

INVENTORY MANAGEMENT SYSTEM FOR RETAILERS

A Project Report

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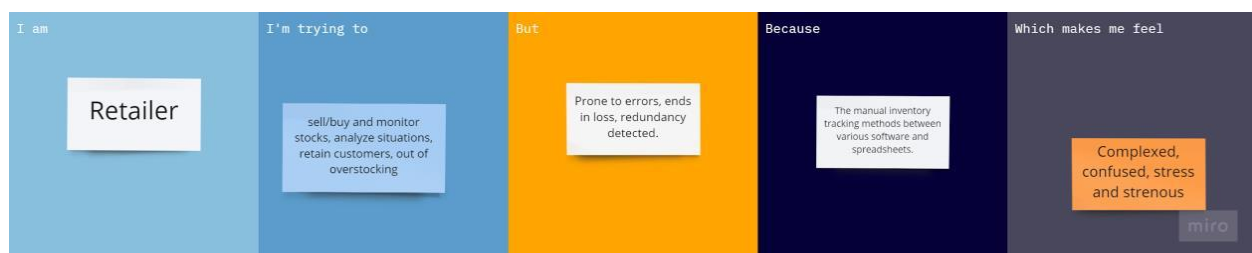
1 INTRODUCTION

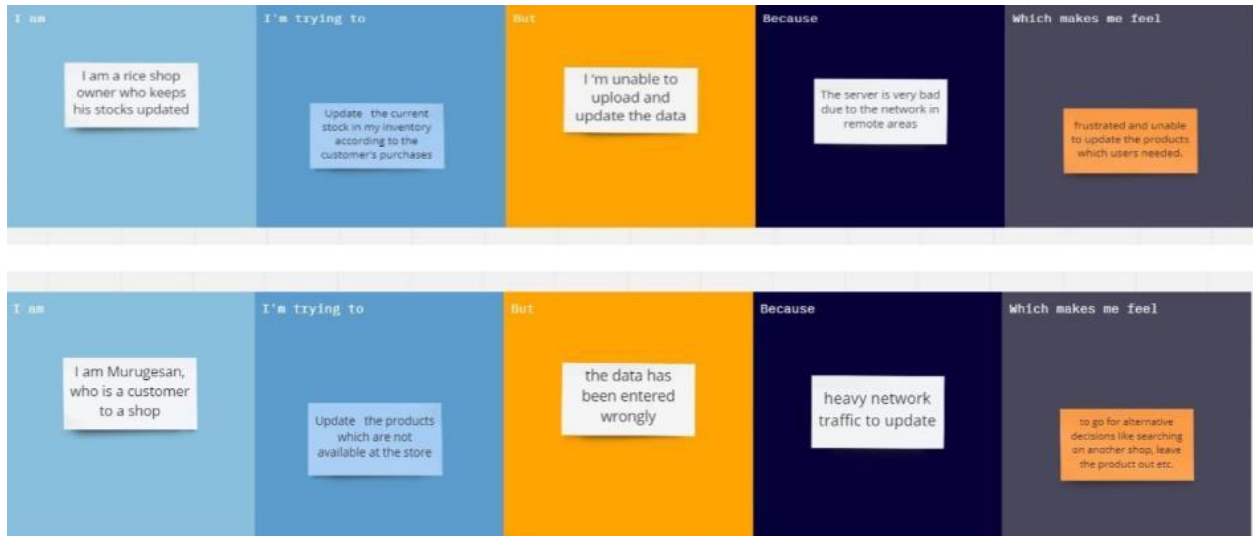
1.1 Project Overview

The project Inventory Management System is a complete web based application. An inventory management system is the combination of technology (hardware and software) and processes and procedures that oversee the monitoring and maintenance of stocked products, whether those products are company assets, raw materials and supplies, or finished products ready to be sent to vendors or end consumers. Inventory Management System plays an important role because it reduces the stress, monitoring of products, making balance sheets and many more which was done manually. Simply Inventory Management System overtook the manual things and also it optimizes the cost and time constraint. Inventory Management Software is an open source project developed by procedural PHP, MySQL, bootstrap, and jQuery. This application is based on web application and developed with procedural PHP, MySQL database, jQuery, data tables plugins, and bootstrap. This application provides the users to manage brands, category, product, orders, and report. This system provides best inventory management software features. This system can be also used for small business. It is free web based inventory management software. In brands page, the admin can add, update, and remove the brand's information. In product section, the admin can add the product information and manage the stock. In order section, the application will manage the stock of the product and generates the total amount of payment to be paid by the client. The application can also generate the orders report on based on the month you select.

1.2 Purpose

The main purpose of inventory management is to help businesses easily and efficiently manage the ordering, stocking, storing, and using of inventory. By effectively managing your inventory, you'll always know what items are in stock, how many of them there are, and where they are located.





2 LITERATURE SURVEY

2.1 Existing problem

There is a number of Inventory Management System available in the market. After doing the research, I have come to know that most of them are limited to few products. Some others are lacking in good UI. Marketing points are not much focused on increasing sales.

Customer management system and Inventory Management system can't be linked due to different organization which leads to compromising the client satisfaction level. Most of them are not using the cloud computing concept but we are trying to develop such a system that is for everyone rather than for only big companies or for a small organization.

Most of them are expensive to use and their maintenance is generally not cheap. Our system is Pay-as-per-Use.

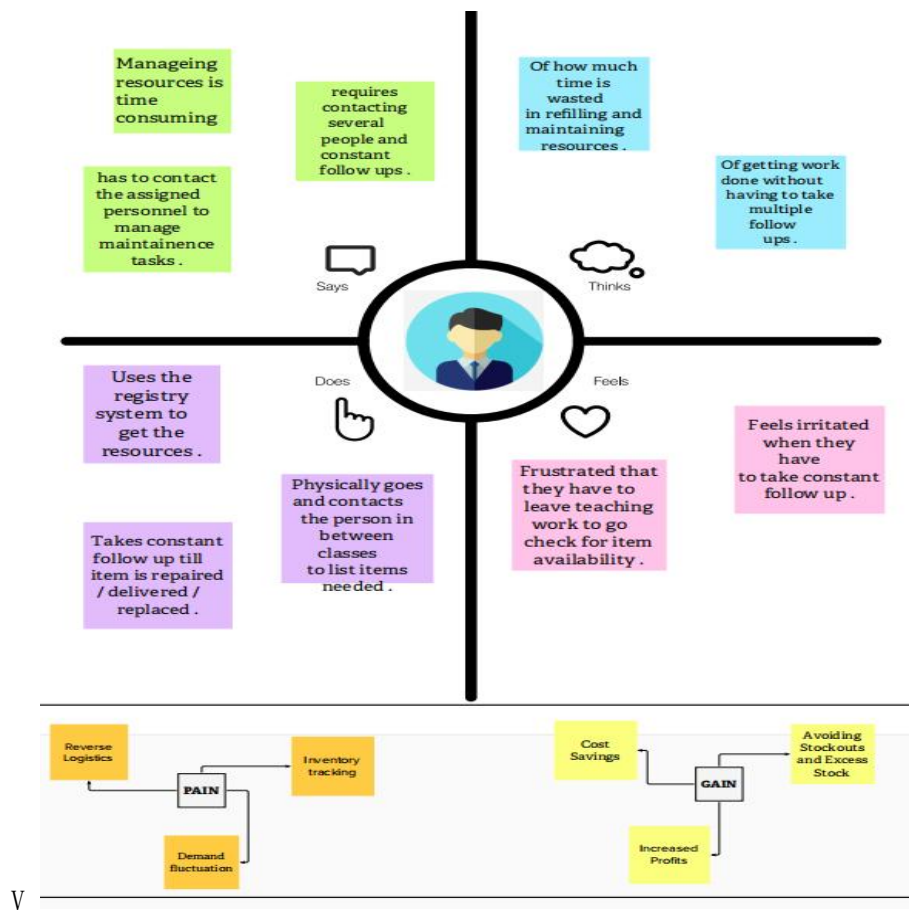
2.2 References

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3 IDEATION AND PROPOSED SOLUTION

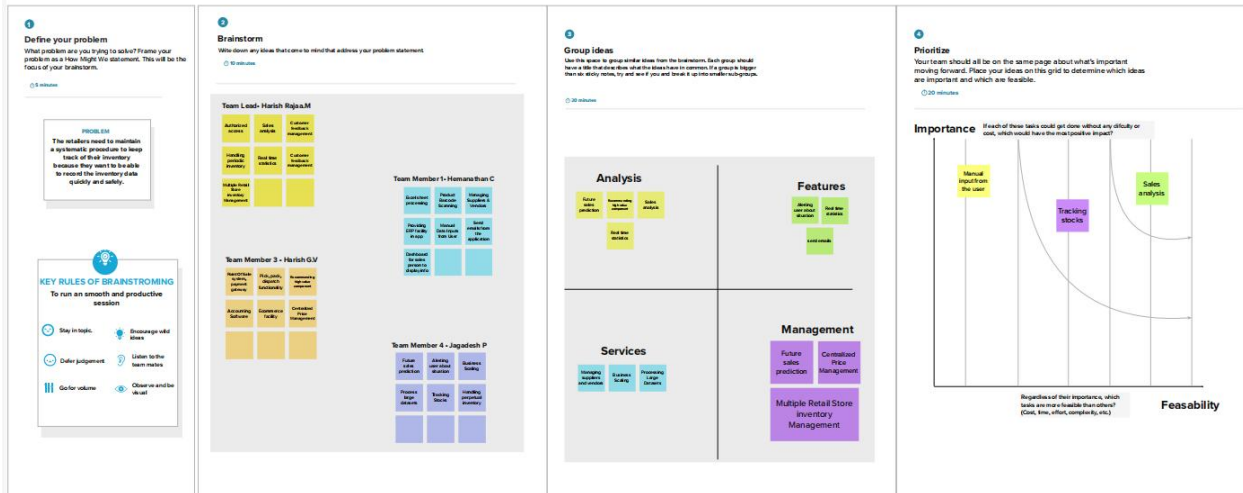
3.1 Empathy Map Canvas

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.



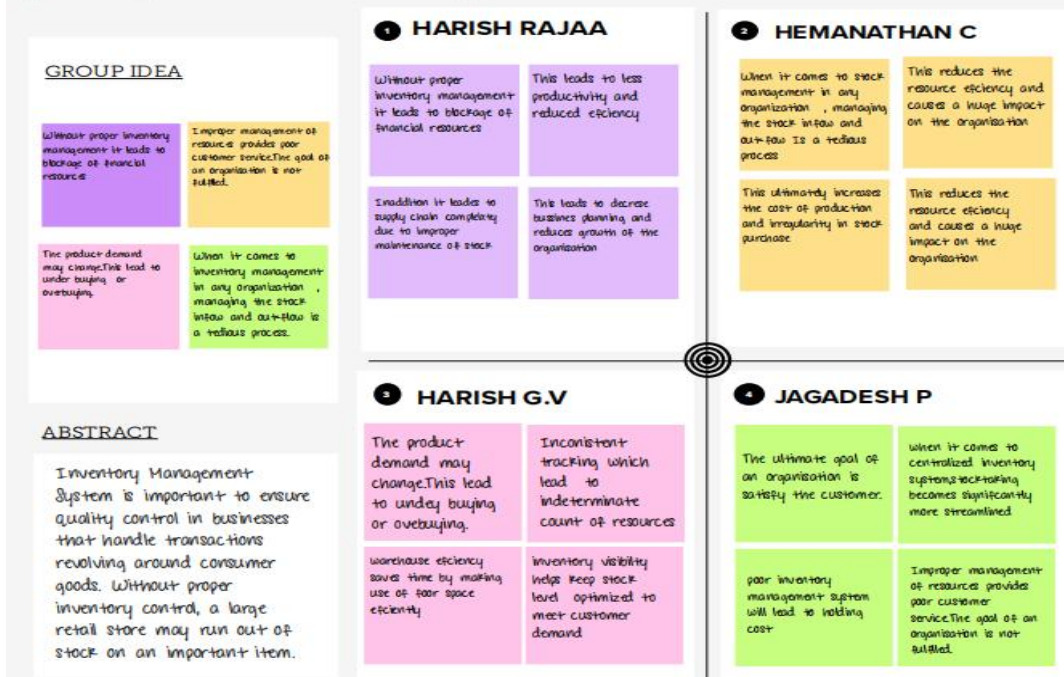
3.2 Ideation & Brainstorming

INVENTORY MANAGEMENT SYSTEM FOR RETAILERS



IDEATION DIAGRAM

INVENTORY MANAGEMENT SYSTEM (IBM-Project-7496-1658859444)



3.3 Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The problem faced by the company is they do not have any systematic system to record and keep their inventory data. It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized.
2.	Idea / Solution description	An inventory management system can simplify the process of ordering, storing and using inventory by automating end-to-end production, business management, demand for-casting and accounting.
3.	Novelty / Uniqueness	The uniqueness of inventory management system are that it ensures you're able to fulfill incoming or open orders and raises profit. It also saves money and provides a insight understanding about the stocks and ease to manage it.
4.	Social Impact / Customer Satisfaction	Inventory management system helps you maintain customer satisfaction when it comes to product returns. It also allows customer to answer the questions of their customers about the product, which could lead them to purchase the item.
5.	Business Model (Revenue Model)	The essential key metrics to develop a business model for inventory management are: assessing your inventory, reviewing your last inventory stocktaking, analyse sales, identify items to repurchase or retire, managing the cloud and safeguard the data.
6.	Scalability of the Solution	Some of the factors you must take note of when choosing an Inventory Management System that can scale up with your business are having a Large inventory, having discrepancy in stock levels, usage of multiple soft wares etc.

3.4 Problem Solution fit:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- ☐ Solve inventory status problems in a way that fits the state of retailers.
- ☐ Succeed faster and increase your solution for stock exchange between manufacturer and customer.
- ☐ Sharpen your management and marketing strategy with the right triggers and messaging.
- ☐ Increase productivity of your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ Understand the existing situation in order to improve it for your retailers.

Problem-Solution Fit canvas		INVENTORY MANAGEMENT SYSTEM FOR RETAILERS	
<p>Define CS, fit into CL</p>	<p>1. CUSTOMER SEGMENT(S) CS</p> <p>Retailers generally gets track of their merchandise from the time it is bought until it is sold.</p> <p>Customers are retailers, shop owners, business people.</p>	<p>6. CUSTOMER LIMITATIONS CL</p> <p>In order to use this software the customer must be trained or should hire a trained person to use this.</p> <p>Non-availability, Network restrictions, change of costs, delivery delay</p>	<p>5. AVAILABLE SOLUTIONS AS</p> <p>PLUSES & MINUSES</p> <ul style="list-style-type: none"> Manually counting and tallying items. Managing log books periodically. Hiring employees and accountant for handling logs and stocks <p>Understand the customer requirements using LEAST principle(Listen, Empathize, Apologize, Solve and Thank)</p>
<p>Focus on PR, tap into BE, understand RC</p>	<p>2. PROBLEMS / JOBS TO BE DONE PR</p> <p>Make inventory tracking easier by automating it. Generate automatic alert and messages to make work easier.</p> <p>Graphical representation of sales and stock availability is done to understand easily.</p> <p>Hard to handle inventory stocks.</p> <p>Not able to find the best selling goods.</p> <ul style="list-style-type: none"> Avoid overstocking To notify the retailers about the items which are out of stock Poor demand forecasting 	<p>9. PROBLEM ROOT / CAUSE RC</p> <p>Manual work consumes time and it is error prone.</p> <p>Not much organised.</p> <p>Poor Customer Service.</p> <p>Periodic change in demand of the customers.</p>	<p>7. BEHAVIOR BE</p> <p>+ITS INTENSITY</p> <p>The customer must find a effective inventory software.</p> <p>Enquire the retailers in the neighborhood.</p> <p>Get reference from customers who visit their shop.</p> <p>As the number of stocks increases, the number of staff managing the inventory can be increased to provide scalability.</p> <p>Implementing it in his business to streamline his work and make more profit.</p>
<p>Extract online & offline CH of BE</p>	<p>3. TRIGGERS TO ACT TR</p> <p>Need separate knowledge for maintenance. Maintaining large number of records by single individual.</p> <ul style="list-style-type: none"> Get coupon on purchase Offers on daily customer Freedom on self service 	<p>10. YOUR SOLUTION SL</p> <p>1.By managing inventory retailers meet customer demand.</p> <p>2.Conduct regular stock check to maintain the stock.</p> <p>3.Optimize the warehouse to the customer standard of living.</p> <p>4.Providing personalized store experiences to the customer.</p> <p>5.Design a flask based Inventory management system application.</p>	<p>8. CHANNELS of BEHAVIOR CH</p> <p>ONLINE</p> <p>Online Inventory trackers which come tor free may steal personal information of users and it may also contains a lot of ads.</p> <p>Immediate accessibility irrespective of place and time.</p> <p>OFFLINE</p> <p>The user will receive constant upgrades through mail even though they are active.</p> <p>Inventory stocks notified through SMS.</p>
	<p>4. EMOTIONS EM</p> <p>BEFORE / AFTER</p> <p>BEFORE:</p> <p>Unable to know the current stock details.</p> <p>Not able to update the inventory stock values.</p> <p>AFTER:</p> <p>Able to know the current stock details.</p> <p>Confidence, Happiness and Positive thoughts.</p>		

4 REQUIREMENT ANALYSIS

FUNCTIONAL REQUIREMENTS:

The project was developed as a web application, the web site functional requirements were mentioned below:

Registration Page:

- User can register through the form.
- User must provide the his/her details to register.

Login Page:

- User can login into the system.
- If the credentials is valid, user can logged into the system.
- When user successfully logs on, the system displays the Main Screen.

I

Main Page:

- Displays about the stock details when enter into this page.
- Alert users when the stocks are less through email.
- Update user profile.

Add Items:

- Add new stocks in this page by providing stocks information.
- Update stocks information.

Log out:

- Log out button provide users to log out from the system.
- After logged out, the login page displayed.

NON FUNCTIONAL REQUIREMENTS:

The Non Functional Requirements of the project mentioned below:

Usability:

We should provide our business analysis model to be supported in any devices like Laptop , Mobiles , PC's and also in computer . Hence it is more flexible to use.

Security:

The security requirements deal with the primary security. The software should be handled only by the administrator and authorized users. Only the administrator has right to create new accounts and generating inventory. Only authorized users can access the system with username and password of administration.

Availability:

The software will be available only to administrator of the organization and the product as well as customer details will be recorded by him. He can add customers, update and delete them as well as add new products and manage them.

Performance:

The system must be capable of handling multiple users at a time flexibly without causing any errors.

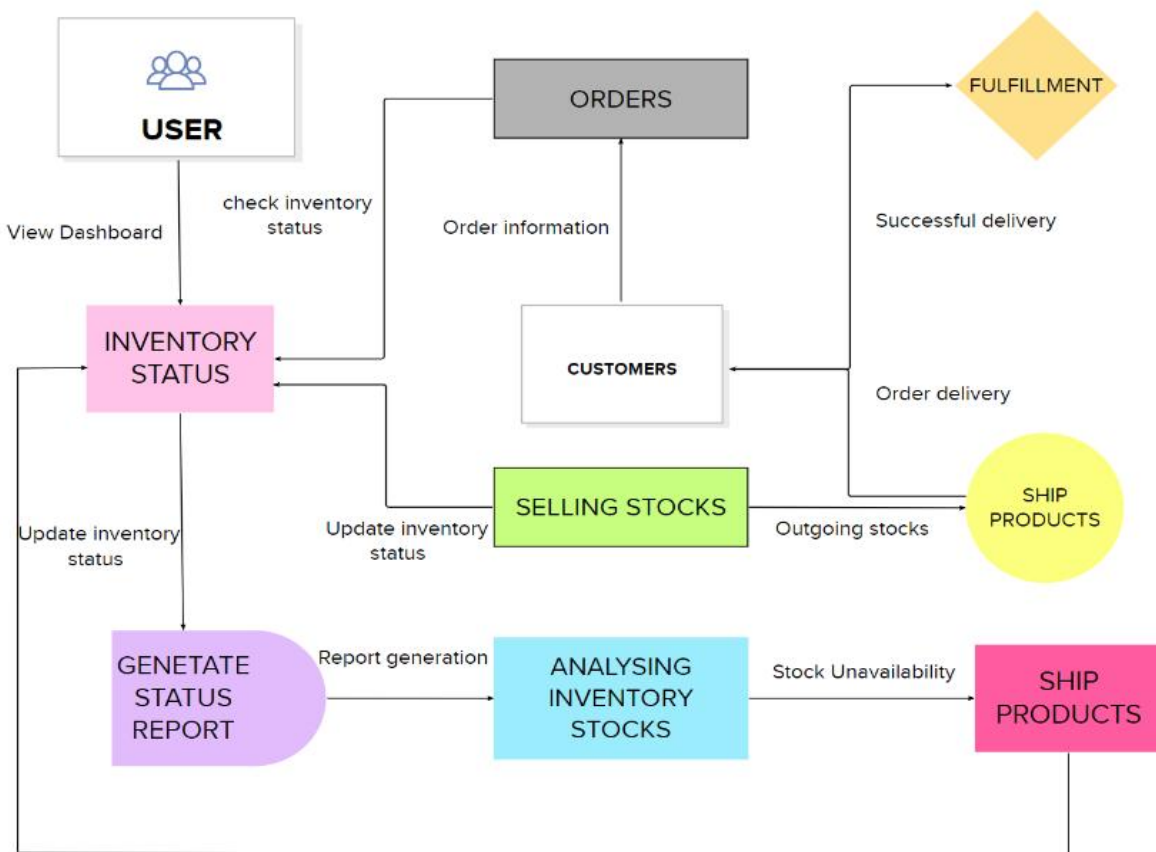
Reliability:

Stocks can be balanced exactly without having any fluctuations in terms of excess flow or under flow of stocks. We can ensure accurate inventory valuation.

5 PROJECT DESIGN

5.1 Data flow diagram:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



5.2 Solution & Technical Architecture:

The Deliverable shall include the architectural diagrams below and the information as per the table1& table 2

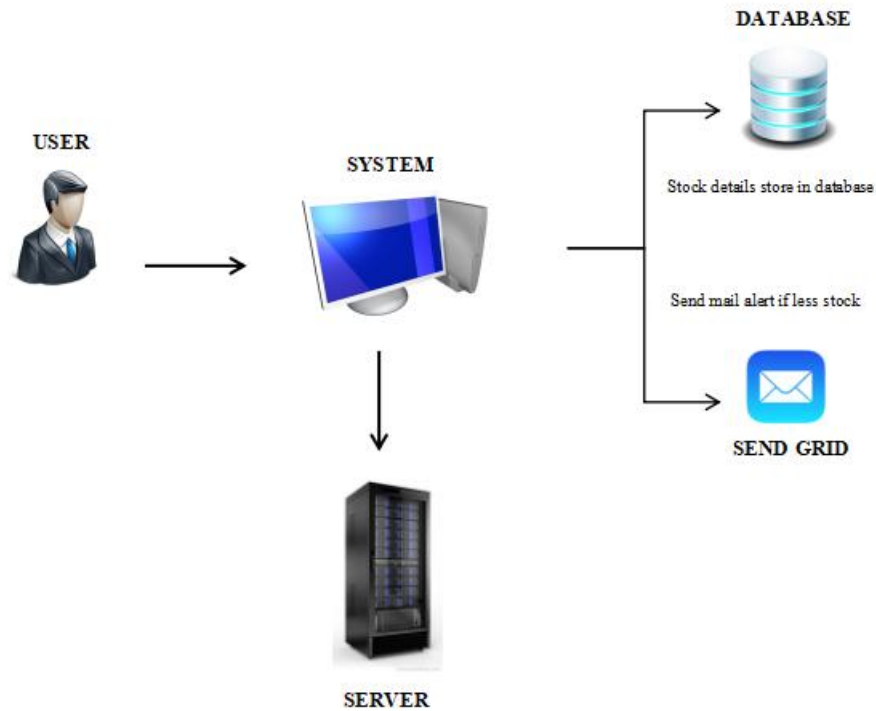


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the application through Web UI.	HTML, CSS, JavaScript, Flask - Python framework, etc.
2.	Application Logic-1 (Login)	Before enjoying the functionalities provided by the website, the user needs to register. Registration is meant to be done initially. Once an account is created, the login can be made using username and password.	Flask

3.	Application Logic-2 (Managing inventory)	After logging in, users can provide all the necessary details that are involved in inventory management. The services are provided in the dashboard where you could add, remove or display stocks and send alert mails for each transaction.	Database, Python.
4.	Application Logic-3 (Feedback)	This allows the users to enter their feedback. The provided feedback will be stored in the databases. This database helps in listing all the feedback provided by the user.	Database, Python, Flask
5.	Database	Data Type, Configurations etc.	MySQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage

5.3 User Stories

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Team Members
Sprint 1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	High	Split between all 4
Sprint 1		USN-2	As a user, I will receive confirmation email once I have registered for the application	Medium	Split between all 4

Sprint 1	Login	USN-3	As a user, I can log into the application by entering email & password	High	Harish Rajaa M & Hemanathan C
Sprint 2	Items	USN-5	As a user, I can add the items.	High	Harish G.V & Hemanathan C
Sprint 2		USN-6	As a user, I can see the items	Low	Harish Rajaa M & Jagadesh P
Sprint 2	Inventory	USN-7	As a user, I can add the items to inventory.	High	Jagadesh P Harish Rajaa M Hemanathan C
Sprint 2		USN-8	As a user, I can see the items in the inventory.	Low	Hemanathan C & Harish G.V
Sprint 3	Indication	USN-9	As a user, I can be able to receive indication	High	Jagadesh P & Hemanathan C
Sprint 3	Location	USN-10	As a user, I can be able to see items from a particular store location	Medium	Harish G.V Hemanathan C Harish Rajaa M
Sprint 3		USN-11	As a user, I can add a new location of my store	Medium	Harish Rajaa M
Sprint 4	Purchase	USN -12	As a customer, I can be able to purchase good from the particular location of the store	High	Hemanathan C
Sprint 4	Deployment	USN-13	As a user, I can access the software in the web	High	Jagedesh P

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	8 Days	25 Oct 2022	02 Nov 2022	20	29 Oct 2022
Sprint-2	20	8 Days	02 Nov 2022	10 Nov 2022	20	05 Nov 2022
Sprint-3	20	8 Days	10 Nov 2022	19 Nov 2022	20	15 Nov 2022
Sprint-4	20	8 Days	20 Nov 2022	29 Nov 2022	20	19 Nov 2022

6 PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Registration	USN-1	Being a mobile application user for this inventory management system . I will be able to register with my mail and phone number and login using the same credentials .	2	High	
Sprint-2		USN-2	I will receive confirmation email once and one time password once I register for the application	2	High	
Sprint-1		USN-3	As a user, I can register for the application through mobile number	2	High	
Sprint-3		USN-4	As a user, I can register for the application through Gmail	2	Medium	
Sprint-1		USN-5	Being a web user, I can register for the application by entering my email, password, and confirming my password.	1	High	
Sprint -1		USN-6	As a user, I will receive confirmation email once I have registered for the application through the web portal	2	medium	
Sprint-3		USN-7	As a user, I can register for the application through gmail	3	Medium	
Sprint-2		USN -8	As a user, I can register for the application through mobile number	2	High	
Sprint-2		USN-9	I will be registering using the unique admin credentials provided by the developer	3	Medium	
Sprint-1	Login	USN-10	Being a mobile application user for this inventory management system . I will login using the same credentials	2	High	

			whichi used in registration			
Sprint-1		USN-11	Would login using the credentials to use my service	3	High	
Sprint-3		USN-12	As a user, I can log into the application by entering gmail credentials which i used for registering	3	High	
Sprint-2		USN-13	As a user, I can log into the application by entering the mobile number credentials which i used for registering	2	High	
Sprint-1		USN-14	As a user I will be able to login via my username and password for the system	1	High	
Sprint-1		USN-15	I will be able to login to the system with the help of the unique admin login credentials given by the developer	3	Medium	
Sprint-2	Dashboard	USN-16	Once I login i will be redirected to my personal dashboard from where i can use my services	2	High	
Sprint-3		USN-17	The dashboard will give me access to all my services	2	High	
Sprint-2		USN-18	I can login using the credentials which was given using the registration	3	Medium	
Sprint -3		USN-19	I will be able to login using gmail	3	High	

Sprint-3		USN-20	I will be able to login via my mobile number	2	High	
Sprint-4		USN-21	As an admin i will be tracking the status if the inventories and stocks of the all the retailers and i will make sure that everything is smooth from both the buyer and the seller	2	High	
Sprint -4		USN-22	As an admin i will be in contact with the customer care executive	3	Medium	
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	
Sprint -4	Resolving queries	USN-23	I will be able to login with customer care executive login credentials	3	Medium	
Sprint -4	Raising queries	USN-24	I will be able to answer the queries and raise new queries or report to the same queries	4	Medium	
Sprint -4	Reporting to the admin	USN-25	Once the queries are solved or if there is any issues regarding the queries which was raised will be reported to the admin	3	Medium	

6.2 Sprint Delivery Schedule:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)	
Sprint-1	15	7 Days	24 Oct 2022	30 Oct 2022	15	30 Oct 2022	
Sprint-2	15	7 Days	01 Nov 2022	07 Nov 2022	15	07 Nov 2022	
Sprint-3	15	7 Days	09 Nov 2022	15 Nov 2022	15	15 Nov 2022	
Sprint-4	15	7 Days	17 Nov 2022	23 Nov 2022	15	23Nov 2022	

7. CODING AND SOLUTIONING

7.1 REGISTER AND LOGIN

Registration allows the user to create new account and enjoys the functionality of the website. It is mandatory for everyone to create their own account before getting to know about the stocks. The user's name, email and password is collected from the user for registering them into the website. Once the users successfully got registered, they could login using their email and password.

7.2 INVENTORY MANAGEMENT

This is the important feature of the website. Here retailer could enter their respective stock items and check for the availability. The user needs to provide stock_name, stock_brand, stock_number, no.of stocks required, stock_type, validity, retailer details, city and state. These values passed on to the retailer section. The response from the admin is either received as a mail or by a call. After getting the response, the requested stock is provided and the excess stocks are held up.

7.3 ADD AND REMOVE STOCK

This section can be managed by the admin or the manufacturer. Where they could manage the website by adding the newly available products and removing out dated products. This helps the admin to keep track of the goods and easy to manage them. The admin is then notified through mail whenever there is a shortage of goods in inventory.

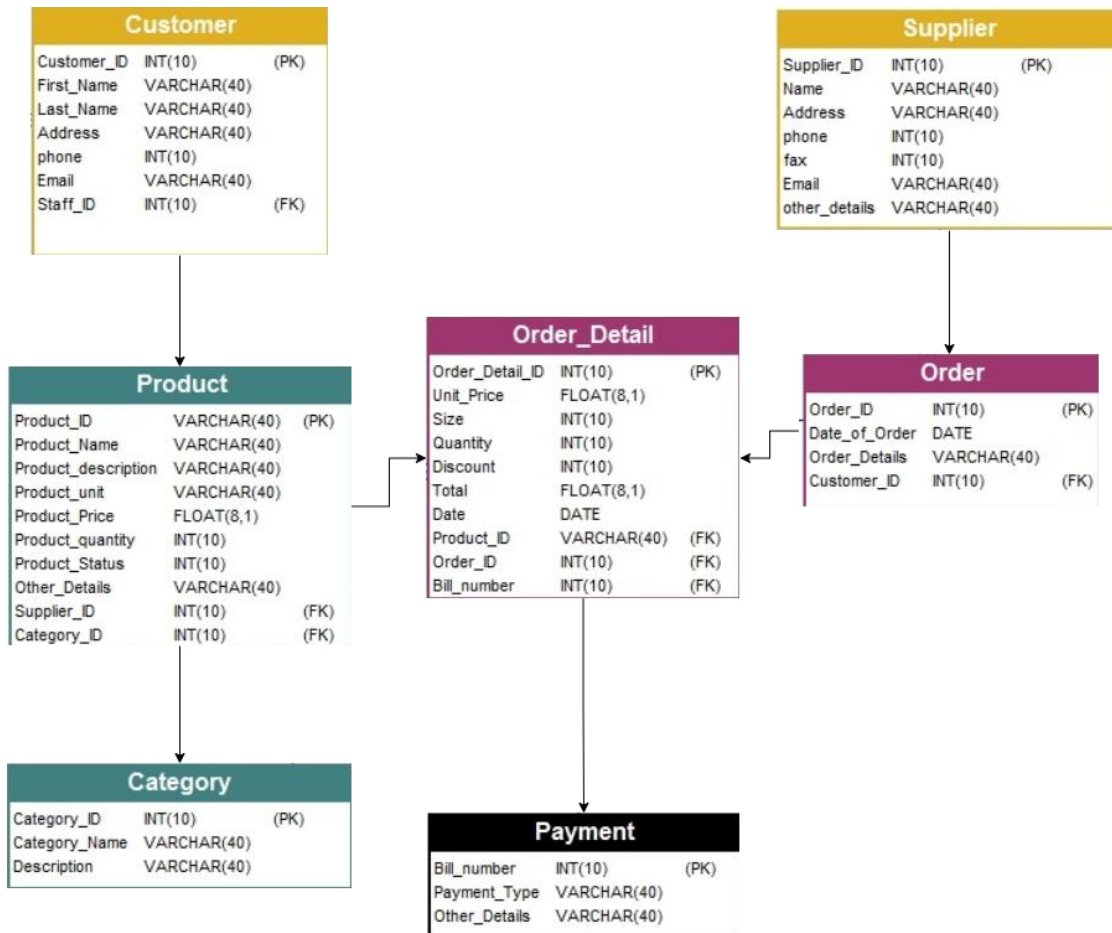
7.4 ALERT MESSAGE

Here it helps in alerting the retailer or the manufacturer when there is a need in stocks for the company. In traditional way it is difficult for admin keep track of all the products availability. Inorder to overcome the human error Inventory management system helps the admin to keep track of the inventories with ease. Where it is deigned to alert the admin whenever retailers ask for a stock or some of the products are out of stock in inventory.

7.5 PAYMENT HISTORY

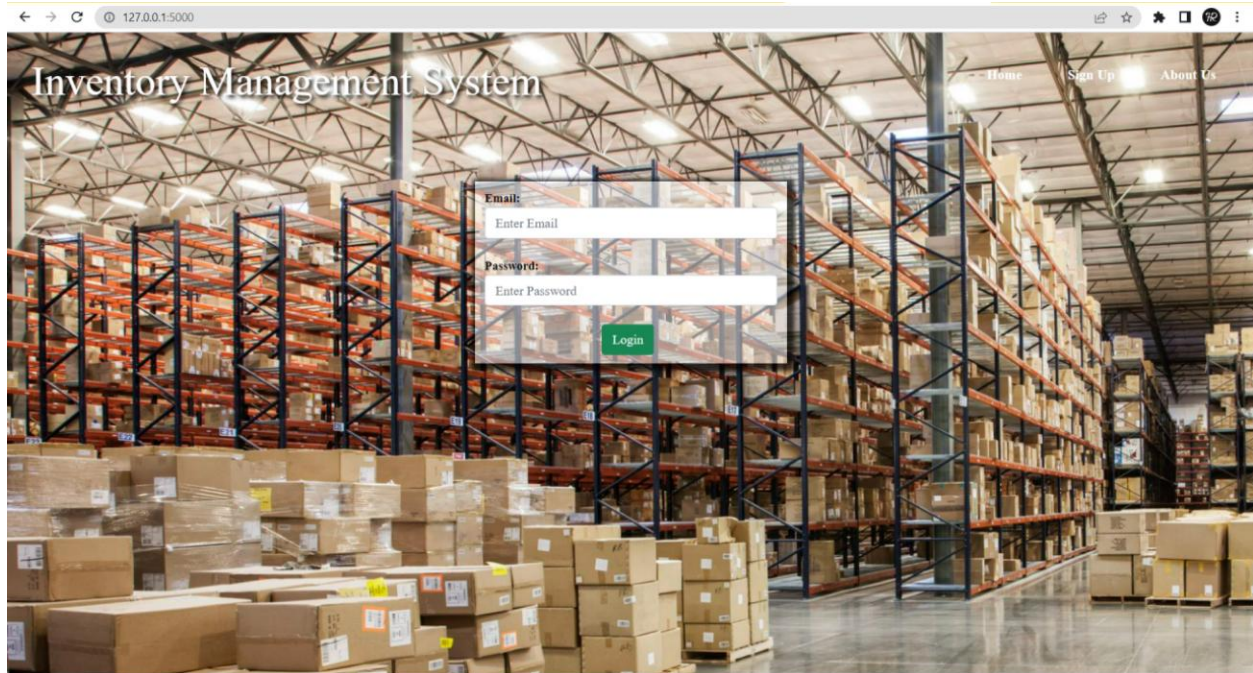
This displays the overall transaction history of the website from the Inventory Database. The admin could find the stocks that are sold to several retailers. Payment history helps in understanding the number of products sold between retailers. This also helps in getting to know status of other products too. Management of transactions can be performed based on this. The company which owns best inventory management system, will come to know which stock is abundant and which needed the most and it also maintains seure transaction.

7.6 DATABASE SCHEMA



8. TESTING

8.1 LOGIN PAGE



The below image displays the login page of the inventory management system

PROGRAM:

home.html:

```
<!DOCTYPE html>

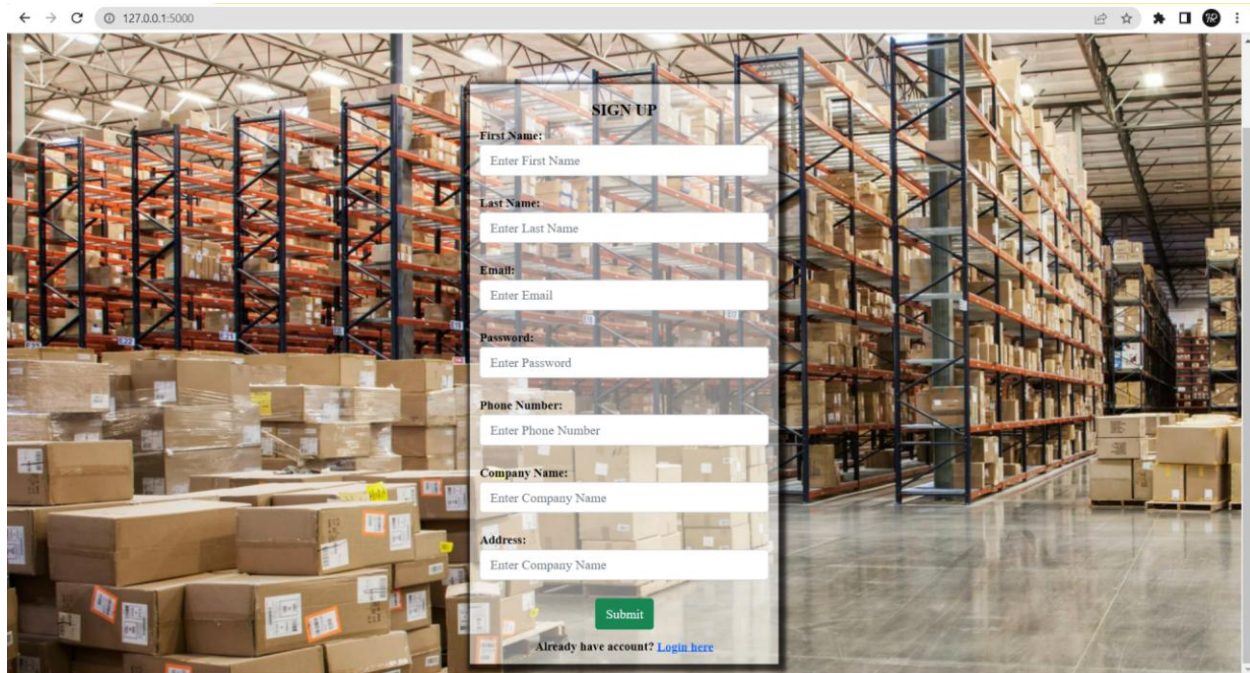
<html>
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```

        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
        <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css">
        <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js"></script>
        <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/AlertifyJS/1.13.1/css/alertify.min.css" />
        <script src = " https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js "></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/AlertifyJS/1.13.1/alertify.min.js"></script>
        <script src="/static/js/index.js"></script>
        <link rel="stylesheet" href="/static/css/index.css">
    </head>
    <body style="font-family:'Times New Roman', Times, serif;">
        <div class="heading">
            <h1 style="font-size: 50px;">Inventory Management System</h1>
            <ul class="nav justify-content-right">
                <li class="nav-item">
                    <a class="nav-link active" id="home" href="javascript:;home()">Home</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" id="signup" href="javascript:;signup()">Sign Up</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" id="about" href="javascript:;about()">About Us</a>
                </li>
            </ul>
        </div>
        <input type="hidden" value="{msg}" id="msg"/>
        <div id="main"></div>
    </body>
</html>

```

8.2 SIGN UP PAGE



register.html

```
<html>
  <head>
    <title>Register Here</title>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js"></script>
    <script src="static/js/index.js"></script>
    <style>
      .container
      {
        font-family: 'Times New Roman', Times, serif;
        color:black;
        font-weight: bold;
        background-color: rgba(255, 255, 255, 0.5);
        -moz-box-shadow:3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        -webkit-box-shadow: 3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        box-shadow:3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        width: 25%;
        padding-top:10px;
        font-size: 15px;
```



```

    }
    h2
    {
        padding-top: 10px;
        text-align: center;
        font-weight: bold;
        font-size: 20px;
    }
    button{margin-left: 40%;}
    .worddark
    {
        text-align: center;
        padding: 10px 0px 10px 0px;
    }
    .alertify-notifier .ajs-message.ajs-error{
        color: white;
        background-color: #f60505b9;
    }
    .alertify-notifier .ajs-message.ajs-success{
        color: white;
        background-color: rgb(67, 166, 67);
    }
    .alertify-notifier .ajs-message.ajs-warning{
        color: white;
        background-color: rgb(214, 160, 84);
    }
}
</style>
</head>
<body>
    <div class="container">
        <h2>SIGN UP</h2>
        <form action="{url_for('validate_register')}}" method="post">
            <div class="form-group">
                <label for="fname">First Name:</label>
                <input type="text" class="form-control" id="fname" placeholder="Enter First Name" name="fname"
required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="lname">Last Name:</label>
                <input type="text" class="form-control" id="lname" placeholder="Enter Last Name" name="lname"
required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="email">Email:</label>
                <input type="email" class="form-control" id="email" placeholder="Enter Email" name="email"
required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="pwd">Password:</label>
                <input type="password" class="form-control" id="pwd" placeholder="Enter Password" name="pwd"
required="required">
            </div>
            <br>

```



```

        <div class="form-group">
            <label for="phone">Phone Number:</label>
            <input type="text" class="form-control" id="phone" placeholder="Enter Phone Number"
name="phone" required="required">
        </div>
        <br>
        <div class="form-group">
            <label for="cname">Company Name:</label>
            <input type="text" class="form-control" id="cname" placeholder="Enter Company Name"
name="cname" required="required">
        </div>
        <br>
        <div class="form-group">
            <label for="cname">Address:</label>
            <input type="text" class="form-control" id="address" placeholder="Enter Company Name"
name="address" required="required">
        </div>
        <br>
        <button type="submit" class="btn btn-success">Submit</button>
    </form>
    <p class="worddark">Already have account? <a class="worddark" href="javascript:;home()">Login
here</a></p>
</div>
<input type="hidden" value="{{msg}}" id="msg"/>
<script>
    $(document).ready(function(){
        let msg=document.getElementById('msg').value;
        if(msg=='error')
        {
            alertify.set('notifier','position','top-center');
            alertify.error('Error while Registering.....');
        }
        else if(msg=='success')
        {
            alertify.set('notifier','position','top-center');
            alertify.success('You are registered Successfully!')
        }
        else if(msg=='exists')
        {
            alertify.set('notifier','position','top-center');
            alertify.warning('Account already exists!')
        }
    });
</script>
</body>
</html>

```

8.3 ABOUT US PAGE:



about.html

```
<html>
  <head>
    <title>Login</title>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js"></script>
    <style>
      .container
      {
        font-family: 'Times New Roman', Times, serif;
        color:black;
        font-weight: bold;
        background-color: rgba(255, 255, 255,0.5);
        -moz-box-shadow:3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        -webkit-box-shadow: 3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        box-shadow:3px 3px 5px 6px rgba(0, 0, 0, 0.700);
        width: 25%;
        padding-top:10px;
        font-size: 15px;
      }
    </style>
```

```

</head>
<body>
  <div class="container">
    <p>inventory management system,provide the management process to the retailers and vendors.it
helps to the retailers to buy the products</p>
  </div>
</body>
</html>

```

9. RESULTS:

The screenshot displays the 'Inventory System' web application. At the top, a dark blue header bar contains the text 'Inventory System' on the left and 'Welcome admin | Log Out' on the right. Below the header, a left sidebar features a vertical list of menu items: 'Item' (highlighted in orange), 'Purchase', 'Vendor', 'Sale', 'Customer', 'Search', and 'Reports'. The main content area is titled 'Item Details' and contains a form for adding or updating an item. The form includes fields for 'Item Number*', 'Product ID', 'Item Name*', 'Status' (a dropdown menu currently set to 'Active'), 'Description' (a text area), 'Discount %', 'Quantity*', 'Unit Price*', and 'Total Stock'. At the bottom of the form, there are four buttons: 'Add Item' (green), 'Update' (blue), 'Delete' (red), and 'Clear' (grey).

PROGRAM:

```

<html>
  <head>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js"></script>
    <style>
      .container
      {
        font-family: 'Times New Roman', Times, serif;
        color:black;
        font-weight: bold;
        padding-top:10px;
        font-size: 15px;
      }
    </style>
  </head>
  <body>
    <div class="container">
      <p>inventory management system,provide the management process to the retailers and vendors.it
      helps to the retailers to buy the products</p>
    </div>
  </body>
</html>

```

```

        width:40%;
        margin:auto;
    }
    h1
    {
        padding-top: 10px;
        text-align: center;
        font-weight:bold;
        margin-bottom: 20px;;
    }
    button{margin-left: 40%;}
</style>
</head>
<body>
    <div class="container">
        <h1>Add Product</h1>
        <form action="{url_for('validate_register')}}" method="post">
            <div class="form-group">
                <label for="image">Image:</label>
                <input type="file" class="form-control" id="image" name="image" required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="pid">Product ID:</label>
                <input type="text" class="form-control" id="pid" placeholder="Enter Product ID" name="pid"
required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="pname">Product Name:</label>
                <input type="text" class="form-control" id="pname" placeholder="Enter Product Name"
name="pname" required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="Category">Category:</label>
                <input type="text" class="form-control" id="Category" placeholder="Enter Category"
name="Category" required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="mdate">Manufacture Date:</label>
                <input type="date" class="form-control" id="mdate" placeholder="Enter Mfg.Date"
name="mdate" required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="edate">Expiry Date:</label>
                <input type="date" class="form-control" id="edate" placeholder="Enter Expiry Date"
name="edate" required="required">
            </div>
            <br>
            <div class="form-group">
                <label for="price">Price:</label>
                <input type="number" class="form-control" id="price" placeholder="Enter Price"
name="price" required="required">

```

```

        </div>
        <br>
        <div class="form-group">
            <label for="qty">Quantity:</label>
            <input type="number" class="form-control" id="qty" placeholder="Enter Quantity" name="qty"
required="required">
        </div>
        <br>
        <div class="form-group">
            <label for="Desc">Description:</label>
            <textarea class="form-control" id="desc" placeholder="Enter Description"
name="desc"></textarea>
        </div>
        <br>
        <button type="submit" class="btn btn-success">Submit</button>
    </form>
</div>
</body>
</html>

```

10. ADVANTAGES & DISADVANTAGES

- The advantages of the system include maintaining the right amount of stocks, leads more organizable warehouses, saves time, energy and money and it also improves efficiency and productivity.
- Inventory management system face some of the disadvantages like problem in production line, system may crash sometimes, Malicious hacking may occur and these online digital management systems tend to reduce physical audits.

11 CONCLUSION

Inventory management has to do with keeping accurate records of goods that are ready for shipment. This often means having enough stock of goods to the inventory totals as well as subtracting the most recent shipments of finished goods to buyers. This project helps us to access and manage the information easily. And also helps to verify the stock currently available with them and to update the stock when necessary. This project reduce the time to search the product from the current available stock. The role of an inventory system is to track your products and supplies. Inventory management System.

12 FUTURE SCOPE

The scope of inventory management system is very vast. It involves warehousing and physical distribution, manufacturing and production planning, purchasing, sales and marketing and financial analysis. The first step in an inventory management system is the availability of effective and useful information about demand, production, purchasing and costs to the decision-making levels of a company. This information should be timely enough for making decisions about ordering levels, production schedules and transfer of goods between locations on a timely basis.

SOURCE CODE

GITHUB LINK: <https://github.com/IBM-EPBL/IBM-Project-7496-1658859444>

PROJECT DEMO LINK: