

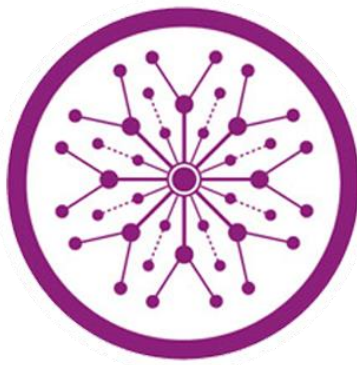
Smart Supply Chain Management System

Final Year Project

Session 2019-2023

A project submitted in partial fulfillment of the degree of

BS in Computer Science



Department of Computer Science

Faculty of Computer Science & Information Technology

The Superior University, Lahore

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Project Group Members				
Sr.#	Reg. #	Student Name	Email ID	*Signature
(i)	BCSM-F19-313	Touseef Ahmad	BCSM-F19-313@superior.edu.pk	
(ii)	BCSM-F19-320	Sohail Iqbal	BCSM-F19-320@superior.edu.pk	
(iii)	BCSM-F19-319	Ahmad Naeem	BCSM-F19-319@superior.edu.pk	

*The candidates confirm that the work submitted is their own and appropriate credit has been given where reference has been made to work of others

Plagiarism Free Certificate

This is to certify that, I Touseef Ahmad Son of Imdad Ali, group leader of FYP under registration no BCSM-F19-313 at Computer Science Department, The Superior University, Lahore. I declare that my FYP report is checked by my supervisor.

Date: _____ Name of Group Leader: Touseef Ahmad

Signature: _____

Name of Supervisor: Noman Jazeb

Co-Supervisor: Jameel Sumra

Designation: Senior-Lecturer

Designation: Senior-Lecturer

Signature: _____

Signature: _____

HoD: Dr.Irfan Ud Din

Signature: _____

Smart Supply Chain Management System

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APPROVAL

PROJECT SUPERVISOR

Comments: _____

Name: _____

Date: _____

Signature: _____

PROJECT MANAGER

Comments: _____

Date: _____

Signature: _____

HEAD OF THE DEPARTMENT

Comments: _____

Date: _____

Signature: _____

Dedication

I dedicate my dissertation work to my family and my Supervisor. A special feeling of gratitude to my loving parents whose words of encouragement and push for tenacity ring in my ears. My brother have never left my side and are very special. I also dedicate this dissertation to my many friends. I will always appreciate all they have done, especially Sohail for helping me develop my technology skills, Ahmad for the many hours of proofreading, and Danish for helping me to master the leader dots. I dedicate this work and give special thanks to my best friend Sohail.

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I wish to thank my Supervisor who were more than generous with their expertise and precious time. A special thanks to Sir Nouman Jazeb, my Supervisor for his countless hours of reflecting, reading, encouraging, and most of all patience throughout the entire process. I would like to acknowledge and thank my university for allowing me to conduct my project and providing any assistance requested. Their excitement and willingness to provide feedback made the completion of this project an enjoyable experience.

Summery

*"Smart Supply Chain Management System" is a web-based system designed for the manufacturing sector that provides information regarding a company's clients and vendors with regard to the launch of its products. This product develops a system that company management can use to track sales, vendors, and their clients. **Main feature of this system is to predicte the most sell item using the machine learning.** It meets the various requirements of the company's clients. The specific purpose of the system is to automate communication between the client, Admin and dealers of the organization*

Executive Summery

The "Smart Supply Chain Management System" is a cutting-edge web-based solution tailored for the manufacturing sector. Its main objective is to provide valuable information about a company's clients and vendors, particularly during product launches. This system empowers company management by offering effective sales, vendor, and client tracking capabilities. Leveraging advanced machine learning techniques, the system's standout feature is its ability to predict the most sought-after items, optimizing inventory management and sales strategies.

With a strong focus on meeting the diverse requirements of the company's clients, the Smart Supply Chain Management System serves as a comprehensive tool for enhancing communication and collaboration. By automating communication processes between clients, administrators, and dealers, the system streamlines the organization's supply chain management operations. This automation brings forth improved efficiency and efficacy, resulting in cost savings and increased customer satisfaction.

The system's web-based nature ensures accessibility and flexibility, enabling users to access critical information and perform essential tasks from anywhere at any time. Its user-friendly interface makes it easy for company management to navigate through various features and functionalities, making informed decisions and monitoring performance effectively.

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Chapter 1

Introduction

1. Introduction

In today's modern age, technology plays a crucial role in almost every aspect of our daily lives. From communication and entertainment to education and work, technology has become an integral part of how we live and interact with the world around us. As a result, people are constantly seeking ways to optimize their time and increase efficiency, leading to a growing demand for solutions that provide convenience and benefits.

One of the key factors driving the need for time-saving solutions is the fast-paced nature of modern society. With busy schedules and numerous responsibilities, people are looking for ways to accomplish tasks more quickly and effectively. Technology has stepped in to address this need by offering innovative tools and applications that automate processes, streamline workflows, and provide instant access to information and services.

For example, the advent of smartphones and mobile applications has revolutionized the way we communicate, access information, and perform various tasks. With just a few taps on a screen, we can check our emails, make online purchases, book appointments, order food, and even manage our finances. These conveniences not only save time but also offer a level of flexibility and accessibility that was unimaginable in the past.

In addition to smartphones, other technological advancements such as smart home devices, virtual assistants, and Internet of Things (IoT) devices have further simplified and automated everyday tasks. From controlling home appliances and adjusting the thermostat to setting reminders and managing schedules, these technologies provide a seamless integration between our physical and digital worlds.

The "smart supply chain management system" is a sophisticated web-based application specifically designed for the production sector. Its primary function is to provide comprehensive information to the company's clients and dealers regarding its product launches. This innovative product aims to streamline the management processes within the organization by enabling efficient tracking of sales, dealers, and clients.

Traditionally, the task of tracking all relevant details manually has proven to be both tedious and time-consuming. For instance, conducting product surveys and launching campaigns in different areas has been solely reliant on representatives who manually gather information. This manual approach often leads to delays and inaccuracies in communication and data collection, hampering the company's overall efficiency and productivity.

With the introduction of the smart supply chain management system, these challenges are effectively addressed. The system automates and centralizes the communication channels between clients, administrators, and dealers, resulting in seamless and prompt information exchange.

By utilizing the smart supply chain management system, the company's management can effortlessly track the progress of sales, monitor dealer activities, and maintain a comprehensive database of clients. This real-time visibility enables decision-makers to gain valuable insights into sales trends, customer preferences, and market demands. With such data at their disposal, the management can make informed decisions regarding product launches, marketing strategies, and overall business planning.

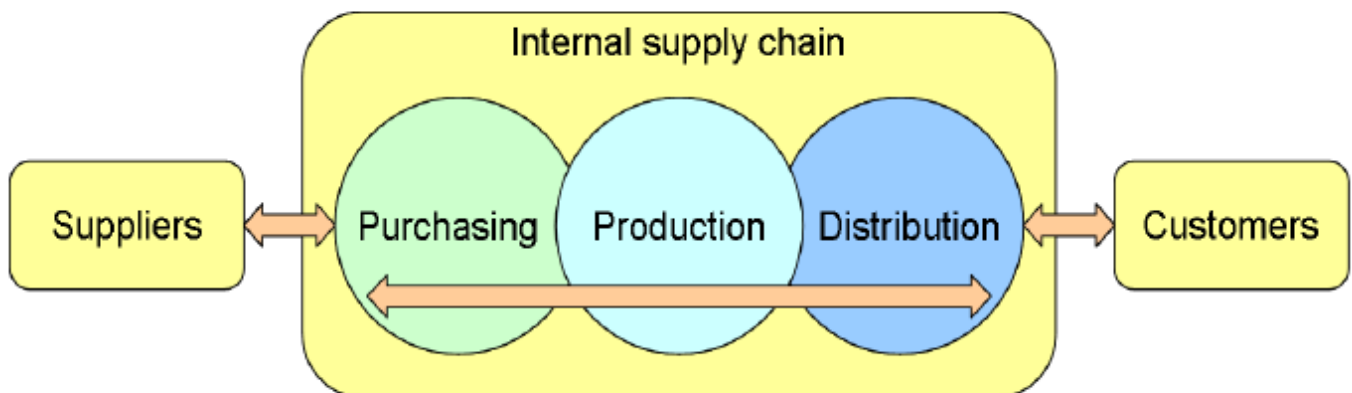
One of the key features of the system is its ability to cater to the diverse requirements of the company's clients. Through the application, clients can access relevant information about products, pricing, availability, and any updates related to their orders. This self-service functionality empowers clients to make informed decisions and fosters a stronger customer-company relationship.

Moreover, the system serves as a communication hub between clients, administrators, and dealers. It facilitates seamless interaction, allowing clients to easily communicate their queries, concerns, and feedback directly to the company. The system also enables administrators to respond promptly, ensuring efficient customer service and satisfaction.

For dealers, the smart supply chain management system provides a centralized platform to access essential information about products, inventory, pricing, and promotional materials. Dealers can efficiently manage their orders, track deliveries, and provide real-time updates to clients, enhancing their overall service quality.

Overall, the smart supply chain management system revolutionizes the company's operations by automating manual processes, reducing time-consuming tasks, and improving communication between all stakeholders involved. Its user-friendly interface, real-time data tracking, and enhanced customer service capabilities empower the company to stay competitive in the dynamic market landscape. By leveraging this innovative system, the company can streamline its supply chain processes, optimize resource allocation, and deliver an exceptional customer experience.

Pictorial view of project



Pictorial view of project

1.2 Purpose

The specific purpose of the system is to automate the communication between the management, client and dealers of the organization. This project maintains the information related to the client and dealers of the company with respect to its product launch. This will also keep track of sales and dealers. The scope of this project is to enable the user of an organization to view the issues through the LAN/Internet. Based on the Category of the user i.e. employee or administrator, the various parts of the system are made available to the users.

1.3 Document Conventions

Main headings are numerically distributed and written in Times New Roman. Where details are in Arial and Italic. Some phrases which are require to read in bold format. Priorities for higher-level requirements are assumed to be inherited by detailed requirement or whether every requirement statement is to have its own priority. This system has its own requirements according to the needs of users, and we will attempt our best to Complete all requirements which have meeting with user needs.

1.4 Project Objective

The main objective of the project is to find out the smart Smart supply chain management system. Supply chain is a lengthy process. Basically their supply chain is totally warehouse - based. In supply chain, at first they store the entire product from different manufacturer in their warehouse. The transportation cost is tota The specific purpose of the system is to automate communication between management, the client and the organization's dealers. This project stores information regarding the company's client and dealers with respect to its product launch. It will also track sales and dealers. **It will predict the best selling item at a specific time or current time using machine learning.** The aim of this project is to allow the user of the organization to view the problems via LAN/Internet. Based on the user category, i.e. employee or administrator, different parts of the system are made available to born by the manufacturing company. Then the stored products are distributed through the own vehicles to its several outlets. There is no intermediary between warehouse and manufacturing company. No product directly comes to the outlet without the hands of warehouse. Other objectives of this report are:

- To know the supply chain of supermarket.
- To understand the difference between the traditional markets supply chain and supermarkets supply chain.
- To explore the relation of shopping to the supermarket of residential area & non - residential area based on gender, income & age.
- To gather practical knowledge of supply chain management.

- To explore the variation between male and female customer in residential & non - residential area.
- Improve operational & streamlining operations
- Maintain all the project , employee , project database
- Maintain global standards of the project e development
- Reduce Manpower and manual paper works for maintaining the records offline
- Main the accuracy, integrity and consistency of the data
- Providing such a mechanism to make the man power fast to maintain all the information about the project

1.5 Intended Audience and Reading Suggestion:

A Supply Chain is basically an interconnected network of suppliers, manufacturers, warehouses, distributors and retailers. This incorporates a coordinated plan which in turn has processes to develop products by converting raw materials to finished goods.

1.6 Project Scope

SCM has a broad scope that includes sub-suppliers, suppliers, internal operations, trade customers, retail customers, and end users. It covers the management of material, information, and funds flows.

- Minimizes Operating Cost
- Boosts Customer Service
- Enhance Financial Position
- Manages Distribution
- Bring coordination among partners
- Inventory Management
- Supplier Management

Scope of Project Trough Diagram:

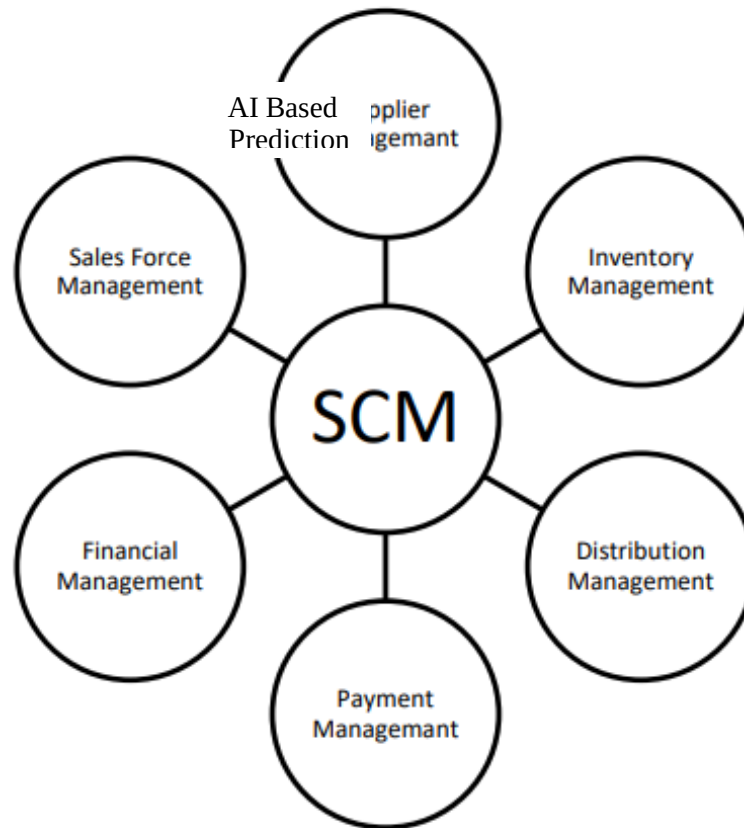


Figure # 1.6: The scope of Smart Supply Chain Management System

Chapter 2

Over All Description

2. Overall Description

2.1 Product Perspective

Web traffic can be analyzed by viewing the traffic statistics found in the web server log file, an automatically - generated list of all the pages served. A hit is generated when any file is served. The page itself is considered a file, but images are also files, thus a page with 5 images could generate 6 hits (the 5 images and the page itself). A page view is generated when a visitor requests any page within the web site a visitor will always generate at least one page view (the main page) but could generate many more. Web Traffic Analyzer is aimed towards the vendors who want to reach out to the maximum cross - section of customer and common people who can be potential customer. This project envisages bridging the gap between the seller, the retailer and the customer. Web Traffic Analyzer should be user - friendly, quick to learn ' and reliable software for the above purpose. OSM is intended to be a stand - alone product and should not depend on the availability of other software. It should run on both UNIX and Windows based platform.

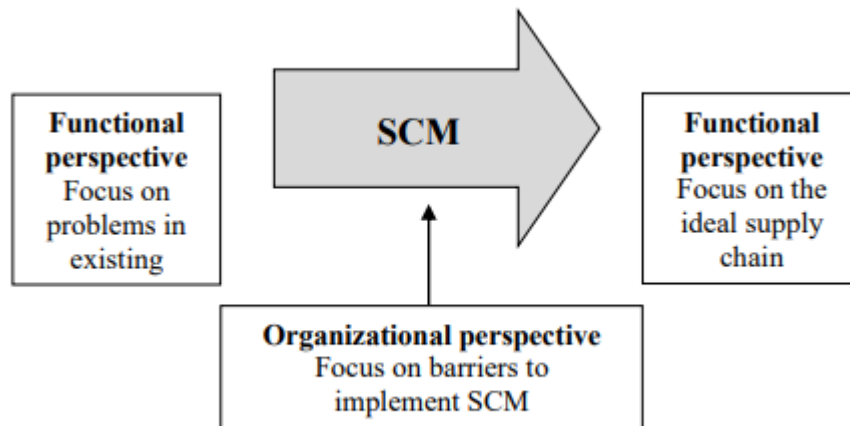


Figure # 2.1: The content in the three perspectives on a conceptual level

2.2 Product Function

Web traffic refers to the data transmitted to and from a website by its visitors. It represents a significant portion of overall Internet traffic and is measured based on the number of visitors and the pages they access. Websites monitor their incoming and outgoing traffic to understand visitor behavior, identify popular pages, detect trends, and optimize their site structure.

Monitoring web traffic provides valuable insights to website owners and administrators. By analyzing the data, they can determine which parts or pages of the site attract the most attention and engagement. This information helps them make informed decisions about content creation, marketing strategies, and user experience enhancements. For example, if a specific page receives a significant amount of traffic from a particular country, it could indicate an opportunity to target that region with localized content or advertising.

Furthermore, web traffic monitoring assists in identifying security issues and potential bandwidth limitations. Unusual spikes in traffic or suspicious activity patterns can alert administrators to possible security threats, such as DDoS attacks or unauthorized access attempts. By monitoring web traffic, website owners can take proactive measures to mitigate such risks and protect their site and visitors' data.

In some cases, websites leverage their web traffic for advertising purposes. Companies may offer advertising schemes where they pay for screen space on popular websites in exchange for increased web traffic. This mutually beneficial arrangement allows advertisers to reach a broader audience while website owners monetize their site's popularity.

2.3 User Classes and Characteristics

Every web-based Software is not usable for everyone. Every software is developed to facilitate specific users and there are some classes and characteristics to differentiate our audience from everyone.

We have 2 levels of users**User module:**

This is a normal level of user who will be very few number of functionality for website

Administration module:

This user is an admin type who has full rights on the system.

2.4 Operating Environment

Software system will operate on windows, Linux, Mac operating system.

The Smart supply chain management system is an advanced and efficient web-based application that revolutionizes the way supply chains are managed. This system utilizes the Coordinator framework in PHP for its implementation, making it a robust and scalable solution. The use of PHP, along with other programming languages such as jQuery and JavaScript, ensures a dynamic and interactive user experience.

The backbone of the Smart supply chain management system lies in its My/SQL database, which provides a secure and reliable storage solution for all the essential data. By leveraging the power of a database management system, the application can efficiently handle and process vast amounts of information related to clients, dealers, products, sales, and more.

In terms of design, the application adopts HTML and CSS to create a visually appealing and user-friendly interface. The combination of these technologies allows for the seamless integration of content and design elements, ensuring a cohesive and intuitive user experience.

In conclusion, the Smart supply chain management system is a web-based application that leverages the Coordinator framework in PHP to deliver an efficient and comprehensive solution for managing supply chains. By utilizing PHP, jQuery, JavaScript, My/SQL database, and HTML/CSS for design, the application offers a dynamic, secure, and user-friendly experience. With its automation capabilities, real-time tracking, and data analysis features, the Smart supply chain management system optimizes

supply chain operations, enhances collaboration, and empowers organizations to make informed decisions for improved efficiency and customer satisfaction.

2.5 Design and Implementation Constraints

The amount of traffic seen by a web site is a measure of its popularity. By analyzing the statistics of visitors it is possible to see shortcomings of the site and look to improve those areas. It is also possible to increase (or, in some cases decrease) the popularity of a site and the number of people that visit it.

Her product is developed using **HTML5, CSS3, JAVASCRIPT** and **PHP XAMPP** server.

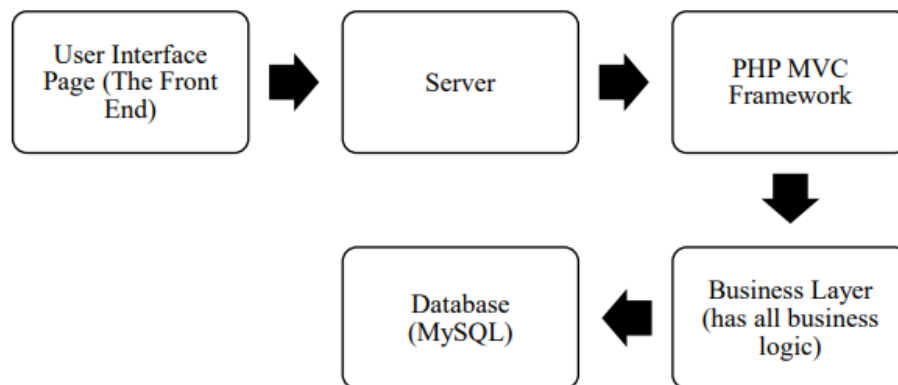


Figure #2.5: The project architecture.

2.6 User Documentation

The product will include user manual. The user manual will include product overview, complete configuration of the used software (such as XAMPP server) technical detail's, backup procedures and contact information which will include email address.

The database will be created in the XAMPP server.

2.7 Assumptions and Dependencies

All the data entered will be correct and up to date. This software package is developed using as front end which is supported by **PHP. MySQL** as the back end which is supported by Window 7, 8, 10, 11 etc.

It is assumed that the user will have enough knowledge of basic computer usage and basic concepts of web/internet usage to take care of the system.

The product needs following third party product.

- XAMPP server to store database.
- PHP to develop the product.

LOGIN

Email Address

Password

☐ Remember me

Login

[Forgot Password?](#)

Knowledge Base
Projects
Invoices
Contracts
Estimates
Proposals
Support

Files Calendar

Good Afternoon touseef!

Projects Summary

0 Not Started	1 In Progress	0 On Hold	0 Cancelled	0 Finished
------------------	------------------	--------------	----------------	---------------

Welcome Admin
Dashboard Options

DASHBOARD
CUSTOMERS
SALES
SUBSCRIPTIONS
EXPENSES
CONTRACTS
PROJECTS
TASKS
SUPPORT
LEADS

INVOICES AWAITING PAYMENT
0 / 1

CONVERTED LEADS
0 / 0

PROJECTS IN PROGRESS
1 / 1

TASKS NOT FINISHED
1 / 1

INVOICE OVERVIEW

0 DRAFT	0.00%
0 NOT SENT	0.00%
0 UNPAID	0.00%
0 PARTIALLY PAID	0.00%
0 OVERDUE	0.00%

ESTIMATE OVERVIEW

0 DRAFT	0.00%
0 NOT SENT	0.00%
0 SENT	0.00%
0 EXPIRED	0.00%
0 DECLINED	0.00%

PROPOSAL OVERVIEW

0 DRAFT	0.00%
0 SENT	0.00%
0 OPEN	0.00%
0 REVISED	0.00%
0 DECLINED	0.00%

My To Do Items

Latest to do's

to do item list descriptionn
2023-06-06 15:20:03

Latest finished to do's

No finished todos found

Chapter 3

System Features

3. System Features

Features are the “tools” you use within a system to complete a set of tasks or actions. Functionality is how those features actually work to provide you with a desired outcome.

The Supply Chain is the movement of materials as they flow from their source to the end customer. Supply Chain includes purchasing, manufacturing, warehousing, transportation, customer service, demand planning, supply planning and Supply Chain management. It is made up of the people, activities, information and resources involved in moving a product from its supplier to customer.

System Features are mentioned below:

- **Online Request Management:** The system allows clients to submit requests online, providing a convenient and streamlined process. This feature eliminates the need for manual paperwork and enables quick submission of requests.
- **Request Approval Workflow:** The system includes an online approval process that involves higher authorities. This feature ensures that requests are reviewed and approved by the appropriate personnel before further action is taken.
- **Online Delivery Schedule:** The system provides clients with real-time updates on product delivery time and date. This feature enhances transparency and allows clients to plan accordingly.
- **Inventory Management:** The system includes a comprehensive inventory module that stores and manages data related to stock levels, item availability, and tracking. This feature helps in maintaining optimal inventory levels, reducing stockouts, and ensuring timely order fulfillment.
- **Inventory Search Functionality:** The system incorporates a search feature within the inventory section, enabling users to quickly locate specific items or product information. This feature improves efficiency and saves time by eliminating the need for manual searching.
- **Quotation Management:** The system facilitates the storage and updating of quotations from retailers or suppliers. This feature helps in maintaining accurate pricing information and allows for effective comparison and negotiation.
- **Labor Information Management:** The system stores labor-related information, including costs and contacts. This feature provides visibility into labor resources, enables cost analysis, and facilitates effective labor management.

- **Predictive Analytics:** The system utilizes machine learning algorithms to predict the most sellable items. This feature helps in demand forecasting, optimizing inventory levels, and ensuring the availability of popular products.
- **Manufacturing Cost Tracking:** In the case of manufacturing processes, the system captures and tracks manufacturing costs. This feature provides insights into production expenses, helps in cost analysis, and supports decision-making related to pricing and profitability.
- **Logistics Information:** The system contains relevant logistics information, including transportation details, routes, and carriers. This feature facilitates efficient management of logistics, ensuring timely and cost-effective product movement.
- **Client Feedback Mechanism:** The system allows clients to provide feedback on their experience. This feature enables continuous improvement by gathering valuable insights and addressing any issues promptly.
- **Cloud Server Backup:** To ensure data integrity and availability, the system stores data on a cloud server. This feature provides a backup in case of a main server crash, minimizing the risk of data loss and ensuring business continuity.

By incorporating these features, the Smart supply chain management system empowers organizations to effectively manage their supply chain operations, optimize resources, enhance customer service, and make data-driven decisions to drive overall efficiency and success.

3.1 User Management:

3.1.1 Description and Priority

Provide a user with a page to login in the dashboard to request/order for the required product or see main order/request panel.

Priority = 9

3.1.2 Stimulus/Response Sequences

Stimulus: User clicks on Login Link.

Response: Login Page is displayed.

Stimulus: User Enters Username and Password.

Response: Username and Password are validated from MySQL Database.

Stimulus: User Clicks on Login Button.

Response: Home Page is displayed if Username and Password is correct else Error Message is displayed.

3.1.3FunctionalRequirements

REQ-1: The user shall be able to click the login link.

To fulfill this requirement, the Smart supply chain management system will provide a user-friendly interface with a clearly visible login link. The login link may be positioned prominently on the homepage or in the navigation menu to ensure easy access for users. When the user clicks on the login link, the system will initiate the login process.

REQ-2: The user shall be able to enter his username and password.

Upon clicking the login link, the system will present a login page where the user can enter their username and password. The login page will include input fields for username and password along with appropriate labels and placeholders to guide the user. The system will ensure that the input fields support text entry and provide an intuitive and responsive user interface.

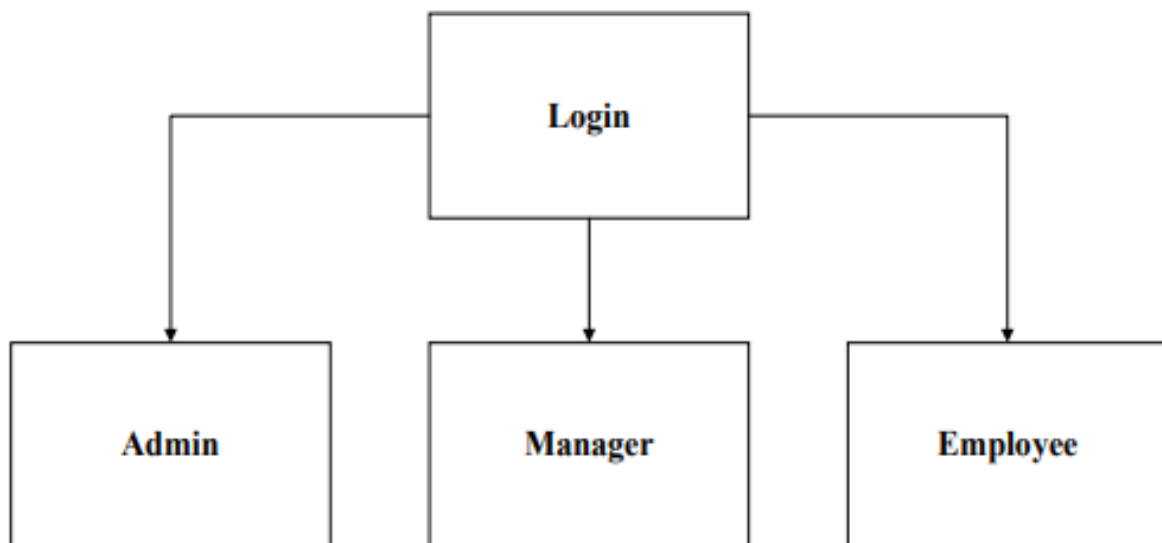
REQ-3: The database shall be able to validate the username and password and move the user to the next page.

Once the user enters their username and password and clicks the "Login" or "Submit" button, the system will initiate the validation process. The system will query the database to verify the entered username and password against the stored credentials. If the provided credentials are valid, the system will grant access and move the user to the next page, such as a dashboard or a personalized user interface.

In case the entered credentials are invalid, the system will display an error message indicating that the login attempt was unsuccessful. This feedback will guide the user to enter the correct credentials or take appropriate action, such as resetting their password.

To ensure security, the Smart supply chain management system will employ appropriate measures such as encryption and secure transmission protocols to protect the user's login credentials during transmission and storage. These security measures will help safeguard sensitive user information and prevent unauthorized access to the system.

Overall, the Smart supply chain management system will provide a seamless and secure login process, allowing users to access the system by clicking the login link, entering their username and password, and validating their credentials against the database. This login functionality will serve as a gateway for users to access the system's features and perform various tasks within the Smart supply chain management system.



Non Functional Requirement:

Performance: The Smart supply chain management system is designed to handle multiple users simultaneously using any web browser. The system is optimized to ensure fast response times and smooth performance, even with a high volume of concurrent users. Load balancing techniques and server optimization strategies are employed to efficiently distribute the workload and ensure optimal performance.

Reliability: To ensure data consistency and reliability, the system follows transaction processing principles when updating the database. This means that database operations are treated as atomic units, ensuring that they are either fully completed or rolled back in case of any failures or errors. By adhering to transaction processing, the system avoids data inconsistencies and maintains the integrity of the data.

Availability: The Smart supply chain management system is deployed on a public shared server, ensuring its availability at all times. Users can access the system from anywhere in the world using an internet connection. The server hosting the system is designed with high availability measures, such as redundancy and failover mechanisms, to minimize downtime and ensure continuous accessibility.

Security: The Smart supply chain management system prioritizes security to protect sensitive data and prevent unauthorized access. Various security mechanisms are implemented to safeguard the system from external threats. This includes user authentication, access control, encryption of sensitive data, and secure transmission protocols. Regular security audits and updates are conducted to address any potential vulnerabilities and ensure ongoing protection.

Maintainability: The system is developed using PHP, a widely-used and well-documented programming language. This makes the system easily maintainable, as PHP developers can readily understand and modify the codebase. The system follows best practices for code organization, documentation, and version control, facilitating efficient maintenance and future enhancements.

Portability: The Smart supply chain management system is designed with portability in mind, allowing for easy migration to different servers or hosting environments. The system is built using standard web technologies and frameworks, making it compatible with various operating systems and web servers. This portability ensures flexibility and adaptability as the system can be seamlessly transferred to different hosting providers or infrastructure setups.

By addressing these non-functional requirements, the Smart supply chain management system ensures optimal performance, reliability, availability, security, maintainability, and portability. These qualities contribute to a robust and user-friendly system that meets the needs of the users and provides a seamless experience in managing the supply chain operations.

Chapter 4

External User Interface

4. External User Interface

4.1 User Interfaces

HTML has been used for developing the User Layout for the system

JavaScript has been used for creating all the validations and client side scripting functionality

CSS has been used for designing the web pages of the system

4.2 Hardware Interfaces

Hardware Environment	PC, laptops, mac Linux
System Configuration	2,4 GB RAM
Operating System	Windows, IOS
Hard Disk	80 GB

4.3 Software Interfaces

Front End	HTML5, CSS3, JavaScript, PHP
Backend	PHP, XAMPP server
Database	My SQL

4.4 Communications Interfaces

As it is mentioned that the solution, we are providing is a web-based solution, therefore common web application standards will be used for communication. For example, HTTP protocol

The communication between the different parts of the system is important since they depend on each other. However, in what way the communication is achieved is not important for the system.

Chapter 5

Other Non Functional Requirements

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Chapter 6

WBS Project Management

6.WBS Project Management

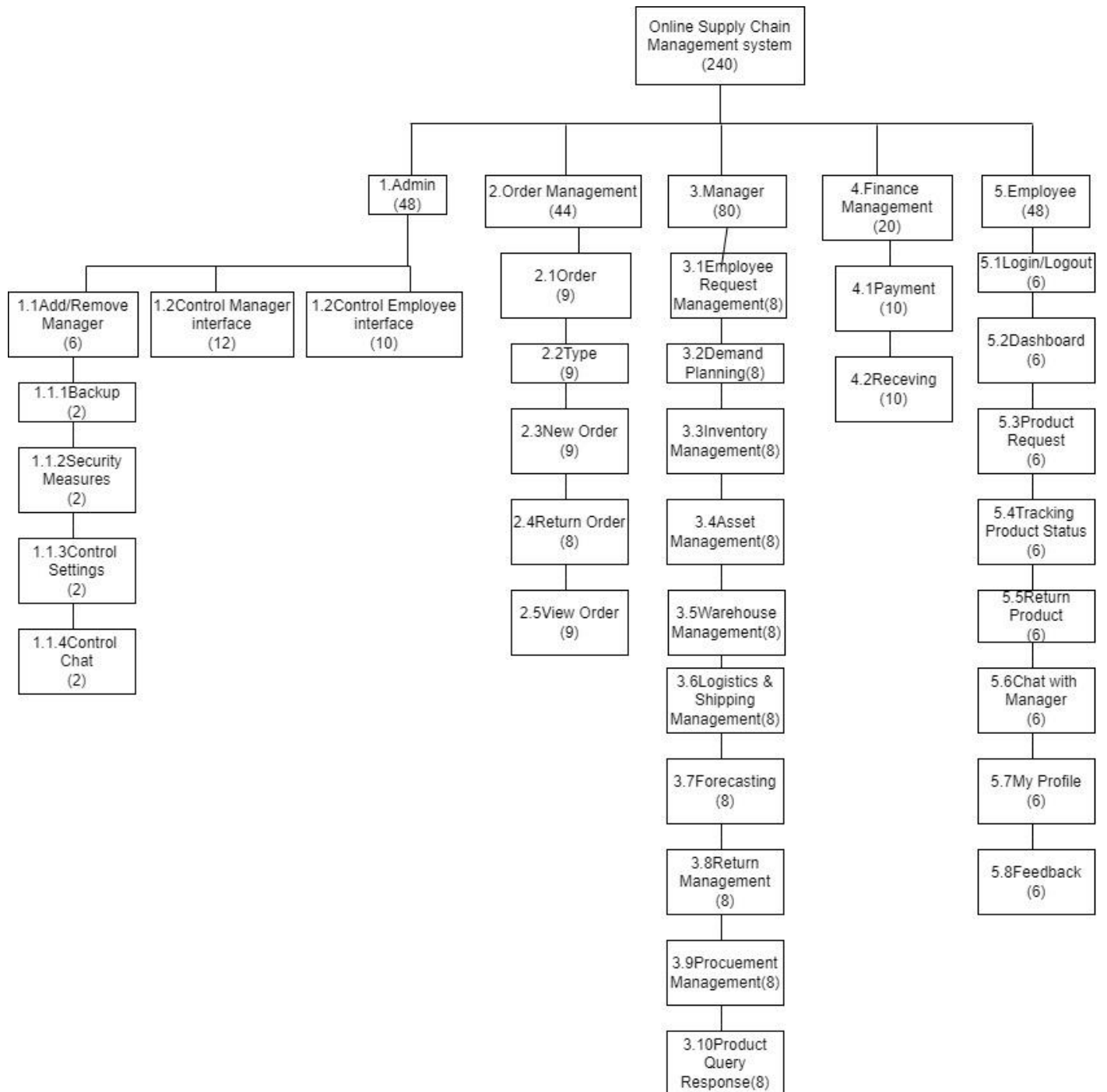


Fig 6.1 WBS

WBS #	WBS Deliverable	Duration (# of Days)	Responsible Team Member(s) & Role(s)
1.1	Requirement Gathering	05	All of us
1.2	Requirement Analyze + Documentation	10	All of us
2.1	Project Planning	05	All of us
2.2	General Management	05	Touseef Ahmad
3.1	UX-UI Design	15	All of us
3.2	Coding	30	Sohail, Touseef Ahmad
3.3	Database Design	10	Touseef Ahmad
3.4	Database Development	05	Touseef Ahmad, Sohail, Ahmad naeem
4.1	Test Plans	05	Ahmad
4.2	Test Cases	05	Sohail
4.3	Testing	05	Touseef Ahmad, Sohail, Ahmad naeem
4.4	Bug Fixing	05	Sohail, Touseef Ahmad
4.5	Final Testing	05	All of us
5.1	Deployment	05	All of us
5.2	Training	05	All of us

WBS Deliverable

Chapter 7

Analysis Model

7. Analysis Model

7.1 Use Case Diagram

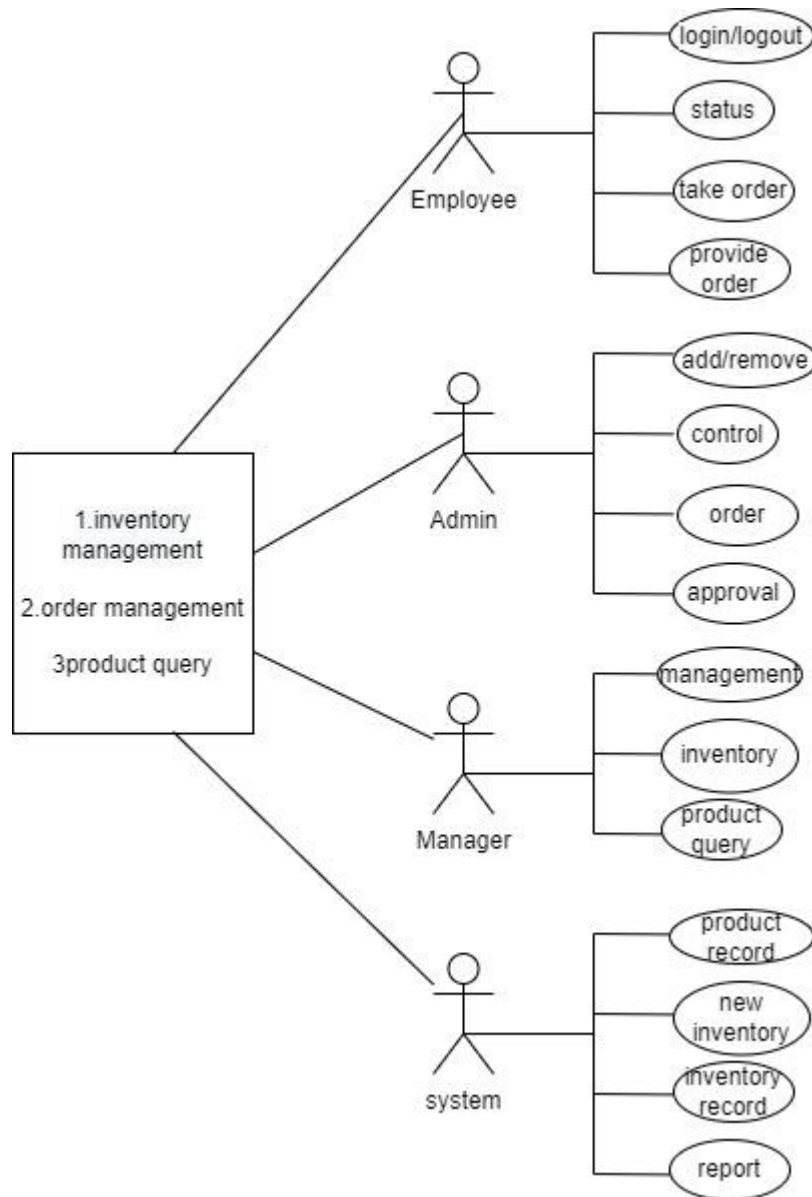


Fig 7.1 Use Case Diagram.

7.2 Class diagram

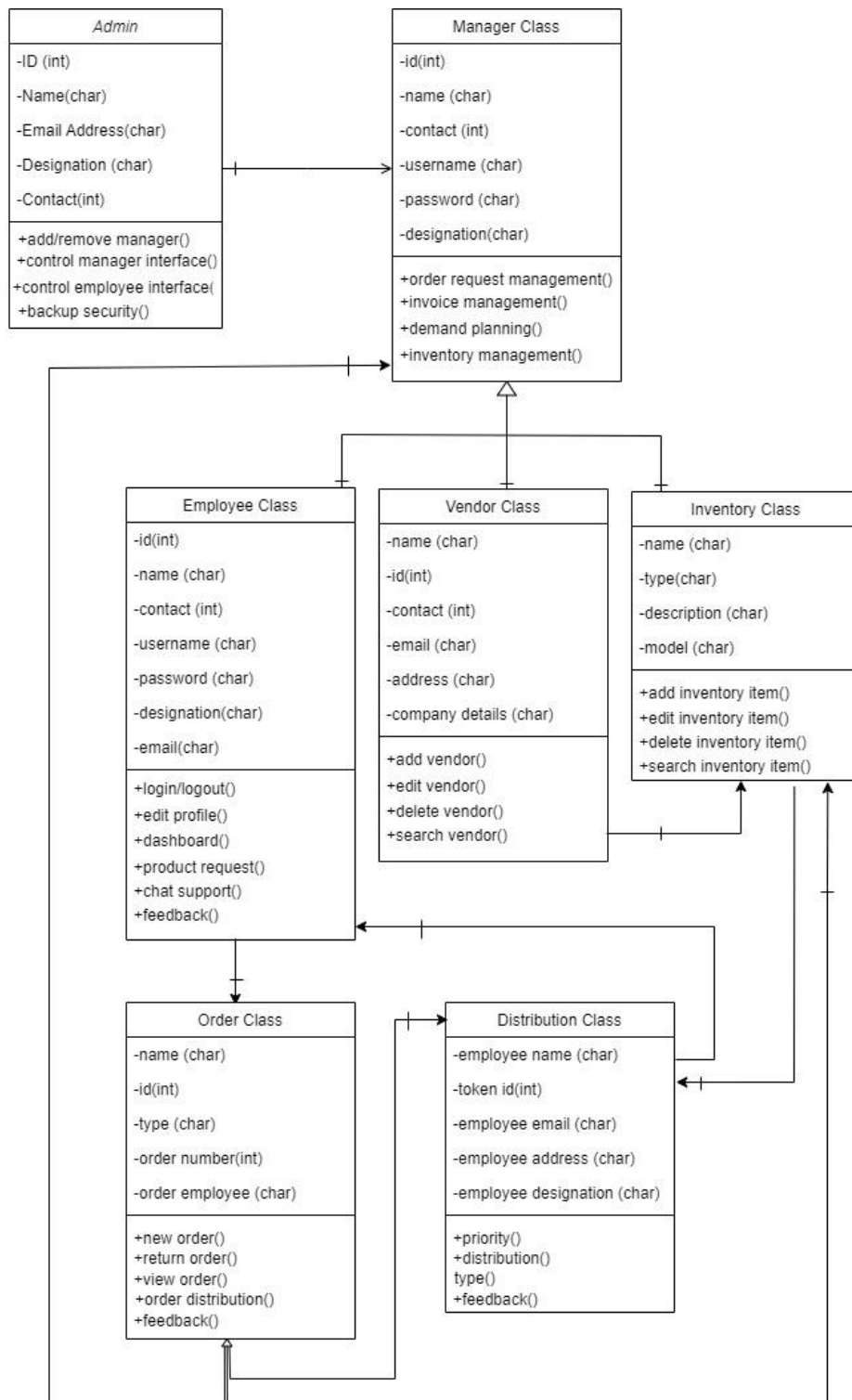


Fig.7.2. Class diagram

7.3 Object Diagram

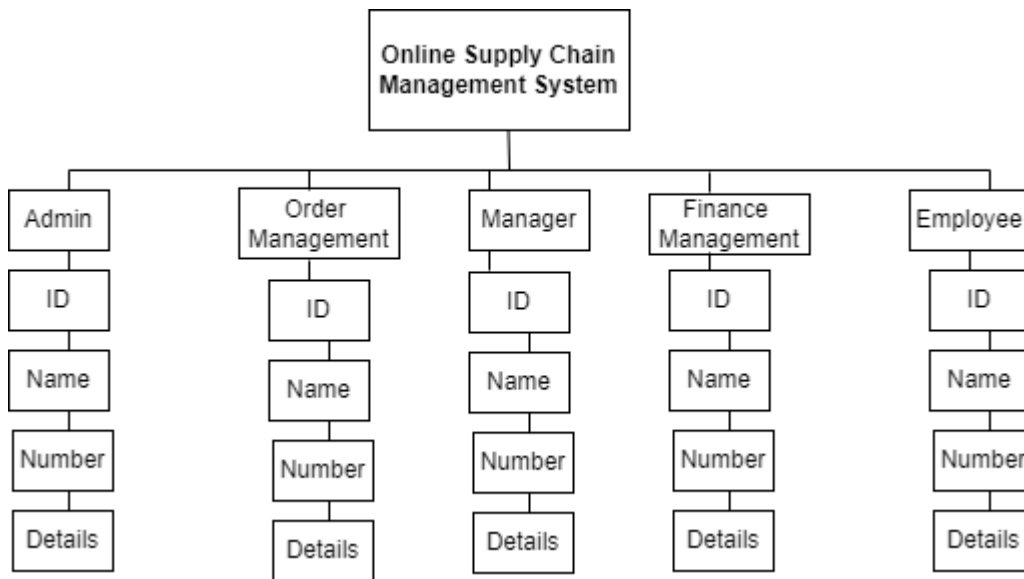


Fig.7.3 Object Diagram

7.4 Sequence Diagram

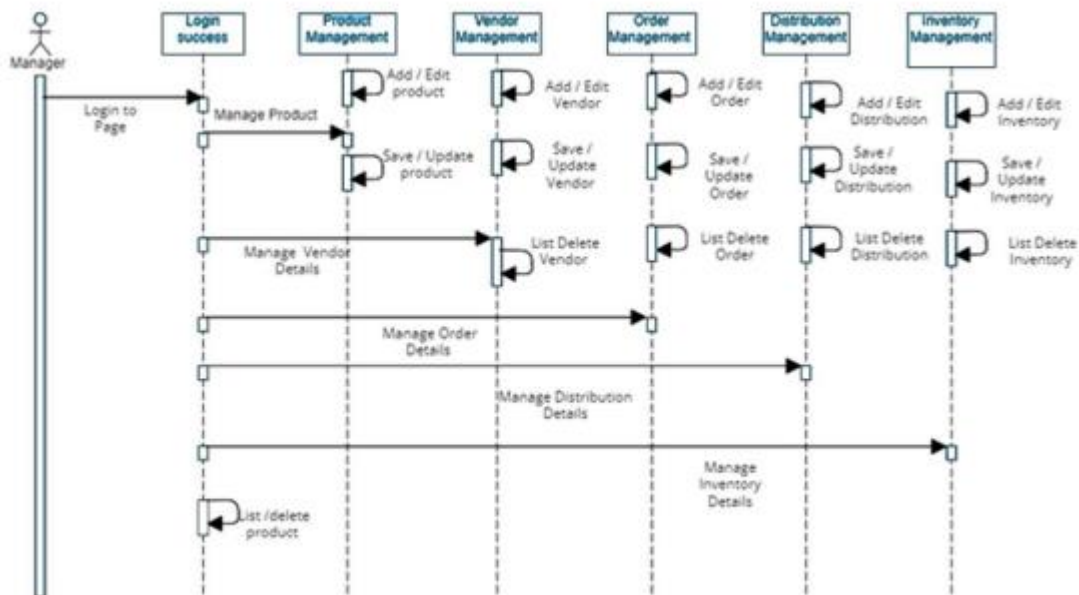


Fig.7.4Sequence Diagram

7.5. Architecture Diagram:

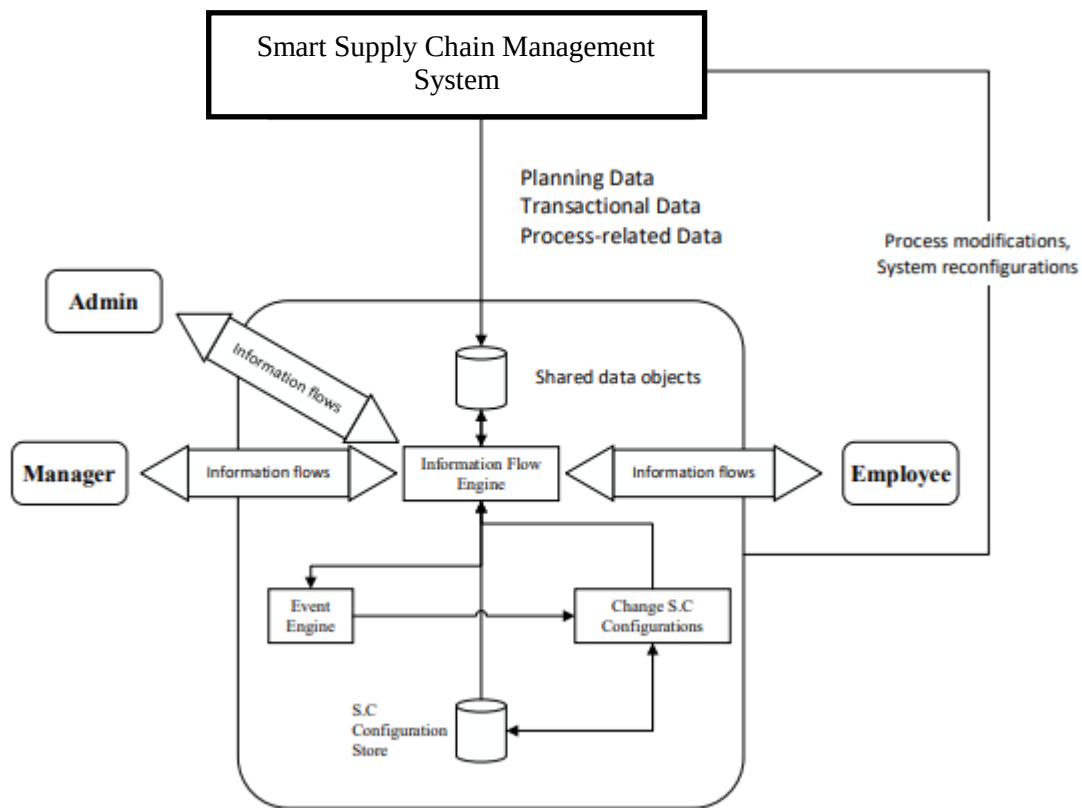


Fig.7.5Architecture Diagram

7.6 ERD Diagram:

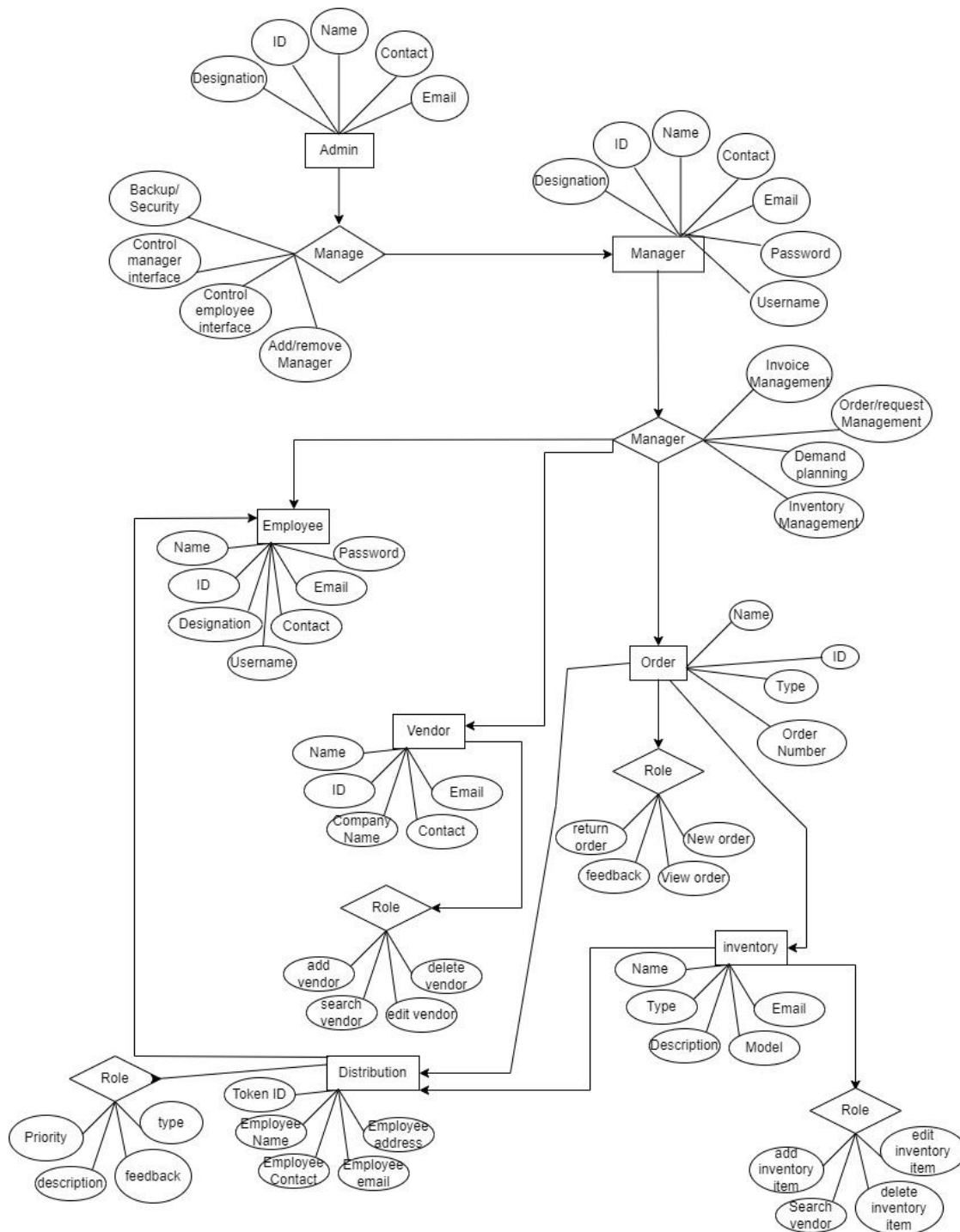


Fig.7.6ERD Diagram

7.8 State Transition Diagram:

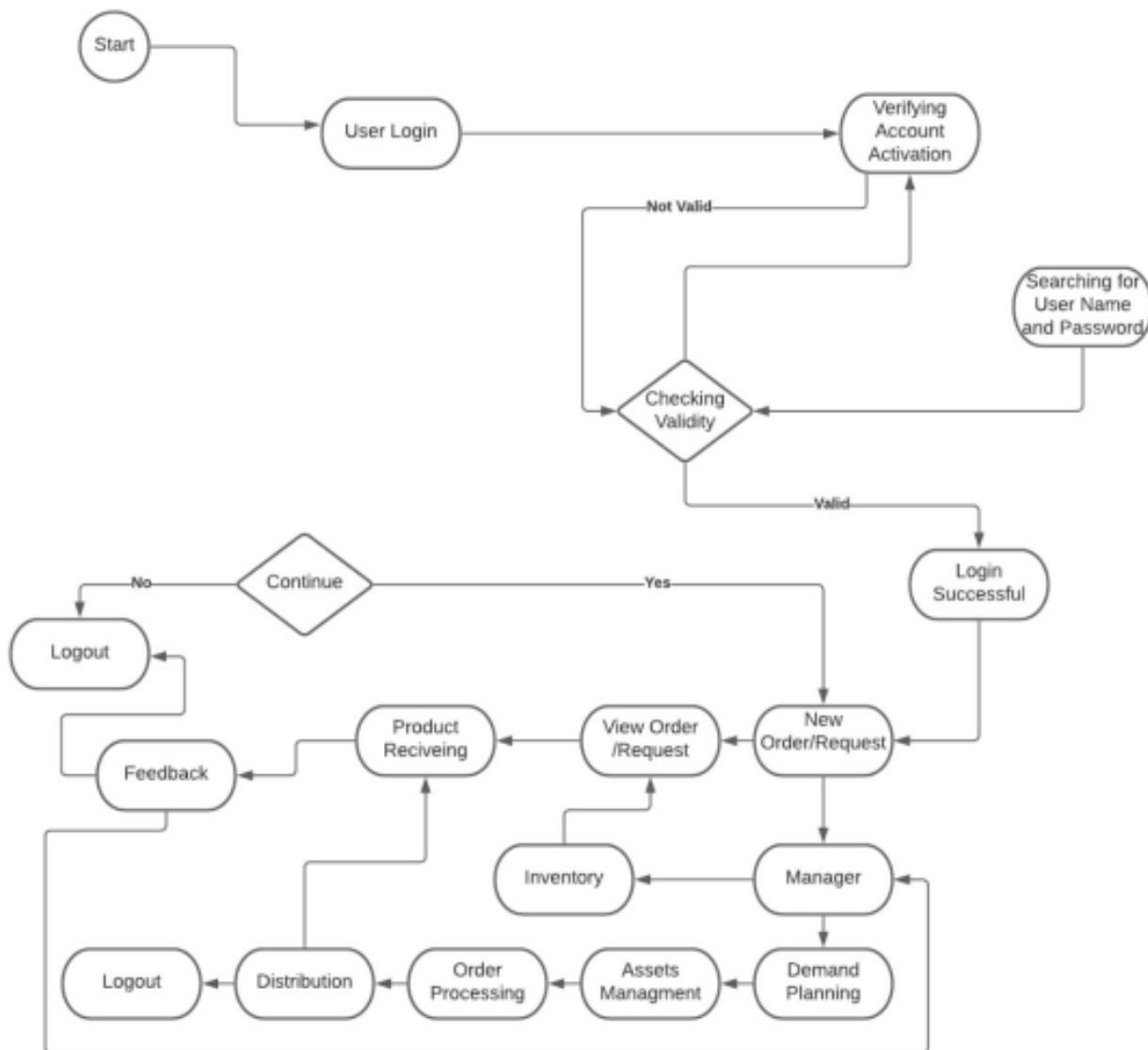


Fig.7.8State Transition Diagram

8. Tools & Technologies

In online learning forum, we used the following Languages. We will discuss each briefly.

1. HTML
2. CSS
3. Java script
4. PHP
5. XAMPP Server

8.1 Programming Languages

HTML, CSS, JavaScript and XAMPP server

8.2 Databases/Data storages

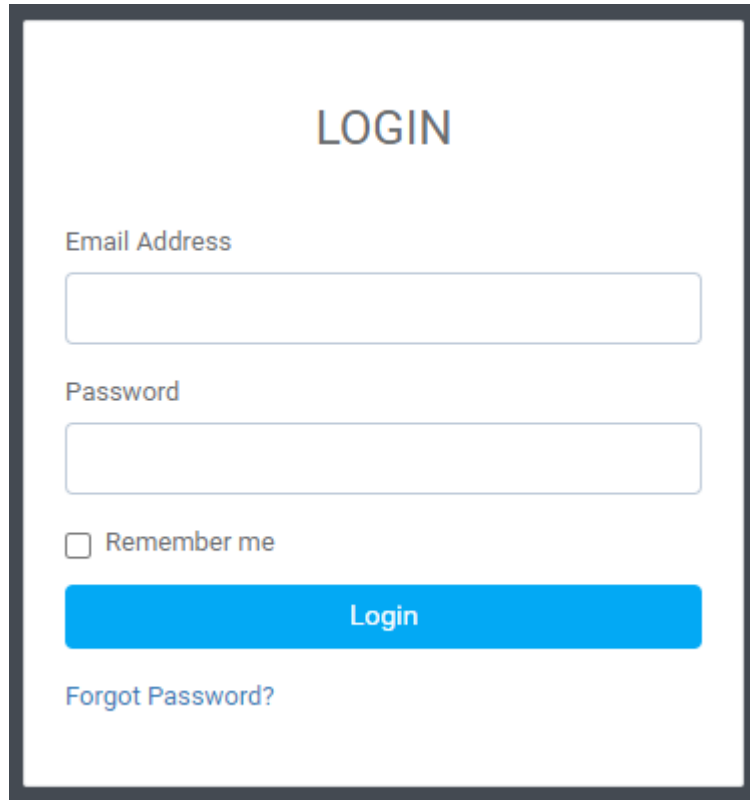
XAMPP Server

8.3 Operating System

`window 7,8,10

Appendix A: Glossary

Sr#	Acronym		Stands for
1	Admin		Administrator
2	ID		Identification
3	HTML		Hypertext Markup Language
4	CSS		Cascading style sheet
5	CODEIGNITOR		Hypertext Pre-processor
6	PHP		Backend coding
7	DBMS		Data Base Management System
8	XAMPP		Server Name
9	RAM		Random Access Memory



A login form titled "LOGIN" with a white background and a dark border. It contains two input fields: "Email Address" and "Password". Below the password field is a checkbox labeled "Remember me". A blue "Login" button is positioned below the checkbox. At the bottom, there is a link "Forgot Password?" in blue text.

LOGIN

Email Address

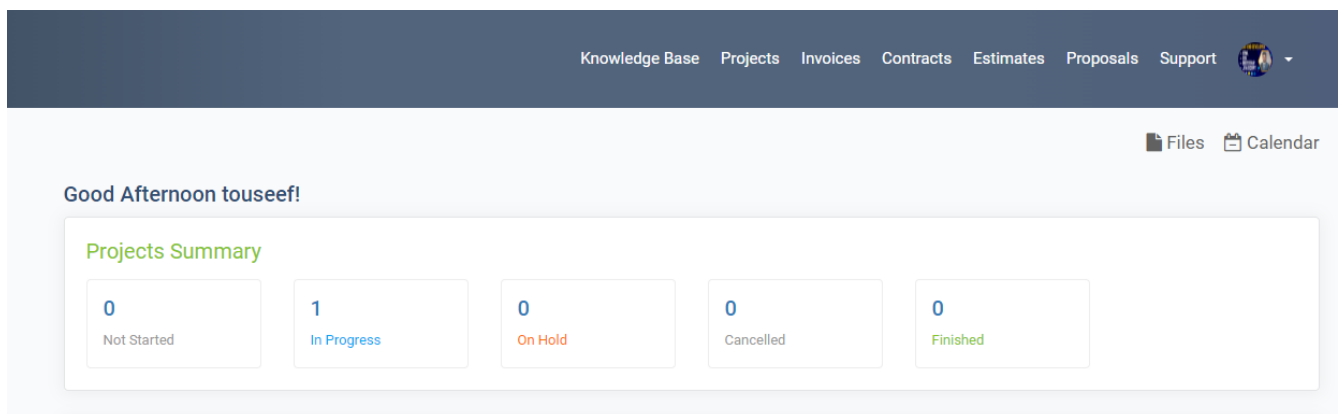
Password

☐ Remember me

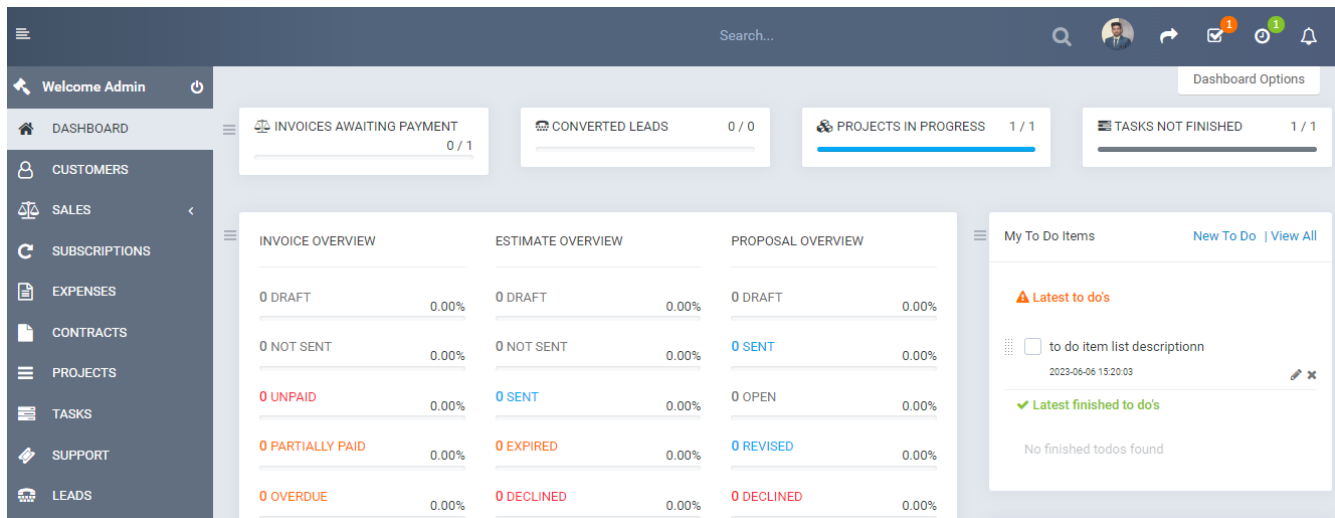
Login

[Forgot Password?](#)

Login Interface for User



Dashboard for Client Side



Dashboard for Admin Side

Reference And Bibliography

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6. <https://www.investopedia.com/terms/s/supplychain.asp>
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