintain product categories. View the product available. Add the Product. Remove the product. Maintain Brands, Invoice Bill Printing and many more

2.2 PROPOSED SYSTEM

Inventory Management System provides a computer-based management system for keeping all records about the stocks in the organisation in an efficient and accessible database. This system also helps the admin to maintain large stocks, using that Admin can easily access the sales.

It reduces and removes the manual and traditional workload; Administrator can easily add, delete, update, view, manage each stock record of the organisation in the computer. Admin can Should Register first with his Name, Mail id, Password. The main objective of the Inventory Management system is to make the owner work easier.

➢ **ADVANTAGES OF PROPOSED SYSTEM**
- Saves time.
- Can Forecast sales trends.
- Improved Cash Flow.

3.SYSTEM REQUIREMENTS

3.1 FUNCTIONAL REQUIREMENTS

 Functional requirements specify which output file should be produced from the given file they describe the relationship between the input and output of the system, for each functional requirement a detailed description of all data inputs and their source and the range of valid inputs must be specified.

3.2 NON-FUNCTIONAL REQUIREMENTS

Describe user-visible aspects of the system that are not directly related with the functional behaviour of the system. Non-functional requirements include quantitative constraints, such as responsible time (i.e., how fast the system reacts to user commands.) or accuracy.

3.3 HARDWARE SPECIFICATIONS

Processor	Intel i3 and above
Clock Speed	2 GHz / 2.33 GHz
Hard disk	10 GB or Higher
Input devices	Keyboard, Mouse
Output device	Monitor
RAM	4GB or higher
System Type	64 bit Operating System

3.4 SOFTWARE SPECIFICATIONS

Operating system	Windows 10 or Higher
Front end	HTML5, CSS, JavaScript, php
Back end	MySQL
Editor	Visual Studio Code
Web server	Apache, phpMyAdmin
Control Panel	XAMPP Control panel v3.3.0
Browser	Microsoft Edge, Chrome etc.,

4. HTML 5

HTML or **Hyper Text Mark-up Language** is the standard mark-up language used to create webpages.

HTML was created in 1991 by Tim Berners-Lee at CERN in Switzerland. It was designed to allow scientists to display and share their research.

HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like). HTML tags most commonly come in pairs like and, although some tags represent empty elements and so are unpaired, for example. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags).

Filename extension: html,.htm

Internet media type: text/html

Type code: Text

Initial release: October 28,2014

Standard: HTML 5.2

5. CSS 3

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 content and presentation, including layout, colors, and fonts. 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.

Filename extension: css,.css

Internet media type: text/css

 Type code: Text

Initial release: 17 December 1996

Standard: CSS 3

6. JAVASCRIPT

JavaScript, often abbreviated **JS**, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries. Designed by Brendan Eich of Netscape initially; others have also contributed to the ECMAScript standard.

Filename extension: .js

Internet media type: Application/JS

Initial release: December 4, 1995

Standard: JSR 245

7. PHP

PHP is now officially known as "**PHP: Hypertext Pre-processor**". It is a server-side scripting language usually written in an HTML context. Unlike an ordinary HTML page, a PHP script is not sent directly to a client by the server; instead, it is parsed by the PHP binary or module, which is server-side installed. HTML elements in the script are left alone, but PHP code is interpreted and executed. PHP code in a script can query databases, create images, read and write files, talk to remote servers – the possibilities is endless. The output from PHP code is combined with the

HTML in the script and the result sent to the user's web-browser, therefore it can never tell the user whether the webserver uses PHP or not, because the entire browser sees is HTML.

Developed by: Rasmus Lerdorf

Developer: The PHP Development Team, Zend Technologies

Initial release: June 8, 1995.

Filename extension: php, .phar, .phtml, .phps, .pht

8. MYSQL

The database has become an integral part of almost every human's life. Without it, many things we do would become very tedious, perhaps impossible tasks. Banks, universities, and libraries are three examples of organizations that depend heavily on some sort of database system. On the Internet, search engines, online shopping, and even the website naming convention would be impossible without the use of a database. A database that is implemented and interfaced. One of the fastest SQL (Structured Query Language) database servers currently on the market is the MySQL server, developed by T.c.X. Data KonsultAB. MySQL, available for download at www.mysql.com, offers the database programmer with an array of options and capabilities rarely seen in other database servers. MySQL is free of charge for those wishing to use it for private and commercial use. Those wishing to develop applications specifically using MySQL should consult MySQL's licensing section, as there is charge for licensing the product.

Original author: MySQL AB

Developers: Oracle Corporation

Initial release: May 23, 1995

Stable release: 8.0.12

Type: RDBMS

9. XAMPP

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage that common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami.

XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl. It also comes with a number of other modules, including OpenSSL, phpMyAdmin, Media Wiki, Joomla, WordPress and more. Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another. XAMPP is offered in both a full and a standard version (Smaller version).

Original author: Apache Friends

Initial release: September 4, 2002

Stable release: 8.2.12

Size: Windows: 148 MB, Linux: 150 MB, macOS: 149 MB

10. DESIGN

10.1 DESCRIPTION

The purpose of the design phase is to plan a solution of the problem specified by the requirement document. This phase is the first step in moving from problem domain to the solution domain. The design of a system is perhaps the most critical factor affecting the quality of the software, and has a major impact on the later phases, particularly testing and maintenance. The output of this phase is the design document. This document is similar to a blue print or plan for the solution, and is used later during implementation, testing and maintenance.

The design activity is often divided into two separate phase-system design and detailed design. System design, which is sometimes also called top-level design, aims to identify the modules that should be in the system, the specifications of these modules, and how they interact with each other to produce the desired results. At the end of system design all the major data structures, file formats, output formats, as well as the major modules in the system and their specifications are decided.

During detailed design in internal logic of each of the modules specified in system design is decided. During this phase further details of the data structures and algorithmic design of each of the modules is specified. The logic of a module is usually specified in a high-level design description language, which is independent of the target language in which the software will eventually be implemented. In system design the focus is on identifying the modules, whereas during detailed design the focus is on designing the logic for each of the modules.

During the design phase, often two separate documents are produced. One for the system design and one of the detailed designs. Together, these documents completely specify the design of the system. That is, they specify the different modules in the system and internal logic of each of the modules.

A design methodology is a systematic approach to creating a design by application of set of techniques and guidelines. Most methodologies focus on system design. The two basic principles used in any design methodology are problem partitioning and abstraction. A large system cannot be handled as a whole, and so for design it is partitioned into smaller systems. Abstraction is a concept related to problem partitioning.

10.2 SOFTWARE DEVELOPMENT LIFE CYCLE
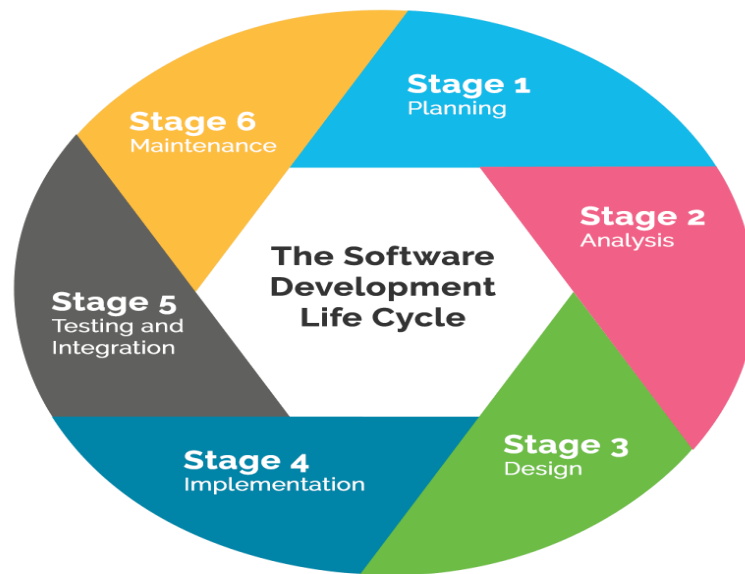
The System Development Life Cycle (SDLC), also referred to as the application development life cycle, is a term used in Systems engineering, Information Systems and Software Engineering to describe a process for planning, creating, testing, and deploying an information system. The systems development life cycle concept applies to a range of hardware and software configurations, as a system can be composed of hardware only, software only, or a combination of both.
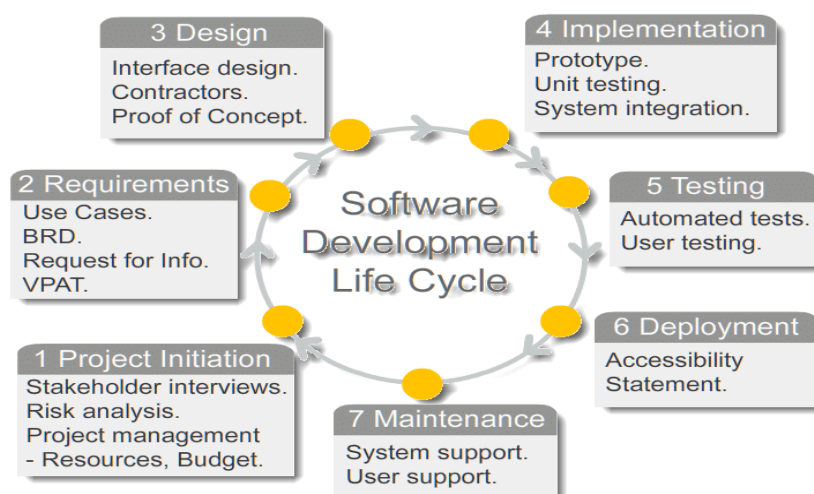
10.2.1 PHASES

1. Requirements gathering and analysis
2. Design
3. Implementation or coding
4. Testing
5. Deployment
6. Maintenance

i. **Requirements gathering and analysis:** Business requirements are gathered in this phase. This is the main focus of the project managers and stake holders. Meetings with managers, stake holders and users are held in order to determine the requirements like; Who is going to use the system? How will they use the system? What data should be input into the system? What data should be output by the system? These are general questions that get answered during a requirement gathering phase. After requirement gathering these requirements are analyzed for their validity and the possibility of incorporating the requirements in the system to be developed is also studied.

ii. **Design:** In this phase the system and software design is prepared from the requirement specifications which were studied in the first phase. System Design helps in specifying hardware and system requirements and also helps in defining overall system architecture. The system design specifications serve as input for the next phase of the model.

iii. **Implementation / Coding:** On receiving system design documents, the work is divided in modules/units and actual coding is started. Since, in this phase the code is produced so it is the main focus for the developer. This is the longest phase of the software development life cycle.

iv. **Testing:** After the code is developed it is tested against the requirements to make sure that the product is actually solving the needs addressed and gathered during the requirements phase. During this phase all types of functional testing like unit testing, integration testing, system testing, acceptance testing are done as well as non-functional testing are also done.

v. **Development:** After successful testing the product is delivered / deployed to the customer for their use. As soon as the product is given to the customers, they will first do the beta testing. If any changes are required or if any bugs are caught, then they will report it to the engineering team. Once those changes are made or the bugs are fixed then the final deployment will happen.

vi. **Maintenance:** Once when the customers start using the developed system then the actual problems come up and needs to be solved from time to time. Thus, process where the care is taken for the developed product is known as Maintenance.

10.2.2 FOUR TYPES OF SDLC MODELS:

i. **Waterfall Process Model:** This Classical Life Cycle or the Waterfall Process Model was the first process model to present a sequential framework, describing basic stages that are mandatory for a successful software development model. It formed the basis for most software development standards and consists of the following phases: Requirements elicitation, Designing, Implementation and Testing. Advantages of waterfall model: • Simple goal, • Simple to understand and use, • Clearly defined stages, • Well understood milestones. Easy to arrange tasks. Process and results are well documented. Easy to manage. Each phase had specific deliverable and a review. Works well for projects where requirements are well understood. Works well when quality is more important than cost/schedule. Customers/End users already know about it.

ii. **Prototype Model:** In Prototype Model, the user is given a "look and feel" of the system using a prototype. The prototype for the system to be developed is built, tested and reworked as necessary. Prototype process model is suitable for dynamic environment where requirements change rapidly. The process begins with gathering main functional requirements; this is followed by a quick design leading to the development of a prototype. The prototype is then evaluated by users and customers. Developers rework on the prototype until the customer and users are satisfied.

iii. **Incremental Development Model:** In Incremental Development process, customers identify, in outlined the services to be provided by the system. They identify which of the services are most important and which are least important to them. A number of delivery increments are then defined which each increment providing a subset of functional requirements. The highest priority functional requirements are delivered first.

iv. **Spiral Model:** In Spiral model, instead of presenting a sequence of activities with some backtracking from one activity to the other, the process model followed a spiral organization of activities. It combines characteristics of both prototype and waterfall process model. The model is divided into some task regions, which are as follows: Construction and release and Customer evaluation. The distinctive feature of this model is that each stage is controlled by a specific risk management criterion ensuring decision making using critical factors.

10.2.2.1 THIS PROJECT IS BASED ON WATERFALL MODEL

Waterfall Process Model: This Classical Life Cycle or the Waterfall Process Model was the first process model to present a sequential framework, describing basic stages that are mandatory for a successful software development model. It formed the basis for most software development standards and consists of the following phases: Requirements, Elicitation, Designing, Implementation and Testing.

T**he following illustration is a representation of the different phases of the Waterfall Model.**
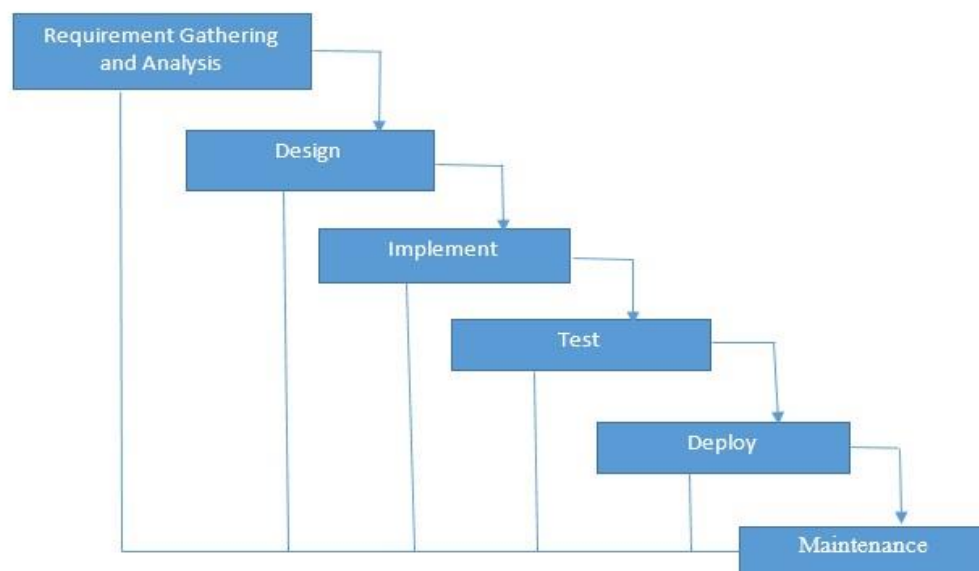
The sequential phases in Waterfall model are :-

- ❖ **Requirement Gathering and analysis** − All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
- ❖ **System Design** − The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- ❖ **Implementation** − With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- ❖ **Integration and Testing** − All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- ❖ **Deployment of system** − Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- ❖ **Maintenance** − There are some issues which come up in the client environment. To fix those issues, patches are released. Also, to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

10.3 SYSTEM AND DETAILED DESING

10.3.1 SYSTEM DESIGN

System design is the process of defining architecture, modules, interfaces, and data for a system to satisfy requirements. System design could be seen as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture of systems engineering.

10.3.2 Architectural Design

The architectural design of a system emphasizes the design of the system architectural that the structure, behaviour and more views of that system and analysis.

10.3.3 Logical Design

The logical design of a system pertains to an abstract representation of the data flows, inputs and outputs of the system. This is often conducted via modelling, using an over-abstract (and sometimes graphical) model of the actual system. In the context of systems, design are included. Logical design includes entity-relationship diagrams (ER diagrams).

10.3.4 Physical design

The physical design relates to the actual input and output processes of the system. This is explained in terms of how data is input into a system, how it is verified/authenticated, how it

is processed, and how it is displayed. In physical design, the following requirements about the system are decided.

1. Input requirement
2. Output requirement
3. Storage requirement
4. Processing requirement
5. System control and backup or recovery

Put another way, the physical portion of system design can generally be broken down into three sub-tasks:
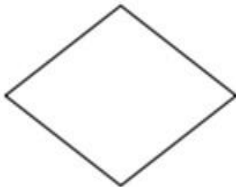
i.   Interface Design
ii. Data Design
iii. Process Design

10.4 SYSTEM DESIGN

10.4.1 Entity relationship diagram

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table.

The symbols used in E-R diagrams are:

SYMBOL	PURPOSE
▭	Represents Entity sets.
⬭	Represent attributes.
◇	Represent Relationship Sets.
——	Line represents flow

Structured analysis is a set of tools and techniques that the analyst. To develop a new kind of a system:

The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal consideration.
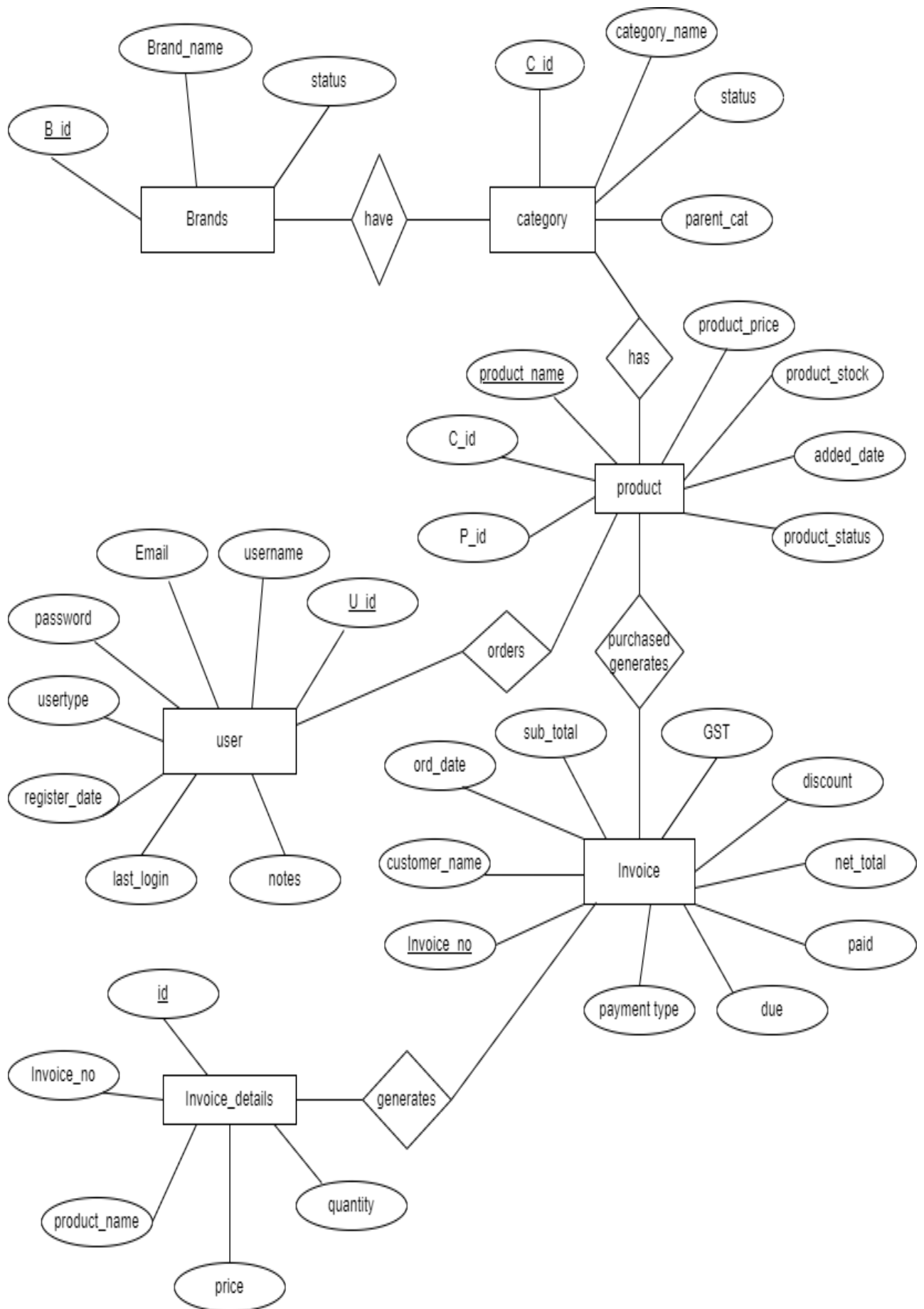
10.4.2 Schema diagram

Brands

B_id	Brand_name	status

Category

C_id	parent_cat	Category_name	Status

Product

P_id	C_id	Product_name	Product_price	product_stock	added_date	Product_status

Invoice

Invoice_no	Customer_name	Ord_date	Sub_total	GST	discount	net_total	paid	due	payment type

Invoice_details

lol_id	Invoice_no	product_name	Price	Quantity

User

U_id	username	Email	password	usertype	register_date	last_login	notes

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10.5. DATABASE DESIGN

A database is a systematic collection of data. They support electronic storage and manipulation of data. Databases make data management easy.

Database design is the organization of data according to a database model. The designer determines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

A properly designed database provides you with access to up-to-date, accurate information The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

PROJECT DATABASE:

Table 10.5.1:- This project consists of 6 databases

Table ▲	Action						Rows	Type	Collation	Size	Overhead
brands	⭐	Browse	Structure	Search	Insert	Empty	Drop	10	InnoDB	latin1_swedish_ci	32.0 KiB	-
categories	⭐	Browse	Structure	Search	Insert	Empty	Drop	6	InnoDB	latin1_swedish_ci	32.0 KiB	-
invoice	⭐	Browse	Structure	Search	Insert	Empty	Drop	27	InnoDB	latin1_swedish_ci	16.0 KiB	-
invoice_details	⭐	Browse	Structure	Search	Insert	Empty	Drop	44	InnoDB	latin1_swedish_ci	32.0 KiB	-
products	⭐	Browse	Structure	Search	Insert	Empty	Drop	5	InnoDB	latin1_swedish_ci	64.0 KiB	-
user	⭐	Browse	Structure	Search	Insert	Empty	Drop	9	InnoDB	latin1_swedish_ci	32.0 KiB	-

Table 10.5.2: This table stores the Brand Details.

				bid	brand_name	status
☐	Edit	Copy	Delete	20	Samsung	1
☐	Edit	Copy	Delete	21	HP	1
☐	Edit	Copy	Delete	22	Adobe	1
☐	Edit	Copy	Delete	23	Apple	1
☐	Edit	Copy	Delete	24	Nokia	1
☐	Edit	Copy	Delete	25	Oppo	1
☐	Edit	Copy	Delete	26	One plus	1
☐	Edit	Copy	Delete	27	Avast Antivirus	1
☐	Edit	Copy	Delete	28	Redmi	1
☐	Edit	Copy	Delete	29	Realme	1

↑_ ☐ Check all   With selected: Edit   Copy   Delete   Export

Table 10.5.3: This table stores the Categories Details.

			cid	parent_cat	category_name	status
☐	Edit	Copy	Delete	12	0 Electronics	1
☐	Edit	Copy	Delete	13	0 Software	1
☐	Edit	Copy	Delete	14	0 Mobiles	1
☐	Edit	Copy	Delete	15	0 Laptop	1
☐	Edit	Copy	Delete	16	0 Antivirus	1
☐	Edit	Copy	Delete	17	0 Gadgets	1

☐ Check all With selected: ✎ Edit Copy ⊖ Delete Export

Table 10.5.4: This table stores the Invoice Details.

			invoice_no	customer_name	order_date	sub_total	gst	discount	net_total	paid	due	payment_type
☐	Edit	Copy	Delete	46	CHAA	0000-00-00	60000	10800	0	70800	5	70795	Cash
☐	Edit	Copy	Delete	47	Charan s r	0000-00-00	120000	21600	20000	121600	121600	0	Cash
☐	Edit	Copy	Delete	48	Charan s r	0000-00-00	120000	21600	0	141600	100000	41600	Cash
☐	Edit	Copy	Delete	49	Sanjay H N	0000-00-00	65000	11700	5000	71700	50000	21700	Cash
☐	Edit	Copy	Delete	50	Charan s r	0000-00-00	500	90	80	510	510	0	Cash

☐ Check all With selected: ✎ Edit Copy ⊖ Delete Export

Table 10.5.5: This table stores the Invoice_details Details.

			id	invoice_no	product_name	price	qty
☐	Edit	Copy	Delete	40	46 Samsung Galaxy S8	60000	1
☐	Edit	Copy	Delete	41	47 Samsung S22 Ultra	120000	1
☐	Edit	Copy	Delete	42	48 Samsung S22 Ultra	120000	1
☐	Edit	Copy	Delete	43	49 Iphone 8	65000	1
☐	Edit	Copy	Delete	44	50 Avira Antivirus	500	1

Table 10.5.6: This table stores the Product Details.

			pid	cid	bid	product_name	product_price	product_stock	added_date	p_status
☐	Edit	Copy	Delete	24	14	20 Samsung S22 Ultra	120000	10	2024-06-22	1
☐	Edit	Copy	Delete	25	15	21 HP i3	50000	5	2024-06-22	1
☐	Edit	Copy	Delete	26	14	25 Oppo F27 Pro Plus 5G	30000	8	2024-06-22	1
☐	Edit	Copy	Delete	27	13	22 Adobe s1	500	3	2024-06-22	1
☐	Edit	Copy	Delete	28	16	27 Avast antivirus gen1	4	500	2024-06-22	1

☐ Check all With selected: ✎ Edit Copy ⊖ Delete Export

☐ Show all | Number of rows: 25 ▾   Filter rows: Search this table   Sort by key: None ▾

Table 10.5.7: This table stores the Brand Details.

	id	username	email	password	usertype	register_date	last_login	notes
☐ 🖉 Edit ⊐i Copy ⊖ Delete	8	chRA	charansr2003@gmail.com	$2y$08$ziBf55kLkarH9nAbyAk4wekcC.0K7CqvhcypdpVLubr...	Admin	2024-06-21	2024-06-22 10:06:06	
☐ 🖉 Edit ⊐i Copy ⊖ Delete	9	Naveen Kumar J	naveen1@gmail.com	$2y$08$rnPsRtmOeoa5I7pZPephseBG/OnNMxfx4BBf5e1acQU...	Admin	2024-06-22	2024-06-22 00:00:00	
☐ 🖉 Edit ⊐i Copy ⊖ Delete	10	Charan S R	charansr203@gmail.com	$2y$08$4GR9xuypK47.xBIMhDy9SuvXrrV1F6MNUSxdHp1zWrY...	Admin	2024-06-22	2024-06-22 00:00:00	

↑ ☐ Check all   *With selected:*   🖉 Edit   ⊐i Copy   ⊖ Delete   🖳 Export

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11.TESTING

Introduction

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring.

Software system meets its requirements and user expectations and does fail in an unacceptable manner. There are various types of tests. Each test type addresses a specific testing requirement.

11.1 Types of Tests

FUCTIONAL TESTING: Here the system is a black box whose behavior is determined by studying its inputs and related outputs. The key problem is to select the inputs that have a huge probability of being members of a set-in may case; the selection of these test cases is based on the previous studies.

STRUCTURAL TESTING: A great deal can be learnt about the strength and the limitation of the application by examinee the manner in which the system breaks. This type of testing has two limitations.

It tests failure behavior of the system circumstances may arise through an unexpected combination of events where the node placed on the system exceeds the maximum anticipated load.

The structure of each module was checked at every step. Some structures were firstly wrong, which came to notice at the time of the connectivity.

UNIT TESTING: In unit testing the entire individual functions and modules were tested independently. By following this strategy all the error in coding were identified and corrected. This method was applied in combination with the white and black box testing techniques to find the errors in each module.

Unit testing is normally considered an adjunct to the coding step. Unit test case design was started after source level code had been developed, reviewed, and verified for correct syntax. A review of design information provides guidance for establishing test cases that were likely to uncover errors in each of the categories discussed above. Each test case was coupled with a set of expected results.

Testing admin login form: This form is used for log in of administrator of the system. In this we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask for username and password.

12. IMPLEMENTATION

INTRODUCTION

Implementation literally means to put into effect or to carry out. In the system implementation phase, the software deals with translation of the design specifications into source code. The ultimate goal of the implementation is to write the source code and the internal documentation so that it can be verified easily.

The code and documentation should be written in manner that eases debugging, testing and modification. System flow charts, simple run-on packages, sample output etc., is part of implementation.

An effort was made to satisfy the following goals in order:

- ❖ Clarity and simplicity of the code.
- ❖ Minimization of Hard Coding.
- ❖ Minimization of the amount of memory used.

13. APPENDICES

APPENDIX 1-

13.1 SOURCE CODE

Home Page (Dashboard.php):-

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
 <title>Inventory Management System</title>
 <!-- Bootstrap CSS -->
 <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
 <!-- Font Awesome CSS -->
 <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
 <style>
  /* Dark mode styles */
  body.dark-mode {
   background-color: #222;
   color: #fff;
  }

  /* Gradient background for the header */
  .navbar {
   background: linear-gradient(to right, #8A2BE2, #E6E6FA); /* Purple to Lavender
gradient */
  }

  /* Zoom in/out button style */
  .zoom-in-out {
   font-size: 1.5rem;
   color: #fff;
   transition: transform 0.3s ease, background-color 0.3s ease;
   background: linear-gradient(to right, #8A2BE2, #E6E6FA); /* Purple to Lavender
gradient */
   border: none;
  }
  /* Zoom in/out button hover effect */
  .zoom-in-out:hover {
   transform: scale(1.2);
   background: linear-gradient(to right, #8A2BE2, #D8BFD8); /* Adjusted gradient on
hover */
  }
   /* Background image */
```

```css
    body {
      background-image: url('./images/bg.jpg'); /* Replace with your image path */
      background-size: cover;
      background-position: center;
      background-repeat: no-repeat;
      min-height: 100vh; /* Ensure the background covers the entire viewport */
    }

    /* Card animation */
    .card {
      transition: transform 0.3s ease;
    }

    /* Card hover effect */
    .card:hover {
      transform: scale(1.1);
    }

    /* Add spacing between cards */
    .card-container {
      margin-top: 20px; /* Adjust as needed */
    }

    /* Footer styles */
    footer {
      background-color: #343a40; /* Dark background color */
      color: #fff; /* Light text color */
      text-align: center;
      padding: 10px 0;
      position: fixed;
      width: 100%;
      bottom: 0;
    }
  </style>
</head>
<body>

<!-- Navbar -->
<?php include_once("./templates/header.php"); ?>
<br/><br/>
<div class="container">
  <div class="row">
    <div class="col-md-4">
      <div class="card mx-auto">
        <img class="card-img-top mx-auto" style="width:60%;" src="./img/logo.png" alt="Card image cap">
        <div class="card-body">
          <h4 class="card-title">Profile Info</h4>
          <p class="card-text"><i class="fa fa-user"> </i>Admin: CHARAN.S.R</p>
```

```html
        <p class="card-text"><i class="fa fa-user"> </i>Admin: NAVEEN
KUMAR.J</p>
          <a href="logout.php" class="btn btn-primary"><i class="fa fa-edit"> </i>Log
Out</a>
      </div>
    </div>
  </div>
  <div class="col-md-8">
    <div class="jumbotron" style="width:100%;height:100%;">
    <h1>Welcome Admin,</h1>
    <div class="row">
      <div class="col-sm-6">
        <iframe
src="http://free.timeanddate.com/clock/i616j2aa/n1993/szw160/szh160/cf100/hnce1ead6"
frameborder="0" width="160" height="160"></iframe>
      </div>
      <div class="col-sm-6">
        <div class="card">
          <div class="card-body">
            <h4 class="card-title">New Orders</h4>
            <p class="card-text">Here you can make invoices and create new orders</p>
            <a href="new_order.php" class="btn btn-primary">New Orders</a>
          </div>
        </div>
      </div>
    </div>
  </div>
 </div>
</div>

<div class="container card-container">
 <div class="row">
  <div class="col-md-4">
    <div class="card">
     <div class="card-body">
      <h4 class="card-title">Categories</h4>
      <p class="card-text">Here you can manage your categories and add new parent and
subcategories</p>
      <a href="#" data-toggle="modal" data-target="#form_category" class="btn btn-
primary">Add</a>
      <a href="manage_categories.php" class="btn btn-primary">Manage</a>
     </div>
    </div>
  </div>
  <div class="col-md-4">
    <div class="card">
     <div class="card-body">
      <h4 class="card-title">Brands</h4>
      <p class="card-text">Here you can manage your brand and add new brand</p>
```

```
      <a href="#" data-toggle="modal" data-target="#form_brand" class="btn btn-
primary">Add</a>
      <a href="manage_brand.php" class="btn btn-primary">Manage</a>
     </div>
    </div>
   </div>
   <div class="col-md-4">
    <div class="card">
     <div class="card-body">
      <h4 class="card-title">Products</h4>
      <p class="card-text">Here you can manage your products and add new products</p>
      <a href="#" data-toggle="modal" data-target="#form_products" class="btn btn-
primary">Add</a>
      <a href="manage_product.php" class="btn btn-primary">Manage</a>
     </div>
    </div>
   </div>
  </div>
</div>

<!-- Footer -->
<footer>
  <b>DEVELOPED BY:</b> <b>CHARAN.S.R</b> (U03KW21S0026) & <b> NAVEEN
KUMAR.J</b> (U03KW21S0004)<br>
  UNDER THE GUIDENCE OF Asst.Prof, <b>Mrs.Roja.K</b>
</footer>

<!-- Include modals and other PHP includes -->
<?php include_once("./templates/category.php"); ?>
<?php include_once("./templates/brand.php"); ?>
<?php include_once("./templates/products.php"); ?>

<!-- Bootstrap JS and dependencies -->
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>

</body>
</html>
```

Login Page(Index.php) : -

```php
<?php
include_once("./database/constants.php");
if (isset($_SESSION["userid"])) {
        header("location:".DOMAIN."/dashboard.php");
}
```

```php
?>
<!DOCTYPE html>
<html>
<head>
        <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
        <title>Inventory Management System</title>
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
        <link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
        <link rel="stylesheet" type="text/css" href="./includes/style.css">
        <script type="text/javascript" rel="stylesheet" src="./js/main.js"></script>
 </head>
<body background="./images/login1.jpg">
<div class="overlay"><div class="loader"></div></div>
        <!-- Navbar -->
        <?php include_once("./templates/header.php"); ?>
        <br/><br/>
        <div class="container">
                <?php
                        if (isset($_GET["msg"]) AND !empty($_GET["msg"])) {
                                ?>
                                        <div class="alert alert-success alert-dismissible fade
show" role="alert">
                                         <?php echo $_GET["msg"]; ?>
                                         <button type="button" class="close" data-
dismiss="alert" aria-label="Close">
                                          <span aria-hidden="true">&times;</span>
                                         </button>
                                        </div>
                                <?php
                        }
```

```
                ?>
            <div class="card mx-auto" style="width: 20rem;">
              <img class="card-img-top mx-auto" style="width:60%;"
src="./img/logo.png" alt="Login Icon">
            <div class="card-body">
                <!-- this form cant be submit directly as it has onsubmit return false --
>
          <form id="form_login" onsubmit="return false">
              <div class="form-group">
                <label for="exampleInputEmail1">Email address</label>
                <input type="email" class="form-control" name="log_email"
id="log_email" placeholder="Enter email">
                <small id="e_error" class="form-text text-muted">We'll never share
your email with anyone else.</small>
              </div>
              <div class="form-group">
                <label for="exampleInputPassword1">Password</label>
                <input type="password" class="form-control"
name="log_password" id="log_password" placeholder="Password">
                    <small id="p_error" class="form-text text-muted"></small>
              </div>
              <button type="submit" class="btn btn-primary"><i class="fa fa-
lock"> </i>Login</button>
                <span><a href="register.php">Register</a></span>
              </form>
          </div>
          <div class="card-footer"><a href="#">Forget Password ?</a></div>
        </div>
    </div>

</body>
</html>
```

Register Page(register.php) : -

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <title>Inventory Management System</title>
```

```html
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
    <link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="stylesheet" type="text/css" href="./includes/style.css">
    <script type="text/javascript" src="./js/main.js"></script>
    <style>
      body {
        background-image: url('./images/registerbg.jpg');
        background-size: cover;
        background-position: center;
        min-height: 100vh;
      }
      .card {
        animation: zoom-in 0.3s ease;
        background-color:green; /* Light grey background color */
        border-radius: 10px;
        box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
      }
      @keyframes zoom-in {
        from {
          transform: scale(0.5);
        }
        to {
          transform: scale(1);
        }
      }
    </style>
 </head>
<body>
<div class="overlay"><div class="loader"></div></div>
    <!-- Navbar -->
    <?php include_once("./templates/header.php"); ?>
    <br/><br/>
    <div class="container">
```

```html
<div class="card mx-auto" style="width: 30rem;">
  <div class="card-header"><center><b>Register</b></center></div>
    <div class="card-body">
      <form id="register_form" onsubmit="return false" autocomplete="off">
        <div class="form-group">
          <label for="username">Full Name</label>
          <input type="text" name="username" class="form-control" id="username"
placeholder="Enter Username">
          <small id="u_error" class="form-text text-muted"></small>
        </div>
        <div class="form-group">
          <label for="email">Email address</label>
          <input type="email" name="email" class="form-control" id="email" aria-
describedby="emailHelp" placeholder="Enter email">
          <small id="e_error" class="form-text text-muted">We'll never share your email
with anyone else.</small>
        </div>
        <div class="form-group">
          <label for="password1">Password</label>
          <input type="password" name="password1" class="form-control"
id="password1" placeholder="Password">
          <small id="p1_error" class="form-text text-muted"></small>
        </div>
        <div class="form-group">
          <label for="password2">Re-enter Password</label>
          <input type="password" name="password2" class="form-control"
id="password2" placeholder="Password">
          <small id="p2_error" class="form-text text-muted"></small>
        </div>
        <div class="form-group">
          <label for="usertype">Usertype</label>
          <select name="usertype" class="form-control" id="usertype">
            <option value="">Choose User Type</option>
            <option value="Admin">Admin</option>
            <option value="Other">Other</option>
          </select>
          <small id="t_error" class="form-text text-muted"></small>
        </div>
        <button type="submit" name="user_register" class="btn btn-primary"><span
class="fa fa-user"></span> Register</button>
        <span><a href="index.php">Login</a></span>
      </form>
    </div>
  <div class="card-footer text-muted">
  </div>
</div>
```

```
    </div>
  </body>
</html>
```

Invoice Bill Page(Invoice_bill.php) : -

```php
<?php
session_start();

include_once("../fpdf/fpdf.php");

class PDF extends FPDF {
    // Page footer
    function Footer() {
        // Position at 1.5 cm from bottom
        $this->SetY(-15);
        // Arial bold 15
        $this->SetFont('Arial','B',15);
        // Page footer text
        $this->Cell(0,10,'Thank You, Please Visit again',0,0,'C');
    }
}

if ($_GET["order_date"] && $_GET["invoice_no"]) {
    $pdf = new PDF();
    $pdf->AddPage();

    // Draw thick border around the page
    $pdf->SetLineWidth(0.5); // Set line width to 2 points
    $pdf->Rect(5, 5, 200, 287);

    // Add logo
    $logoPath = '../img/logo.png'; // Replace with your logo path
    $pdf->Image($logoPath, 10, 10, 30);

    // Title
    $pdf->SetFont("Times", "B", 20);
    $pdf->Cell(190, 20, "INVENTORY MANAGEMENT", 0, 1, "C");

    // Adjust space between title and contact info
    $pdf->Ln(1); // Reduced space after the title

    // Contact Information
    $pdf->SetFont("Times", "B", 14);
    $pdf->Cell(190, 10, "No.40, Ram Building, Anekal Taluk, Bangalore", 0, 1, "C");

    $pdf->SetFont("Times", "B", 12);
```

```php
$pdf->Cell(190, 10, "Mail: charansr2003@gmail.com, naveenjanardha980@gmail.com", 0, 1, "C");

// Customer Name and Contact Numbers
$pdf->Cell(190, 10, "Customer Name: " . $_GET["cust_name"], 0, 1, "C");

// Horizontal line
$pdf->Ln(3); // Reduced space before the line
$pdf->Cell(190, 0, "", "T"); // This draws a thin line
$pdf->Ln(3); // Reduced space after the line

// Order Details
$pdf->SetFont("Times", "B", 12);
$pdf->Cell(50, 10, "Date", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["order_date"], 0, 1);
$pdf->Cell(50, 10, "Customer Name", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["cust_name"], 0, 1);
$pdf->Ln(5); // Reduced space before the table

// Table Header
$pdf->SetFont("Times", "B", 14);
$pdf->Cell(10, 10, "#", 1, 0, "C");
$pdf->Cell(70, 10, "Product Name", 1, 0, "C");
$pdf->Cell(30, 10, "Quantity", 1, 0, "C");
$pdf->Cell(40, 10, "Price", 1, 0, "C");
$pdf->Cell(40, 10, "Total (Rs)", 1, 1, "C");

// Table Body
for ($i = 0; $i < count($_GET["pid"]); $i++) {
    $pdf->Cell(10, 10, ($i + 1), 1, 0, "C");
    $pdf->Cell(70, 10, $_GET["pro_name"][$i], 1, 0, "C");
    $pdf->Cell(30, 10, $_GET["qty"][$i], 1, 0, "C");
    $pdf->Cell(40, 10, $_GET["price"][$i], 1, 0, "C");
    $pdf->Cell(40, 10, ($_GET["qty"][$i] * $_GET["price"][$i]), 1, 1, "C");
}
$pdf->Ln(5); // Reduced space before the summary

// Summary
$pdf->Cell(50, 10, "Sub Total", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["sub_total"], 0, 1);
$pdf->Cell(50, 10, "Gst Tax", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["gst"], 0, 1);
$pdf->Cell(50, 10, "Discount", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["discount"], 0, 1);
$pdf->Cell(50, 10, "Net Total", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["net_total"], 0, 1);
```

```
$pdf->Cell(50, 10, "Paid", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["paid"], 0, 1);
$pdf->Cell(50, 10, "Due Amount", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["due"], 0, 1);
$pdf->Cell(50, 10, "Payment Type", 0, 0);
$pdf->Cell(50, 10, ": " . $_GET["payment_type"], 0, 1);

$pdf->Cell(180, 10, "Signature", 0, 0, "R");

// Output the PDF
$pdf->Output("../PDF_INVOICE/PDF_INVOICE_" . $_GET["invoice_no"] . ".pdf", "F");

// Output the PDF to the browser
$pdf->Output();
}
?>
```

Logout Page(Logout.php) : -

```php
<?php

include_once("./database/constants.php");
if (isset($_SESSION["userid"])) {
        session_destroy();
}
header("location:".DOMAIN."/");

?>
```

Brand Page(Brand.php) : -

```html
<div class="modal fade" id="form_brand" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">Add New Brand</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
        <form id="brand_form" onsubmit="return false">
          <div class="form-group">
            <label>Brand Name</label>
            <input type="text" class="form-control" name="brand_name" id="brand_name"
placeholder="Enter Brand Name">
```

```
            <small id="brand_error" class="form-text text-muted"></small>
          </div>
          <button type="submit" class="btn btn-primary">Add</button>
        </form>
      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-secondary" data-
dismiss="modal">Close</button>
      </div>
    </div>
  </div>
</div>
```

Category Page(category.php) : -

```
<!-- Modal -->
<div class="modal fade" id="form_category" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">Modal title</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
        <form id="category_form" onsubmit="return false">
          <div class="form-group">
            <label>Category Name</label>
            <input type="text" class="form-control" name="category_name" id="category_name"
aria-describedby="emailHelp" placeholder="Enter email">
            <small id="cat_error" class="form-text text-muted"></small>
          </div>
          <div class="form-group">
            <label for="exampleInputPassword1">Parent Category</label>
            <select class="form-control" id="parent_cat" name="parent_cat">



            </select>
          </div>
          <button type="submit" class="btn btn-primary">Submit</button>
        </form>
      </div>
      <div class="modal-footer">
```

```
      <button type="button" class="btn btn-secondary" data-
dismiss="modal">Close</button>
    </div>
   </div>
  </div>
</div>
```

Header Page(header.php) : -

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Inventory System</title>
 <!-- Bootstrap CSS -->
 <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
 <!-- Font Awesome CSS -->
 <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
 <style>
  /* Dark mode styles */
  body.dark-mode {
   background-color: #222;
   color: #fff;
  }

  /* Gradient background for the header */
  .navbar {
   background: linear-gradient(to right, #8A2BE2, #E6E6FA); /* Purple to Lavender
gradient */
  }

  /* Zoom in/out button style */
  .zoom-in-out {
   font-size: 1.5rem;
   color: #fff;
   transition: transform 0.3s ease, background-color 0.3s ease;
   background: linear-gradient(to right, #8A2BE2, #E6E6FA); /* Purple to Lavender
gradient */
   border: none;
  }

  /* Zoom in/out button hover effect */
  .zoom-in-out:hover {
   transform: scale(1.2);
```

```html
      background: linear-gradient(to right, #8A2BE2, #D8BFD8); /* Adjusted gradient on
hover */
    }
  </style>
</head>
<body>

<nav class="navbar navbar-expand-lg navbar-dark bg-primary">
  <a class="navbar-brand" href="#">Inventory Management System</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarNav">
    <ul class="navbar-nav mr-auto">
      <li class="nav-item active">
        <a class="nav-link" href="index.php"><i class="fa fa-home"> </i>Home <span
class="sr-only">(current)</span></a>
      </li>
      <li class="nav-item dropdown">
        <a class="nav-link dropdown-toggle" href="#" id="aboutDropdown" role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
          About
        </a>
        <div class="dropdown-menu" aria-labelledby="aboutDropdown">
          <a class="dropdown-item" href="#">Charan</a>
          <a class="dropdown-item" href="#">Naveen</a>
        </div>
      </li>
    </ul>
    <ul class="navbar-nav ml-auto">
      <li class="nav-item active">
        <button class="btn btn-link nav-link zoom-in-out" id="zoom-in-btn" style="cursor:
pointer;" onclick="zoomIn()"><i class="fa fa-search-plus"></i></button>
      </li>
      <li class="nav-item active">
        <button class="btn btn-link nav-link zoom-in-out" id="zoom-out-btn" style="cursor:
pointer;" onclick="zoomOut()"><i class="fa fa-search-minus"></i></button>
      </li>
      <li class="nav-item active">
        <button class="btn btn-link nav-link" id="mode-toggle-btn" style="cursor: pointer;"
onclick="toggleDarkMode()"><i class="fa fa-adjust"></i></button>
      </li>
    </ul>
  </div>
```

```
</nav>

<!-- Your content here -->
<!-- Bootstrap JS and dependencies -->
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>

<script>
 // JavaScript for zoom and mode functionality
 var zoomLevel = 100; // initial zoom level in percentage
 var darkMode = false;

 function zoomIn() {
  zoomLevel += 10;
  document.body.style.zoom = zoomLevel + '%';
 }

 function zoomOut() {
  zoomLevel -= 10;
  document.body.style.zoom = zoomLevel + '%';
 }

 function toggleDarkMode() {
  darkMode = !darkMode;
  if (darkMode) {
   document.body.classList.add('dark-mode');
  } else {
   document.body.classList.remove('dark-mode');
  }
 }
</script>

</body>
</html>
```

Products Page(products.php) : -

```
<!-- Modal -->
<div class="modal fade" id="form_products" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel" aria-hidden="true">
 <div class="modal-dialog" role="document">
  <div class="modal-content">
   <div class="modal-header">
    <h5 class="modal-title" id="exampleModalLabel">Add new products</h5>
    <button type="button" class="close" data-dismiss="modal" aria-label="Close">
```

```html
      <span aria-hidden="true">&times;</span>
    </button>
  </div>
  <div class="modal-body">
    <form id="product_form" onsubmit="return false">
      <div class="form-row">
        <div class="form-group col-md-6">
          <label>Date</label>
          <input type="text" class="form-control" name="added_date" id="added_date"
value="<?php echo date("Y-m-d"); ?>" readonly/>
        </div>
        <div class="form-group col-md-6">
          <label>Product Name</label>
          <input type="text" class="form-control" name="product_name" id="product_name"
placeholder="Enter Product Name" required>
        </div>
      </div>
      <div class="form-group">
        <label>Category</label>
        <select class="form-control" id="select_cat" name="select_cat" required/>
        </select>
      </div>
      <div class="form-group">
        <label>Brand</label>
        <select class="form-control" id="select_brand" name="select_brand" required/>
        </select>
      </div>
      <div class="form-group">
        <label>Product Price</label>
        <input type="text" class="form-control" id="product_price" name="product_price"
placeholder="Enter Price of Product" required/>
      </div>
      <div class="form-group">
        <label>Quantity</label>
        <input type="text" class="form-control" id="product_qty" name="product_qty"
placeholder="Enter Quantity" required/>
      </div>
      <button type="submit" class="btn btn-success">Add Product</button>
    </form>
  </div>
  <div class="modal-footer">
    <button type="button" class="btn btn-secondary" data-
dismiss="modal">Close</button>
  </div>
 </div>
</div></div>
```

Brand Updating Page(update_brand.php) : -

```html
<!-- Modal -->
<div class="modal fade" id="form_brand" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">New Brand Entry</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
        <form id="update_brand_form" onsubmit="return false">
          <div class="form-group">
            <label>Brand Name</label>
            <input type="hidden" name="bid" id="bid" value=""/>
            <input type="text" class="form-control" name="update_brand" id="update_brand" aria-describedby="emailHelp" placeholder="Enter email">
            <small id="brand_error" class="form-text text-muted"></small>
          </div>
          <button type="submit" class="btn btn-primary">Update Brand</button>
        </form>
      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
      </div>
    </div>
  </div>
</div>
```

Category Updating Page(update_category.php) : -

```html
<!-- Modal -->
<div class="modal fade" id="form_category" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">Modal title</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
```

```html
<form id="update_category_form" onsubmit="return false">
  <div class="form-group">
    <label>Category Name</label>
    <input type="hidden" name="cid" id="cid" value=""/>
    <input type="text" class="form-control" name="update_category" id="update_category" aria-describedby="emailHelp" placeholder="Enter email">
    <small id="cat_error" class="form-text text-muted"></small>
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Parent Category</label>
    <select class="form-control" id="parent_cat" name="parent_cat">



    </select>
  </div>
  <button type="submit" class="btn btn-primary">Update Category</button>
</form>
</div>
<div class="modal-footer">
  <button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
</div>
</div>
</div>
</div>
```

Product Updating Page(update_product.php) : -

```html
<!-- Modal -->
<div class="modal fade" id="form_products" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">Add new products</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
        <form id="update_product_form" onsubmit="return false">
          <div class="form-row">
            <div class="form-group col-md-6">
              <input type="hidden" name="pid" id="pid" value=""/>
```

```html
        <label>Date</label>
        <input type="text" class="form-control" name="added_date" id="added_date"
value="<?php echo date("Y-m-d"); ?>" readonly/>
       </div>
       <div class="form-group col-md-6">
        <label>Product Name</label>
        <input type="text" class="form-control" name="update_product"
id="update_product" placeholder="Enter Product Name" required>
       </div>
      </div>
      <div class="form-group">
       <label>Category</label>
       <select class="form-control" id="select_cat" name="select_cat" required/>
       </select>
      </div>
      <div class="form-group">
       <label>Brand</label>
       <select class="form-control" id="select_brand" name="select_brand" required/>
       </select>
      </div>
      <div class="form-group">
       <label>Product Price</label>
       <input type="text" class="form-control" id="product_price" name="product_price"
placeholder="Enter Price of Product" required/>
      </div>
      <div class="form-group">
       <label>Quantity</label>
       <input type="text" class="form-control" id="product_qty" name="product_qty"
placeholder="Enter Quantity" required/>
      </div>
      <button type="submit" class="btn btn-success">Update Product</button>
     </form>
    </div>
    <div class="modal-footer">
     <button type="button" class="btn btn-secondary" data-
dismiss="modal">Close</button>
    </div>
   </div>
  </div>
</div>
```

Brand Managing Page(manage_brand.php) : -

```php
<?php
include_once("./database/constants.php");
if (!isset($_SESSION["userid"])) {
      header("location:".DOMAIN."/");
```

```php
	}
?>
```
```html
<!DOCTYPE html>
<html>
<head>
	<meta charset="utf-8">
   <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
		<title>Inventory Management System</title>
		<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
		<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
   <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
		<link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
		<script type="text/javascript" src="./js/manage.js"></script>
 </head>
<body>
		<!-- Navbar -->
		<?php include_once("./templates/header.php"); ?>
		<br/><br/>
		<div class="container">
				<table class="table table-hover table-bordered">
					<thead>
					 <tr>
					  <th>#</th>
					  <th>Brand</th>
					  <th>Status</th>
					  <th>Action</th>
					 </tr>
					</thead>
					<tbody id="get_brand">
					 <!--<tr>
					  <td>1</td>
					  <td>Electronics</td>
					  <td><a href="#" class="btn btn-success btn-sm">Active</a></td>
```

```html
                  <td>
                    <a href="#" class="btn btn-danger btn-sm">Delete</a>
                    <a href="#" class="btn btn-info btn-sm">Edit</a>
                  </td>
                </tr>-->
              </tbody>
            </table>
        </div>


        <?php
            include_once("./templates/update_brand.php");
        ?>


</body>
</html>
```

Product Managing Page(manage_product.php) : -

```php
<?php
include_once("./database/constants.php");
if (!isset($_SESSION["userid"])) {
        header("location:".DOMAIN."/");
}
?>
<!DOCTYPE html>
<html>
<head>
        <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
        <title>Inventory Management System</title>
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
```

```
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
        <link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
        <script type="text/javascript" src="./js/manage.js"></script>
 </head>
<body>
        <!-- Navbar -->
        <?php include_once("./templates/header.php"); ?>
        <br/><br/>
        <div class="container">
                <table class="table table-hover table-bordered">
                  <thead>
                   <tr>
                     <th>#</th>
                     <th>Product</th>
                     <th>Category</th>
                     <th>Brand</th>
                     <th>Price</th>
                     <th>Stock</th>
                     <th>Added Date</th>
                     <th>Status</th>
                     <th>Action</th>
                    </tr>
                  </thead>
                  <tbody id="get_product">
                    <!--<tr>
                     <td>1</td>
                     <td>Electronics</td>
                     <td>Root</td>
                     <td><a href="#" class="btn btn-success btn-sm">Active</a></td>
                     <td>
                        <a href="#" class="btn btn-danger btn-sm">Delete</a>
                        <a href="#" class="btn btn-info btn-sm">Edit</a>
                     </td>
                    </tr>-->
                  </tbody>
                </table>
        </div>


        <?php
                include_once("./templates/update_products.php");
        ?>
```

```
</body>
</html>
```

Category Managing Page(manage_category.php) : -

```php
<?php
include_once("./database/constants.php");
if (!isset($_SESSION["userid"])) {
        header("location:".DOMAIN."/");
}
?>
<!DOCTYPE html>
<html>
<head>
        <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
        <title>Inventory Management System</title>
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
        <link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
        <script type="text/javascript" src="./js/manage.js"></script>
 </head>
<body>
        <!-- Navbar -->
        <?php include_once("./templates/header.php"); ?>
        <br/><br/>
        <div class="container">
                <table class="table table-hover table-bordered">
                  <thead>
                   <tr>
                     <th>#</th>
                     <th>Category</th>
                     <th>Parent</th>
```

```html
                    <th>Status</th>
                    <th>Action</th>
                 </tr>
              </thead>
              <tbody id="get_category">
               <!--<tr>
                <td>1</td>
                <td>Electronics</td>
                <td>Root</td>
                <td><a href="#" class="btn btn-success btn-sm">Active</a></td>
                <td>
                   <a href="#" class="btn btn-danger btn-sm">Delete</a>
                   <a href="#" class="btn btn-info btn-sm">Edit</a>
                </td>
               </tr>-->
              </tbody>
            </table>
        </div>


        <?php
                include_once("./templates/update_category.php");
        ?>
</body>
</html>
```

New Order Page(new_order.php) : -

```php
<?php
session_start();
include_once("./database/constants.php");
if (!isset($_SESSION["userid"])) {
   header("location:".DOMAIN."/");
   exit; // Add exit after header redirect to stop further execution
}
?>
<!DOCTYPE html>
<html>
<head>
   <meta charset="utf-8">
   <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
   <title>Inventory Management System</title>
   <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
   <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"
integrity="sha384-
vFJXuSJphROIrBnz7yo7oB41mKfc8JzQZiCq4NCceLEaO4IHwicKwpJf9c9IpFgh"
crossorigin="anonymous"></script>
```

```html
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"
integrity="sha384-
alpBpkh1PFOepccYVYDB4do5UnbKysX5WZXm3XxPqe5iKTfUKjNkCk9SaVuEZflJ"
crossorigin="anonymous"></script>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css" integrity="sha384-
PsH8R72JQ3SOdhVi3uxftmaW6Vc51MKb0q5P2rRUpPvrszuE4W1povHYgTpBfshb"
crossorigin="anonymous">
    <link rel="stylesheet" type="text/css" href="https://maxcdn.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">
    <script type="text/javascript" src="./js/order.js"></script>
</head>
<body>
<div class="overlay"><div class="loader"></div></div>
    <!-- Navbar -->
    <?php include_once("./templates/header.php"); ?>
    <br/><br/>

    <div class="container">
      <div class="row">
        <div class="col-md-10 mx-auto">
          <div class="card" style="box-shadow:0 0 25px 0 lightgrey;">
            <div class="card-header">
             <h4>New Orders</h4>
            </div>
            <div class="card-body">
             <form id="get_order_data" onsubmit="return false">
               <div class="form-group row">
                 <label class="col-sm-3 col-form-label" align="right">Order Date</label>
                 <div class="col-sm-6">
                   <input type="text" id="order_date" name="order_date" readonly
class="form-control form-control-sm" value="<?php echo date("d-m-Y"); ?>">
                 </div>
               </div>
               <div class="form-group row">
                 <label class="col-sm-3 col-form-label" align="right">Customer
Name*</label>
                 <div class="col-sm-6">
                   <input type="text" id="cust_name" name="cust_name" class="form-
control form-control-sm" placeholder="Enter Customer Name" required/>
                 </div>
               </div>
               <div class="form-group row">
                 <label class="col-sm-3 col-form-label" align="right">Contact
Number*</label>
                 <div class="col-sm-6">
```

```html
                <input type="text" id="cust_contact" name="cust_contact" class="form-
control form-control-sm" placeholder="Enter Contact Number" required/>
            </div>
          </div>

          <div class="card" style="box-shadow:0 0 15px 0 lightgrey;">
            <div class="card-body">
              <h3>Make an order list</h3>
              <table align="center" style="width:800px;">
                <thead>
                  <tr>
                    <th>#</th>
                    <th style="text-align:center;">Item Name</th>
                    <th style="text-align:center;">Total Quantity</th>
                    <th style="text-align:center;">Quantity</th>
                    <th style="text-align:center;">Price</th>
                    <th>Total</th>
                  </tr>
                </thead>
                <tbody id="invoice_item">

                </tbody>
              </table> <!--Table Ends-->
              <center style="padding:10px;">
                <button id="add" style="width:150px;" class="btn btn-
success">Add</button>
                <button id="remove" style="width:150px;" class="btn btn-
danger">Remove</button>
              </center>
            </div> <!--Card Body Ends-->
          </div> <!-- Order List Card Ends-->

        <p></p>
        <div class="form-group row">
          <label for="sub_total" class="col-sm-3 col-form-label" align="right">Sub
Total</label>
          <div class="col-sm-6">
            <input type="text" readonly name="sub_total" class="form-control form-
control-sm" id="sub_total" required/>
          </div>
        </div>
        <div class="form-group row">
          <label for="gst" class="col-sm-3 col-form-label" align="right">GST
(10%)</label>
          <div class="col-sm-6">
```

```
                <input type="text" readonly name="gst" class="form-control form-control-
sm" id="gst" required/>
              </div>
            </div>
            <div class="form-group row">
             <label for="discount" class="col-sm-3 col-form-label"
align="right">Discount</label>
              <div class="col-sm-6">
               <input type="text" name="discount" class="form-control form-control-sm"
id="discount" required/>
              </div>
            </div>
            <div class="form-group row">
             <label for="net_total" class="col-sm-3 col-form-label" align="right">Net
Total</label>
              <div class="col-sm-6">
               <input type="text" readonly name="net_total" class="form-control form-
control-sm" id="net_total" required/>
              </div>
            </div>
            <div class="form-group row">
             <label for="paid" class="col-sm-3 col-form-label" align="right">Paid</label>
              <div class="col-sm-6">
               <input type="text" name="paid" class="form-control form-control-sm"
id="paid" required>
              </div>
            </div>
            <div class="form-group row">
             <label for="due" class="col-sm-3 col-form-label" align="right">Due</label>
              <div class="col-sm-6">
               <input type="text" readonly name="due" class="form-control form-control-
sm" id="due" required/>
              </div>
            </div>
            <div class="form-group row">
             <label for="payment_type" class="col-sm-3 col-form-label"
align="right">Payment Method</label>
              <div class="col-sm-6">
               <select name="payment_type" class="form-control form-control-sm"
id="payment_type" required/>
                 <option>Cash</option>
                 <option>Card</option>
                 <option>Draft</option>
                 <option>Cheque</option>
                </select>
              </div>
```

```html
            </div>

            <center>
              <input type="submit" id="order_form" style="width:150px;" class="btn btn-info" value="Order">
              <input type="submit" id="print_invoice" style="width:150px;" class="btn btn-success d-none" value="Print Invoice">
            </center>

          </form>

        </div>
      </div>
    </div>
  </div>
</body>
</html>
```

CSS (Style.css):-

```css
/* ------------- CSS Loader ----------- */

.overlay{
      display: none;
      position: fixed;
      width: 100%;
      height: 100%;
      background: #fff;
      z-index: 10;
      opacity: 0.7;
}
.loader{
      width: 150px;
      height: 150px;
      border-radius: 50%;
      border:10px solid #333;
      position: relative;
      margin: 0 auto;
      top:30%;
      animation:loader 2s linear infinite;
}
@keyframes loader{
      50% {
            opacity: 0.5;
      }
```

```css
        100% {
                transform:rotate(360deg);
        }
}
.loader:after{
        content: "";
    width: 35px;
    height: 35px;
    background: #333;
    position: absolute;
    border-radius: 50%;
    top: -20px;
    left: 55px;
}
.loader:before{
        content: "";
    width: 0;
    height: 0;
    border-left: 15px solid transparent;
    border-right: 15px solid transparent;
    border-bottom: 15px solid #333;
    position: absolute;
    transform: rotate(-90deg);
    top: -10px;
    left: 39px;

}

/* --------- CSS Loader End Here ------------*/
```

Manage (manage.php):-

```php
<?php

/**
 * Manage class for handling database operations.
 */
class Manage
{
  private $con;

  /**
   * Constructor to initialize database connection.
   */
  function __construct()
  {
    include_once("../database/db.php");
```

```php
        $db = new Database();
        $this->con = $db->connect();
    }

    /**
     * Fetch records from table with pagination.
     * @param string $table Table name
     * @param int $pno Page number
     * @return array Associative array containing rows and pagination HTML
     */
    public function manageRecordWithPagination($table, $pno)
    {
        $a = $this->pagination($this->con, $table, $pno, 5);
        $sql = "";
        if ($table == "categories") {
            $sql = "SELECT p.cid, p.category_name as category, c.category_name as parent,
p.status
                FROM categories p
                LEFT JOIN categories c ON p.parent_cat = c.cid " . $a["limit"];
        } else if ($table == "products") {
            $sql = "SELECT p.pid, p.product_name, c.category_name, b.brand_name,
p.product_price, p.product_stock, p.added_date, p.p_status
                FROM products p
                JOIN brands b ON p.bid = b.bid
                JOIN categories c ON p.cid = c.cid " . $a["limit"];
        } else {
            $sql = "SELECT * FROM " . $table . " " . $a["limit"];
        }

        $result = $this->con->query($sql) or die($this->con->error);
        $rows = array();
        if ($result->num_rows > 0) {
            while ($row = $result->fetch_assoc()) {
                $rows[] = $row;
            }
        }
        return ["rows" => $rows, "pagination" => $a["pagination"]];
    }

    /**
     * Generate pagination HTML and SQL LIMIT clause.
     * @param object $con MySQLi database connection
     * @param string $table Table name
     * @param int $pno Page number
     * @param int $n Number of records per page
     * @return array Associative array containing pagination HTML and SQL LIMIT clause
```

```php
     */
    private function pagination($con, $table, $pno, $n)
    {
        // Enclose alias 'rows' in backticks to avoid conflicts
        $query = $con->query("SELECT COUNT(*) as `rows` FROM " . $table);
        if (!$query) {
            die($con->error); // Handle query execution error
        }

        $row = $query->fetch_assoc();
        $pagination = "";

        if ($row) {
            $pageno = $pno;
            $numberOfRecordsPerPage = $n;
            $last = ceil($row["rows"] / $numberOfRecordsPerPage);

            $pagination .= "<ul class='pagination'>";

            if ($last != 1) {
                if ($pageno > 1) {
                    $previous = $pageno - 1;
                    $pagination .= "<li class='page-item'><a class='page-link'
href='pagination.php?pageno=" . $previous . "' style='color:#333;'> Previous </a></li>";
                }

                for ($i = $pageno - 5; $i < $pageno; $i++) {
                    if ($i > 0) {
                        $pagination .= "<li class='page-item'><a class='page-link'
href='pagination.php?pageno=" . $i . "'> " . $i . " </a></li>";
                    }
                }
            }

            $pagination .= "<li class='page-item'><a class='page-link'
href='pagination.php?pageno=" . $pageno . "' style='color:#333;'> $pageno </a></li>";

            for ($i = $pageno + 1; $i <= $last; $i++) {
                $pagination .= "<li class='page-item'><a class='page-link'
href='pagination.php?pageno=" . $i . "'> " . $i . " </a></li>";
                if ($i > $pageno + 4) {
                    break;
                }
            }

            if ($last > $pageno) {
                $next = $pageno + 1;
```

```php
            $pagination .= "<li class='page-item'><a class='page-link'
href='pagination.php?pageno=" . $next . "' style='color:#333;'> Next </a></li>";
            }
        }

        $limit = "LIMIT " . ($pageno - 1) * $numberOfRecordsPerPage . "," .
$numberOfRecordsPerPage;

        $pagination .= "</ul>";

        return ["pagination" => $pagination, "limit" => $limit];
    } else {
        die("Error fetching pagination data.");
    }
}

/**
 * Delete a record from the database.
 * @param string $table Table name
 * @param string $pk Primary key column name
 * @param int $id ID of the record to delete
 * @return string Result message
 */
public function deleteRecord($table, $pk, $id)
{
    if ($table == "categories") {
        $pre_stmt = $this->con->prepare("SELECT * FROM categories WHERE parent_cat
= ?");
        $pre_stmt->bind_param("i", $id);
        $pre_stmt->execute();
        $result = $pre_stmt->get_result() or die($this->con->error);
        if ($result->num_rows > 0) {
            return "DEPENDENT_CATEGORY";
        } else {
            $pre_stmt = $this->con->prepare("DELETE FROM " . $table . " WHERE " . $pk .
" = ?");
            $pre_stmt->bind_param("i", $id);
            $result = $pre_stmt->execute() or die($this->con->error);
            if ($result) {
                return "CATEGORY_DELETED";
            }
        }
    } else {
        $pre_stmt = $this->con->prepare("DELETE FROM " . $table . " WHERE " . $pk . " =
?");
        $pre_stmt->bind_param("i", $id);
```

```php
        $result = $pre_stmt->execute() or die($this->con->error);
        if ($result) {
          return "DELETED";
        }
      }
    }
  }

  /**
   * Fetch a single record from the database.
   * @param string $table Table name
   * @param string $pk Primary key column name
   * @param int $id ID of the record to fetch
   * @return array|null Associative array of the fetched record
   */
  public function getSingleRecord($table, $pk, $id)
  {
    $pre_stmt = $this->con->prepare("SELECT * FROM " . $table . " WHERE " . $pk . "= ?
LIMIT 1");
    $pre_stmt->bind_param("i", $id);
    $pre_stmt->execute() or die($this->con->error);
    $result = $pre_stmt->get_result();
    if ($result->num_rows == 1) {
      $row = $result->fetch_assoc();
      return $row;
    }
    return null;
  }

  /**
   * Update a record in the database.
   * @param string $table Table name
   * @param array $where Associative array of WHERE clause conditions
   * @param array $fields Associative array of fields to update
   * @return string Result message
   */
  public function update_record($table, $where, $fields)
  {
    $sql = "";
    $condition = "";
    foreach ($where as $key => $value) {
      $condition .= $key . "='" . $value . "' AND ";
    }
    $condition = substr($condition, 0, -5);
    foreach ($fields as $key => $value) {
      $sql .= $key . "='" . $value . "', ";
    }
```

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```php
        $sql = substr($sql, 0, -2);
        $sql = "UPDATE " . $table . " SET " . $sql . " WHERE " . $condition;
        if (mysqli_query($this->con, $sql)) {
            return "UPDATED";
        }
        return "ERROR";
    }

    /**
     * Store customer order invoice in the database.
     * @param string $orderdate Order date
     * @param string $cust_name Customer name
     * @param array $ar_tqty Array of total quantities
     * @param array $ar_qty Array of quantities
     * @param array $ar_price Array of prices
     * @param array $ar_pro_name Array of product names
     * @param float $sub_total Sub total
     * @param float $gst GST tax
     * @param float $discount Discount
     * @param float $net_total Net total
     * @param float $paid Paid amount
     * @param float $due Due amount
     * @param string $payment_type Payment type
     * @return string|int Invoice number or error message
     */
    public function storeCustomerOrderInvoice(
        $orderdate,
        $cust_name,
        $ar_tqty,
        $ar_qty,
        $ar_price,
        $ar_pro_name,
        $sub_total,
        $gst,
        $discount,
        $net_total,
        $paid,
        $due,
        $payment_type
    ) {
        $pre_stmt = $this->con->prepare("INSERT INTO
        `invoice`(`customer_name`, `order_date`, `sub_total`, `gst`, `discount`, `net_total`,
`paid`, `due`, `payment_type`)
        VALUES (?,?,?,?,?,?,?,?,?)");
        $pre_stmt->bind_param("ssdddddds", $cust_name, $orderdate, $sub_total, $gst,
$discount, $net_total, $paid, $due, $payment_type);
```

```php
        $pre_stmt->execute() or die($this->con->error);
        $invoice_no = $pre_stmt->insert_id;
        if ($invoice_no != null) {
           for ($i = 0; $i < count($ar_price); $i++) {

               //Here we are finding the remaining quantity after giving customer
               $rem_qty = $ar_tqty[$i] - $ar_qty[$i];

               if ($rem_qty < 0) {
                  return "ORDER_FAIL_TO_COMPLETE";
               } else {
                  //Update Product stock
                  $sql = "UPDATE products SET product_stock = '$rem_qty' WHERE
product_name = '" . $ar_pro_name[$i] . "'";
                  $this->con->query($sql);
               }

               $insert_product = $this->con->prepare("INSERT INTO
               `invoice_details`(`invoice_no`, `product_name`, `price`, `qty`)
               VALUES (?,?,?,?)");
               $insert_product->bind_param("isdd", $invoice_no, $ar_pro_name[$i],
$ar_price[$i], $ar_qty[$i]);
               $insert_product->execute() or die($this->con->error);
            }
            return $invoice_no;
        }
    }
}

?>
```

Pagination.php:-

```php
<?php
include_once("manage.php");
$manage = new Manage();

if (isset($_GET["pageno"])) {
   $pageno = $_GET["pageno"];
} else {
   $pageno = 1;
}

$table = "products"; // Change this to your desired table
$data = $manage->manageRecordWithPagination($table, $pageno);
?>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Pagination</title>
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
</head>
<body>
<div class="container">
    <h2>Data from <?php echo $table; ?></h2>
    <table class="table table-bordered">
      <thead>
        <tr>
          <?php
          if (!empty($data["rows"])) {
             foreach (array_keys($data["rows"][0]) as $header) {
                echo "<th>$header</th>";
             }
          }
          ?>
        </tr>
      </thead>
      <tbody>
        <?php
        if (!empty($data["rows"])) {
           foreach ($data["rows"] as $row) {
              echo "<tr>";
              foreach ($row as $cell) {
                 echo "<td>$cell</td>";
              }
              echo "</tr>";
           }
        } else {
           echo "<tr><td colspan='100%'>No data found</td></tr>";
        }
        ?>
      </tbody>
    </table>
    <?php
    echo $data["pagination"];
    ?>
</div>
</body>
</html>
```

JAVA SCRIPT
Main.js:-

```
$(document).ready(function(){
        var DOMAIN = "http://localhost/invproject/public_html";
        $("#register_form").on("submit",function(){
                var status = false;
                var name = $("#username");
                var email = $("#email");
                var pass1 = $("#password1");
                var pass2 = $("#password2");
                var type = $("#usertype");
                //rizwan@gmail.com
                var e_patt = new RegExp(/^[a-z0-9_-]+(\.[a-z0-9_-]+)*@[a-z0-9_-]+(\.[a-z0-9_-]+)*(\.[a-z]{2,4})$/);
                if(name.val() == "" || name.val().length < 6){
                        name.addClass("border-danger");
                        $("#u_error").html("<span class='text-danger'>Please Enter Name and Name should be more than 6 char</span>");
                        status = false;
                }else{
                        name.removeClass("border-danger");
                        $("#u_error").html("");
                        status = true;
                }
                if(!e_patt.test(email.val())){
                        email.addClass("border-danger");
                        $("#e_error").html("<span class='text-danger'>Please Enter Valid Email Address</span>");
                        status = false;
                }else{
                        email.removeClass("border-danger");
                        $("#e_error").html("");
                        status = true;
                }
                if(pass1.val() == "" || pass1.val().length < 9){
                        pass1.addClass("border-danger");
                        $("#p1_error").html("<span class='text-danger'>Please Enter more than 9 digit password</span>");
                        status = false;
                }else{
                        pass1.removeClass("border-danger");
                        $("#p1_error").html("");
                        status = true;
                }
                if(pass2.val() == "" || pass2.val().length < 9){
                        pass2.addClass("border-danger");
```

```javascript
                        $("#p2_error").html("<span class='text-danger'>Please Enter more
than 9 digit password</span>");
                        status = false;
                }else{
                        pass2.removeClass("border-danger");
                        $("#p2_error").html("");
                        status = true;
                }
                if(type.val() == ""){
                        type.addClass("border-danger");
                        $("#t_error").html("<span class='text-danger'>Please Enter more than
9 digit password</span>");
                        status = false;
                }else{
                        type.removeClass("border-danger");
                        $("#t_error").html("");
                        status = true;
                }
                if ((pass1.val() == pass2.val()) && status == true) {
                        $(".overlay").show();
                        $.ajax({
                                url : DOMAIN+"/includes/process.php",
                                method : "POST",
                                data : $("#register_form").serialize(),
                                success : function(data){
                                        if (data == "EMAIL_ALREADY_EXISTS") {
                                                $(".overlay").hide();
                                                alert("It seems like you email is already used");
                                        }else if(data == "SOME_ERROR"){
                                                $(".overlay").hide();
                                                alert("Something Wrong");
                                        }else{
                                                $(".overlay").hide();
                                                window.location.href =
encodeURI(DOMAIN+"/index.php?msg=You are registered Now you can login");
                                        }
                                }
                        })
                }else{
                        pass2.addClass("border-danger");
                        $("#p2_error").html("<span class='text-danger'>Password is not
matched</span>");
                        status = true;
                }
        })
```

```
//For Login Part
$("#form_login").on("submit",function(){
        var email = $("#log_email");
        var pass = $("#log_password");
        var status = false;
        if (email.val() == "") {
                email.addClass("border-danger");
                $("#e_error").html("<span class='text-danger'>Please Enter Email
Address</span>");
                status = false;
        }else{
                email.removeClass("border-danger");
                $("#e_error").html("");
                status = true;
        }
        if (pass.val() == "") {
                pass.addClass("border-danger");
                $("#p_error").html("<span class='text-danger'>Please Enter
Password</span>");
                status = false;
        }else{
                pass.removeClass("border-danger");
                $("#p_error").html("");
                status = true;
        }
        if (status) {
                $(".overlay").show();
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : $("#form_login").serialize(),
                        success : function(data){
                                if (data == "NOT_REGISTERD") {
                                        $(".overlay").hide();
                                        email.addClass("border-danger");
                                        $("#e_error").html("<span class='text-danger'>It
seems like you are not registered</span>");
                                }else if(data == "PASSWORD_NOT_MATCHED"){
                                        $(".overlay").hide();
                                        pass.addClass("border-danger");
                                        $("#p_error").html("<span class='text-
danger'>Please Enter Correct Password</span>");
                                        status = false;
                                }else{
                                        $(".overlay").hide();
                                        console.log(data);
```

```
                                                window.location.href =
DOMAIN+"/dashboard.php";
                                }
                        }
                })
        }
    })

    //Fetch category
    fetch_category();
    function fetch_category(){
            $.ajax({
                    url : DOMAIN+"/includes/process.php",
                    method : "POST",
                    data : {getCategory:1},
                    success : function(data){
                            var root = "<option value='0'>Root</option>";
                            var choose = "<option value=''>Choose Category</option>";
                            $("#parent_cat").html(root+data);
                            $("#select_cat").html(choose+data);
                    }
            })
    }

    //Fetch Brand
    fetch_brand();
    function fetch_brand(){
            $.ajax({
                    url : DOMAIN+"/includes/process.php",
                    method : "POST",
                    data : {getBrand:1},
                    success : function(data){
                            var choose = "<option value=''>Choose Brand</option>";
                            $("#select_brand").html(choose+data);
                    }
            })
    }

    //Add Category
    $("#category_form").on("submit",function(){
            if ($("#category_name").val() == "") {
                    $("#category_name").addClass("border-danger");
                    $("#cat_error").html("<span class='text-danger'>Please Enter Category
Name</span>");
            }else{
                    $.ajax({
```

```javascript
                         url : DOMAIN+"/includes/process.php",
                         method : "POST",
                         data  : $("#category_form").serialize(),
                         success : function(data){
                                if (data == "CATEGORY_ADDED") {

     $("#category_name").removeClass("border-danger");
                                          $("#cat_error").html("<span class='text-
success'>New Category Added Successfully..!</span>");
                                          $("#category_name").val("");
                                          fetch_category();
                                }else{
                                     alert(data);
                                }
                         }
                    })
           }
      })


      //Add Brand
      $("#brand_form").on("submit",function(){
           if ($("#brand_name").val() == "") {
                $("#brand_name").addClass("border-danger");
                $("#brand_error").html("<span class='text-danger'>Please Enter Brand
Name</span>");
           }else{
                $.ajax({
                     url : DOMAIN+"/includes/process.php",
                     method : "POST",
                     data : $("#brand_form").serialize(),
                     success : function(data){
                            if (data == "BRAND_ADDED") {
                                $("#brand_name").removeClass("border-
danger");

                                $("#brand_error").html("<span class='text-
success'>New Brand Added Successfully..!</span>");
                                $("#brand_name").val("");
                                fetch_brand();
                            }else{
                                alert(data);
                            }

                     }
                })
           }
```

```
                })

        //add product
        $("#product_form").on("submit",function(){
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : $("#product_form").serialize(),
                        success : function(data){
                                if (data == "NEW_PRODUCT_ADDED") {
                                        alert("New Product Added Successfully..!");
                                        $("#product_name").val("");
                                        $("#select_cat").val("");
                                        $("#select_brand").val("");
                                        $("#product_price").val("");
                                        $("#product_qty").val("");

                                }else{
                                        console.log(data);
                                        alert(data);
                                }

                        }
                })
        })

})
```

manage.js:-

```
$(document).ready(function(){
        var DOMAIN = "http://localhost/invproject/public_html";

        //Mange Category
        manageCategory(1);
        function manageCategory(pn){
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : {manageCategory:1,pageno:pn},
                        success : function(data){
                                $("#get_category").html(data);
                        }
                })
        }

        $("body").delegate(".page-link","click",function(){
```

```
                var pn = $(this).attr("pn");
                manageCategory(pn);
        })

        $("body").delegate(".del_cat","click",function(){
                var did = $(this).attr("did");
                if (confirm("Are you sure ? You want to delete..!")) {
                        $.ajax({
                                url : DOMAIN+"/includes/process.php",
                                method : "POST",
                                data : {deleteCategory:1,id:did},
                                success : function(data){
                                        if (data == "DEPENDENT_CATEGORY") {
                                                alert("Sorry ! this Category is dependent on
other sub categories");
                                        }else if(data == "CATEGORY_DELETED"){
                                                alert("Category Deleted Successfully..! happy");
                                                manageCategory(1);
                                        }else if(data == "DELETED"){
                                                alert("Deleted Successfully");
                                        }else{
                                                alert(data);
                                        }

                                }
                        })
                }else{

                }
        })

        //Fetch category
        fetch_category();
        function fetch_category(){
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : {getCategory:1},
                        success : function(data){
                                var root = "<option value='0'>Root</option>";
                                var choose = "<option value=''>Choose Category</option>";
                                $("#parent_cat").html(root+data);
                                $("#select_cat").html(choose+data);
                        }
                })
        }
```

```
//Fetch Brand
fetch_brand();
function fetch_brand(){
        $.ajax({
                url : DOMAIN+"/includes/process.php",
                method : "POST",
                data : {getBrand:1},
                success : function(data){
                        var choose = "<option value=''>Choose Brand</option>";
                        $("#select_brand").html(choose+data);
                }
        })
}


//Update Category
$("body").delegate(".edit_cat","click",function(){
        var eid = $(this).attr("eid");
        $.ajax({
                url : DOMAIN+"/includes/process.php",
                method : "POST",
                dataType : "json",
                data : {updateCategory:1,id:eid},
                success : function(data){
                        console.log(data);
                        $("#cid").val(data["cid"]);
                        $("#update_category").val(data["category_name"]);
                        $("#parent_cat").val(data["parent_cat"]);
                }
        })
})

$("#update_category_form").on("submit",function(){
        if ($("#update_category").val() == "") {
                $("#update_category").addClass("border-danger");
                $("#cat_error").html("<span class='text-danger'>Please Enter Category
Name</span>");
        }else{
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data  : $("#update_category_form").serialize(),
                        success : function(data){
                                window.location.href = "";
                        }
```

```
                        })
                }
        })


        //----------Brand-------------
        manageBrand(1);
        function manageBrand(pn){
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : {manageBrand:1,pageno:pn},
                        success : function(data){
                                $("#get_brand").html(data);
                        }
                })
        }

        $("body").delegate(".page-link","click",function(){
                var pn = $(this).attr("pn");
                manageBrand(pn);
        })

        $("body").delegate(".del_brand","click",function(){
                var did = $(this).attr("did");
                if (confirm("Are you sure ? You want to delete..!")) {
                        $.ajax({
                                url : DOMAIN+"/includes/process.php",
                                method : "POST",
                                data : {deleteBrand:1,id:did},
                                success : function(data){
                                        if (data == "DELETED") {
                                                alert("Brand is deleted");
                                                manageBrand(1);
                                        }else{
                                                alert(data);
                                        }

                                }
                        })
                }
        })

        //Update Brand
        $("body").delegate(".edit_brand","click",function(){
                var eid = $(this).attr("eid");
```

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```
            $.ajax({
                    url : DOMAIN+"/includes/process.php",
                    method : "POST",
                    dataType : "json",
                    data : {updateBrand:1,id:eid},
                    success : function(data){
                            console.log(data);
                            $("#bid").val(data["bid"]);
                            $("#update_brand").val(data["brand_name"]);
                    }
            })
      })

      $("#update_brand_form").on("submit",function(){
            if ($("#update_brand").val() == "") {
                    $("#update_brand").addClass("border-danger");
                    $("#brand_error").html("<span class='text-danger'>Please Enter Brand
Name</span>");
            }else{
                    $.ajax({
                            url : DOMAIN+"/includes/process.php",
                            method : "POST",
                            data  : $("#update_brand_form").serialize(),
                            success : function(data){
                                    alert(data);
                                    window.location.href = "";
                            }
                    })
            }
      })
      manageProduct(1);
      function manageProduct(pn){
            $.ajax({
                    url : DOMAIN+"/includes/process.php",
                    method : "POST",
                    data : {manageProduct:1,pageno:pn},
                    success : function(data){
                            $("#get_product").html(data);
                    }
            })
      }

      $("body").delegate(".page-link","click",function(){
            var pn = $(this).attr("pn");
            manageProduct(pn);
      })
```

```javascript
$("body").delegate(".del_product","click",function(){
        var did = $(this).attr("did");
        if (confirm("Are you sure ? You want to delete..!")) {
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : {deleteProduct:1,id:did},
                        success : function(data){
                                if (data == "DELETED") {
                                        alert("Product is deleted");
                                        manageProduct(1);
                                }else{
                                        alert(data);
                                }

                        }
                })
        }
})

//Update product
$("body").delegate(".edit_product","click",function(){
        var eid = $(this).attr("eid");
        $.ajax({
                url : DOMAIN+"/includes/process.php",
                method : "POST",
                dataType : "json",
                data : {updateProduct:1,id:eid},
                success : function(data){
                        console.log(data);
                        $("#pid").val(data["pid"]);
                        $("#update_product").val(data["product_name"]);
                        $("#select_cat").val(data["cid"]);
                        $("#select_brand").val(data["bid"]);
                        $("#product_price").val(data["product_price"]);
                        $("#product_qty").val(data["product_stock"]);

                }
        })
})

//Update product
$("#update_product_form").on("submit",function(){
        $.ajax({
                        url : DOMAIN+"/includes/process.php",
```

```
                            method : "POST",
                            data : $("#update_product_form").serialize(),
                            success : function(data){
                                    if (data == "UPDATED") {
                                            alert("Product Updated Successfully..!");
                                            window.location.href = "";
                                    }else{
                                            alert(data);
                                    }
                            }
                    })
        })
})
```

Order.js:-

```
$(document).ready(function(){
        var DOMAIN = "http://localhost/invproject/public_html";

        addNewRow();

        $("#add").click(function(){
                addNewRow();
        })

        function addNewRow(){
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : {getNewOrderItem:1},
                        success : function(data){
                                $("#invoice_item").append(data);
                                var n = 0;
                                $(".number").each(function(){
                                        $(this).html(++n);
                                })
                        }
                })
        }

        $("#remove").click(function(){
                $("#invoice_item").children("tr:last").remove();
                calculate(0,0);
        })
        $("#invoice_item").delegate(".pid","change",function(){
                var pid = $(this).val();
                var tr = $(this).parent().parent();
                $(".overlay").show();
```

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```
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        dataType : "json",
                        data : {getPriceAndQty:1,id:pid},
                        success : function(data){
                                tr.find(".tqty").val(data["product_stock"]);
                                tr.find(".pro_name").val(data["product_name"]);
                                tr.find(".qty").val(1);
                                tr.find(".price").val(data["product_price"]);
                                tr.find(".amt").html( tr.find(".qty").val() * tr.find(".price").val()
);

                                calculate(0,0);
                        }
                })
        })

        $("#invoice_item").delegate(".qty","keyup",function(){
                var qty = $(this);
                var tr = $(this).parent().parent();
                if (isNaN(qty.val())) {
                        alert("Please enter a valid quantity");
                        qty.val(1);
                }else{
                        if ((qty.val() - 0) > (tr.find(".tqty").val()-0)) {
                                alert("Sorry ! This much of quantity is not available");
                                aty.val(1);
                        }else{
                                tr.find(".amt").html(qty.val() * tr.find(".price").val());
                                calculate(0,0);
                        }
                }

        })

        function calculate(dis,paid){
                var sub_total = 0;
                var gst = 0;
                var net_total = 0;
                var discount = dis;
                var paid_amt = paid;
                var due = 0;
                $(".amt").each(function(){
                        sub_total = sub_total + ($(this).html() * 1);
                })
                gst = 0.18 * sub_total;
```

```
        net_total = gst + sub_total;
        net_total = net_total - discount;
        due = net_total - paid_amt;
        $("#gst").val(gst);
        $("#sub_total").val(sub_total);

        $("#discount").val(discount);
        $("#net_total").val(net_total);
        //$("#paid")
        $("#due").val(due);

}

$("#discount").keyup(function(){
        var discount = $(this).val();
        calculate(discount,0);
})

$("#paid").keyup(function(){
        var paid = $(this).val();
        var discount = $("#discount").val();
        calculate(discount,paid);
})

/*Order Accepting*/

$("#order_form").click(function(){

        var invoice = $("#get_order_data").serialize();
        if ($("#cust_name").val() === "") {
                alert("Plaese enter customer name");
        }else if($("#paid").val() === ""){
                alert("Plaese eneter paid amount");
        }else{
                $.ajax({
                        url : DOMAIN+"/includes/process.php",
                        method : "POST",
                        data : $("#get_order_data").serialize(),
                        success : function(data){

                                if (data < 0) {
                                        alert(data);
                                }else{
                                        $("#get_order_data").trigger("reset");

                                        if (confirm("Do u want to print invoice ?")) {
```

```
                                              window.location.href =
DOMAIN+"/includes/invoice_bill.php?invoice_no="+data+"&"+invoice;
                                        }
                                }
                        }
                });
        }
    });
});
```

Database Constants.php:-

```php
<?php
session_start();

define("HOST","localhost");
define("USER","root");
define("PASS","");
define("DB","project_inv");

define("DOMAIN","http://localhost/invproject/public_html");

?>
```

db.php:-

```php
<?php
class Database
{
        private $con;
        public function connect(){
                include_once("constants.php");
                $this->con = new Mysqli(HOST,USER,PASS,DB);
                if ($this->con) {
                        return $this->con;
                }
                return "DATABASE_CONNECTION_FAIL";
        }
```

```php
            public function connectOracleDb(){
                    return null;
            }
    }
    //$db = new Database();
    //$db->connect();
?>
```

13.2 EXPERIMENTAL RESULTS: SCREENSHOTS

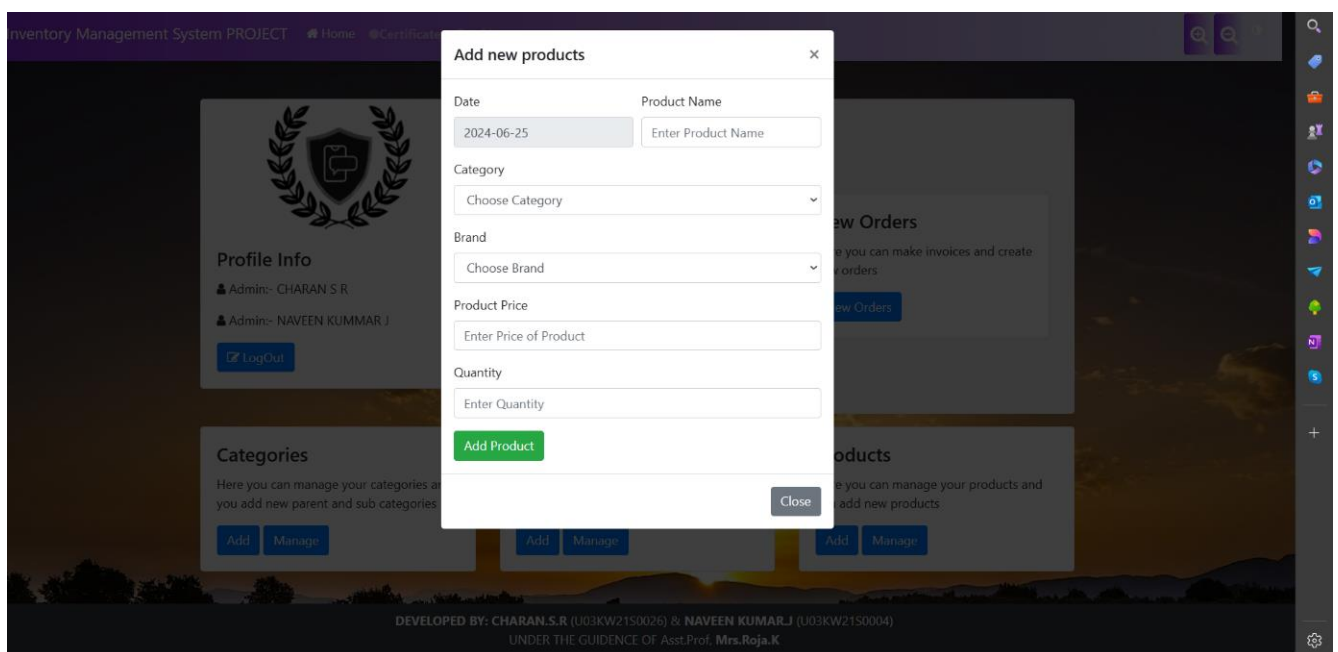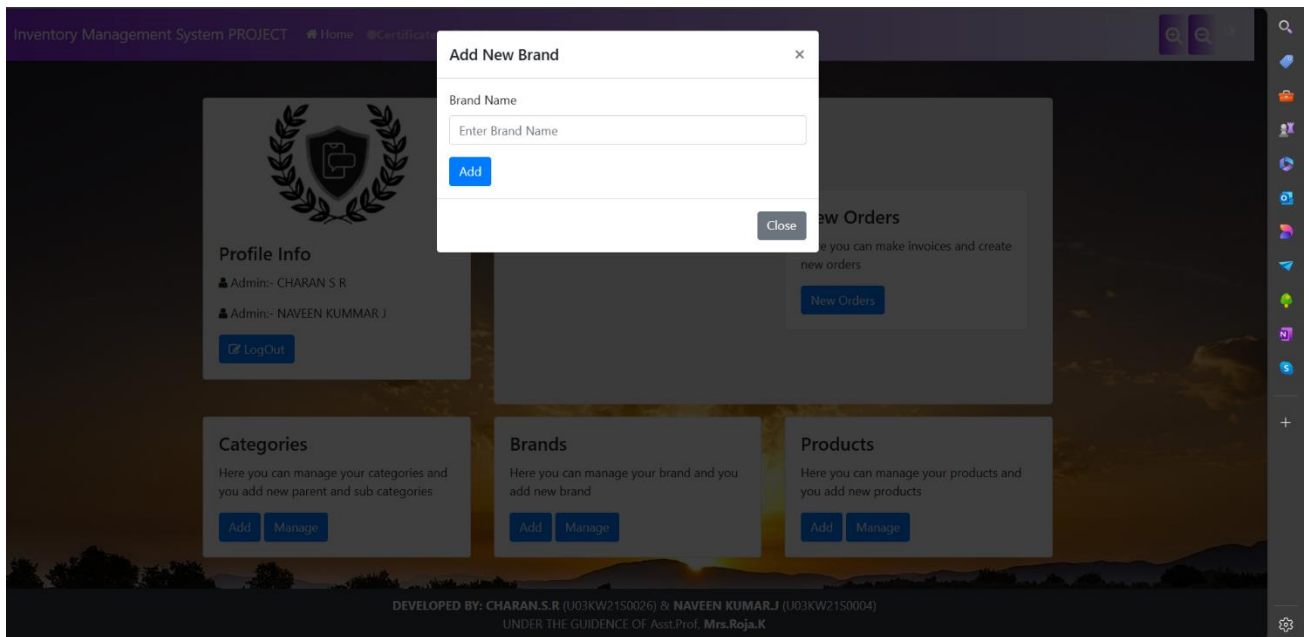### 13.2.1 Login Page
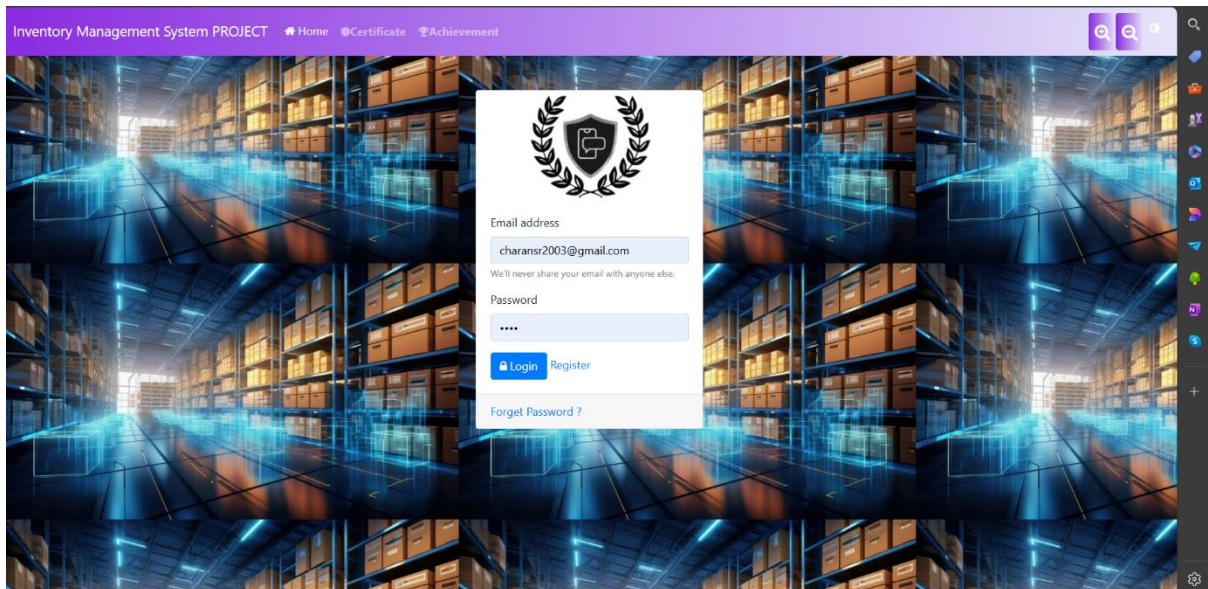
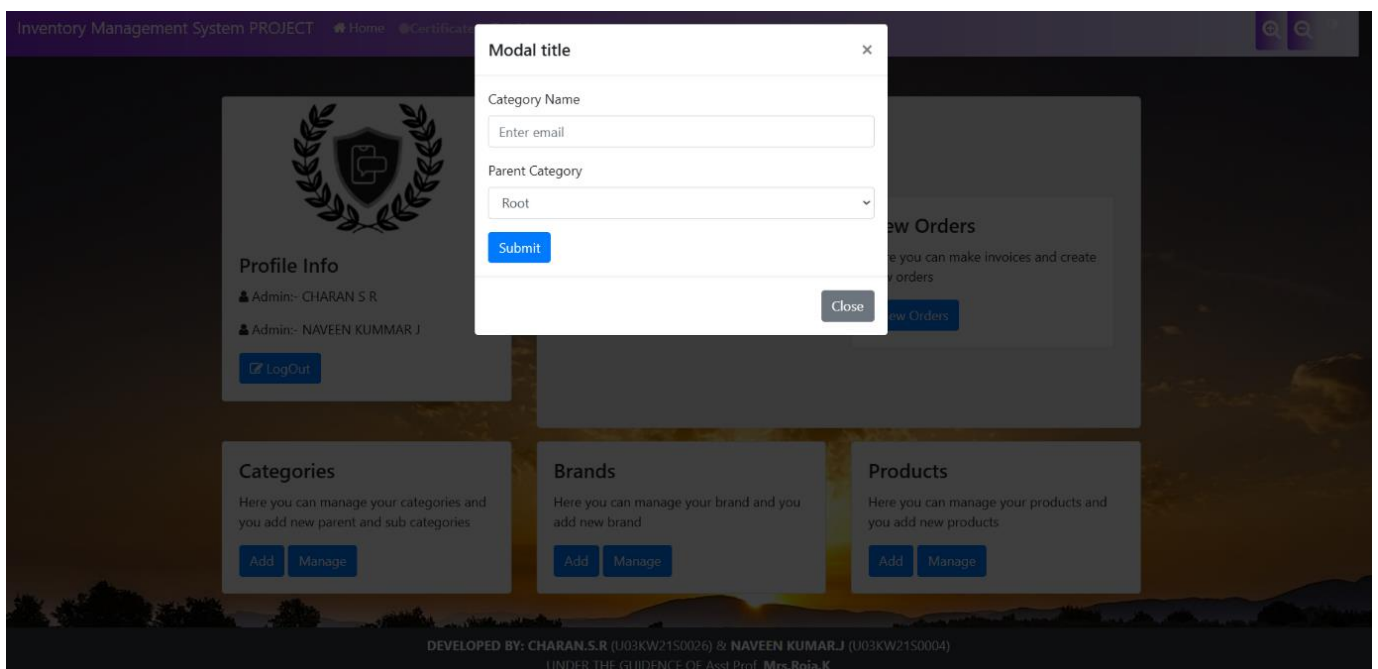

13.2.2 Register Page
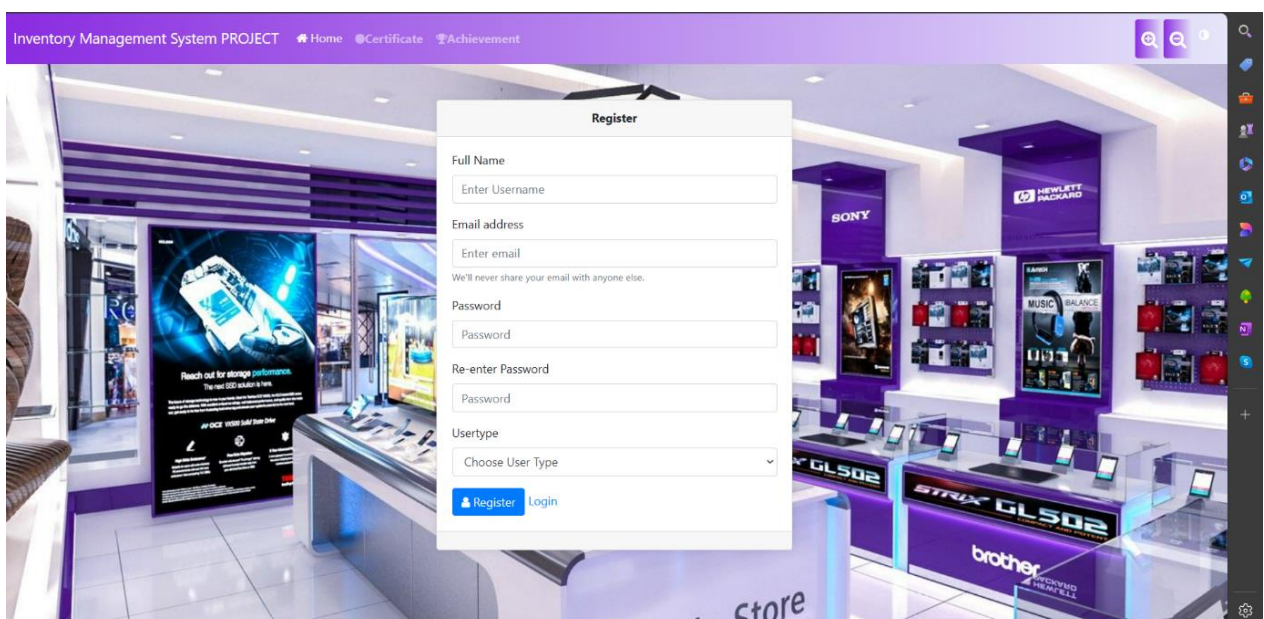
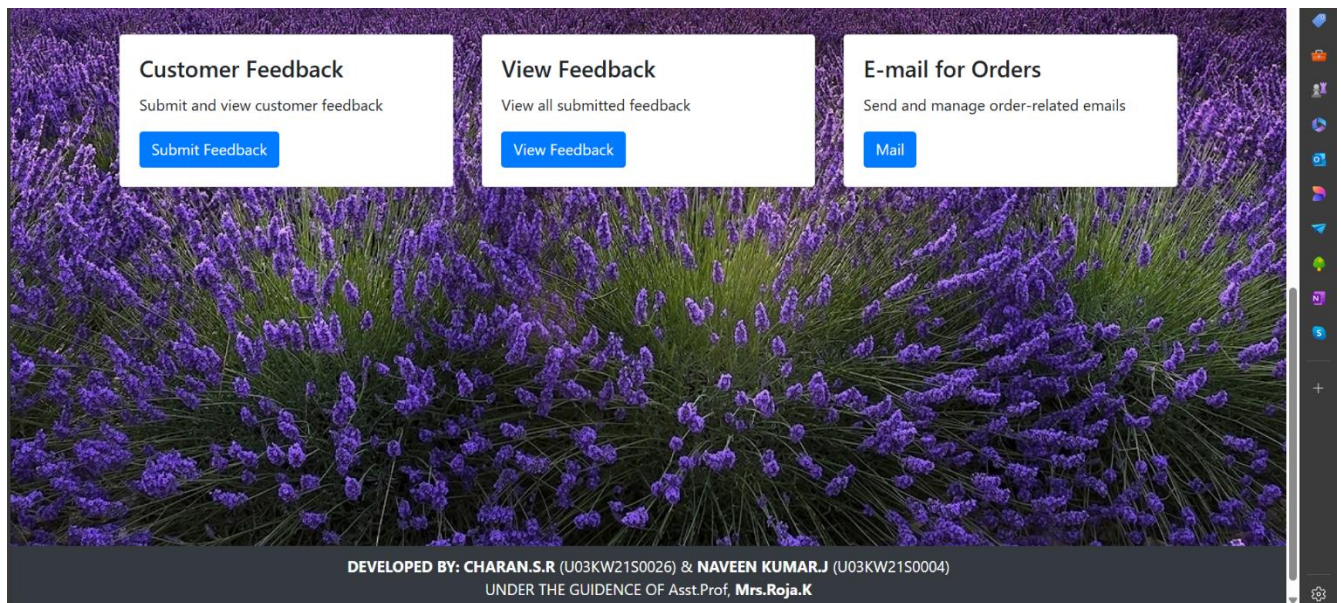## 13.2.3 Dashboard Page
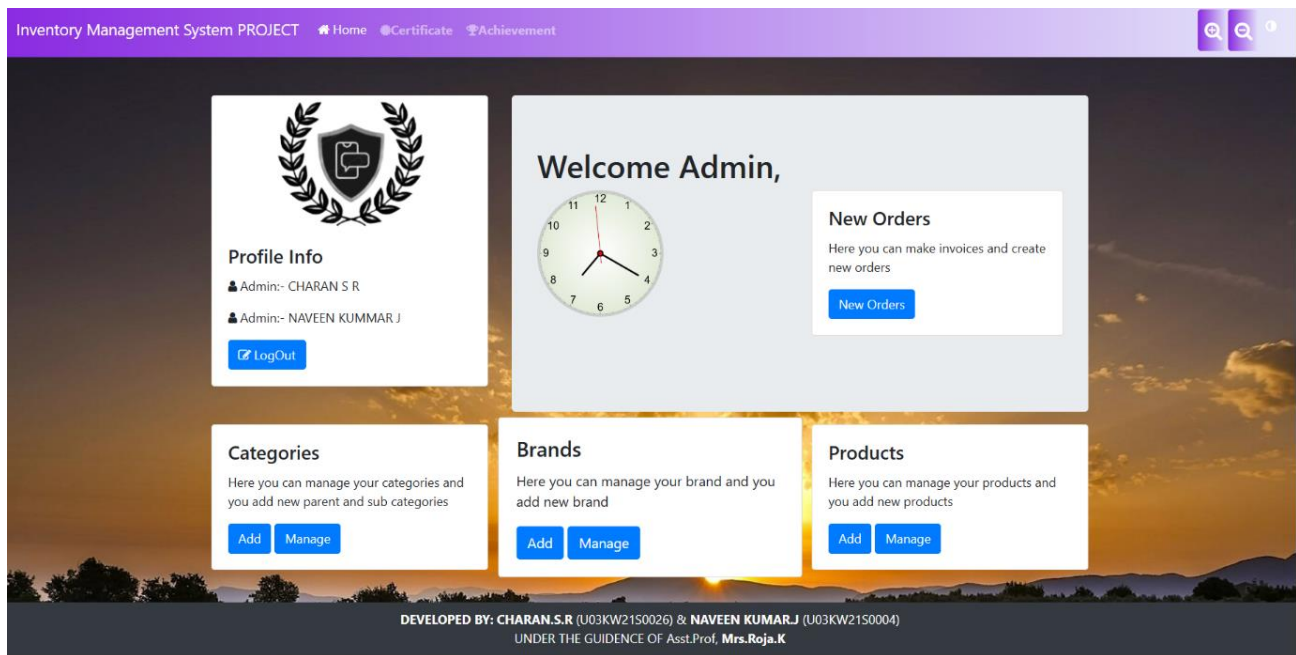
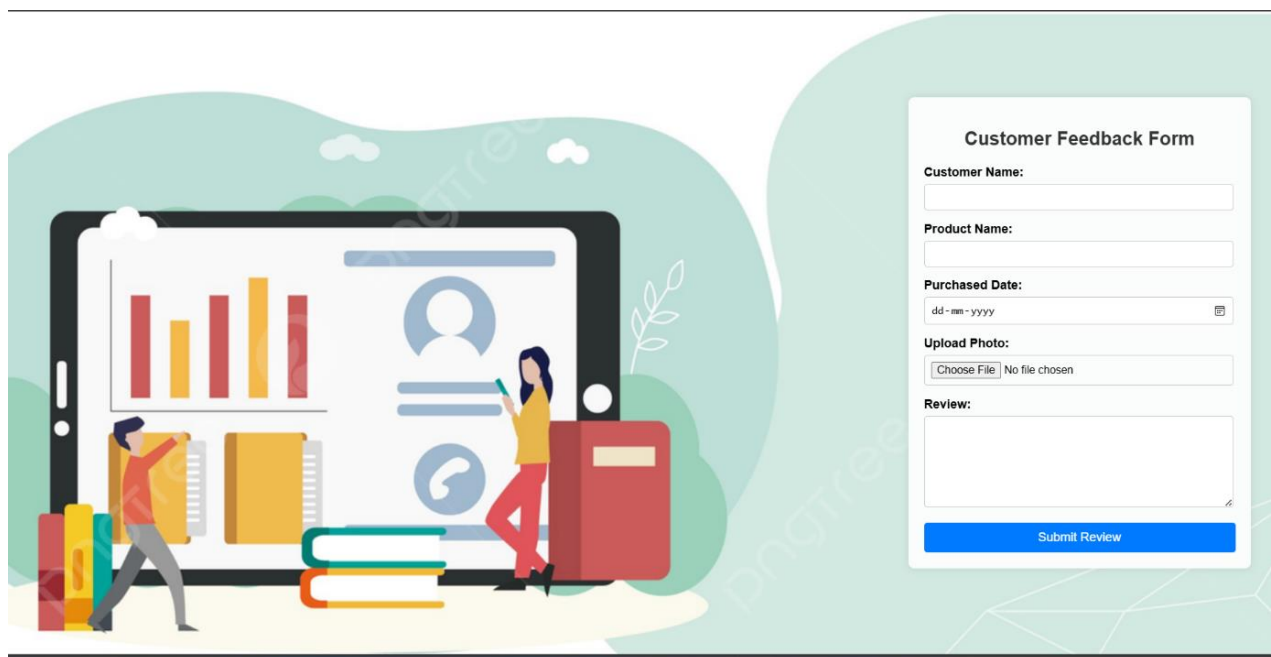## 13.2.4 Adding New Products

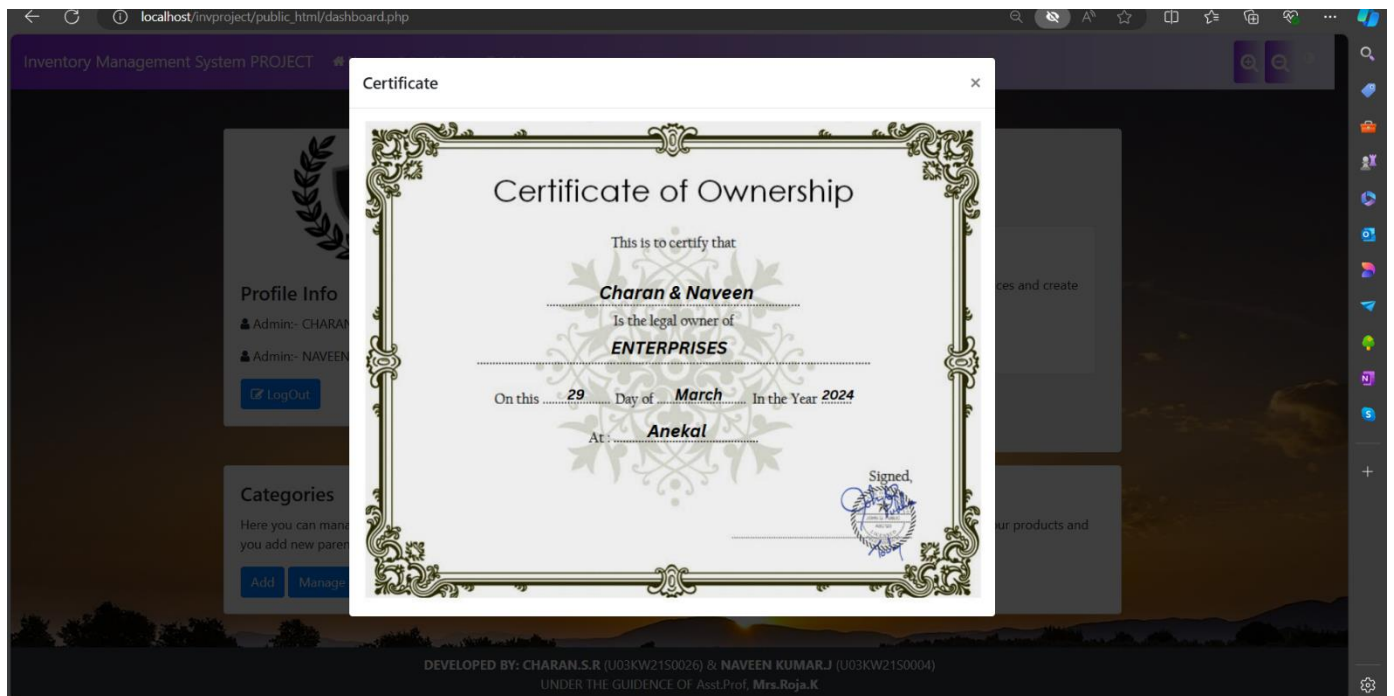## 13.2.5 Add New Brand Page

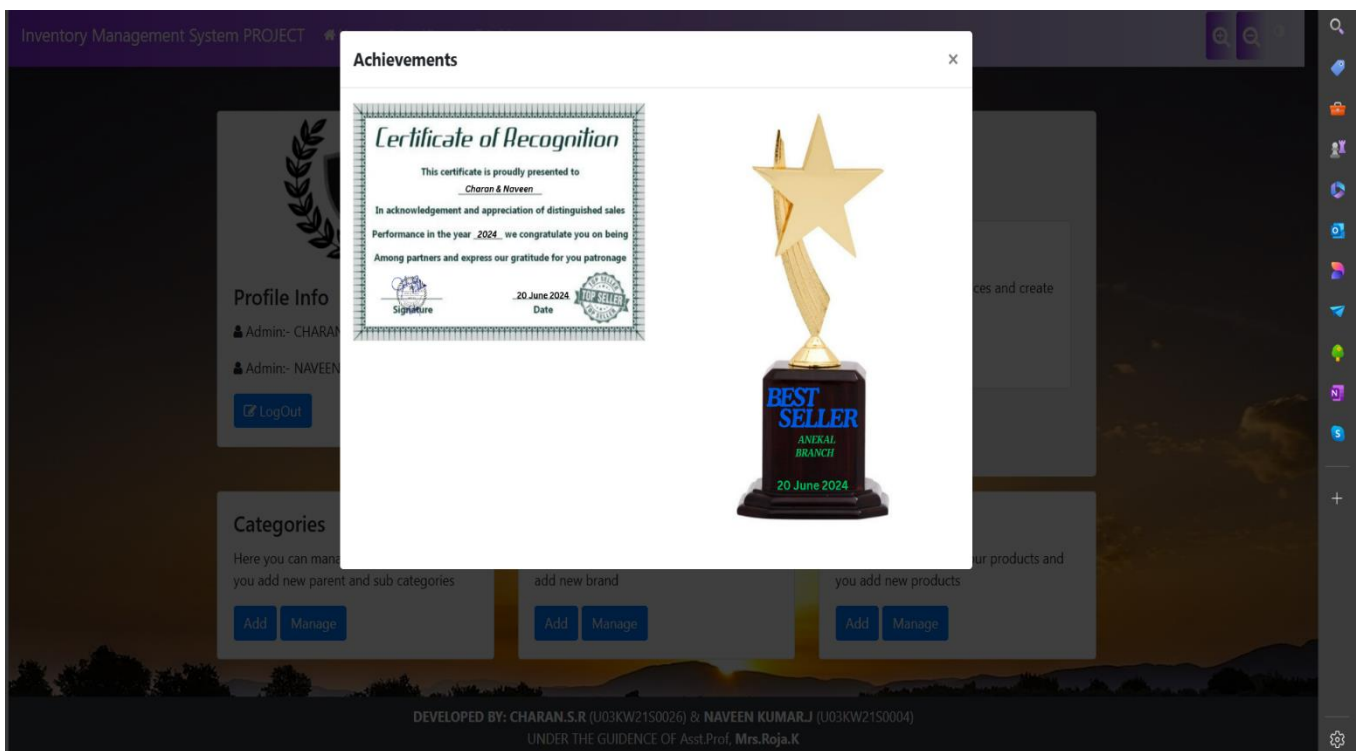## 13.2.6 Adding Category Page

13.2.7 Dashboard Page

13.2.8 Customer Feedback Form

13.2.9 Certificate Page

13.2.9 Achievement Page

14. FUTURE ENHANCEMENT

➤ Since this project was started with very little knowledge about the Inventory Management System, we came to know about the enhancement capability during the process of building it.

➤ Some of the scope we can increase for the betterment and effectiveness are listed below:

- ❖ Interactive user interface design.
- ❖ Use of Oracle as its database.
- ❖ Online payment system can be added.
- ❖ Making the system flexible in any type.
- ❖ Sales and purchase return system will be added in order to make return of products.

15.CONCLUSION

The Inventory Management System is developed and designed for recording and managing the inventory of an organization. It can also be used for different institution with some modification as per requirement.

The system can be easily updated as the other institutional requirement may not be integrated on our project.

After the continuous effort, testing and debugging the current system is ready to be implemented in an organization. The System development Project has developed the ability on us to implement the theoretical Knowledge we have gained during our studies in the real life scenario.

Some of the lesson that we had learned from the project are: -

- ❖ Sharpen the knowledge of working cooperating in working organizational environment and work place.
- ❖ Know the value of time and discipline.
- ❖ Work in group and make group decision.
- ❖ Learnt communication skill,
- ❖ Leadership,
- ❖ Quality and to make good relation.

Inventory management practices, businesses can optimize their operations, reduce costs, minimize stockouts, and enhance customer satisfaction.

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