ATMIYA UNIVERSITY

RAJKOT

A

Report On

Inventory Management

Under subject of

PROJECT

B. TECH, Semester – VII

(Computer Engineering)

Submitted by:

1. Lathigara Fenil Yogeshbhai   201002015
2. Raiyani Raj Jentibhai   201002022

Prof. Ambrish A Patel

(Faculty Guide)

Prof. Tosal M. Bhalodia

(Head of the Department)

Academic Year

(2022-23)

CANDIDATE'S DECLARATION

We hereby declare that the work presented in this project entitled "**INVENTORY MANAGEMENT**" submitted towards completion of project in **7th Semester** of B. Tech. (Computer Engineering) is an authentic record of our original work carried out under the guidance of "**Prof. Ambrish Patel".**

We have not submitted the matter embodied in this project for the award of any other degree.

Semester: 7th

Place: Rajkot

Signature:

Lathigara Fenil (201002015)

Raiyani Raj (201002022)

ATMIYA UNIVERSITY

RAJKOT

CERTIFICATE

Date:

This is to certify that the "**INVENTORY MANAGEMENT**" has been carried out by **LATHIGARA FENIL** under my guidance in fulfillment of the subject Major Project in COMPUTER ENGINEERING (7th Semester) of Atmiya University, Rajkot during the academic year 2022.

Prof. Ambrish Patel   Prof. Tosal M. Bhalodia

(Project Guide)   **(Head of the Department)**

ATMIYA UNIVERSITY

RAJKOT

CERTIFICATE

Date:

This is to certify that the "**INVENTORY MANAGEMENT**" has been carried out by **RAIYANI RAJ** under my guidance in fulfillment of the subject Major Project in COMPUTER ENGINEERING (7th Semester) of Atmiya University, Rajkot during the academic year 2022.

Prof. Ambrish Patel   Prof. Tosal M. Bhalodia

(Project Guide)   **(Head of the Department)**

ACKNOWLEDGEMENT

We have taken many efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. We would like to extend our sincere thanks to all of them.

We are highly indebted to **Prof. AMBRISH ASHOKKUMAR PATEL** for their guidance and constant supervision as well as for providing necessary information regarding the Mini Project titled **"INVENTORY MANAGEMENT".** We would like to express our gratitude towards staff members of Computer Engineering Department, Atmiya University for their kind co-operation and encouragement which helped us in completion of this project.

We even thank and appreciate to our colleague in developing the project and people who have willingly helped us out with their abilities.

LATHIGARA FENIL (201002015)

RAIYANI RAJ (201002022)

ABSTRACT

Inventory management can be used by retail dealers and also wholesale dealers for sales management of stocks or inventory containing multiple categories of products of multiple brands with it's quantity, availability as well as its's prices, and user can also generate and manage invoice of the product.

INDEX

LIST OF FIGURES

LIST OF TABLES

CHAPTER – 1 INTRODUCTION

1.1 Purpose

The existing manual Inventory management system consumes more time for managing all the stocks of products, brands, quantity, availability and price. Because it's based on paper, A person has to maintain all the things manually by his/her self, To make this whole process easy and maintain correct information, we designed and developed this project.

1.2 Scope

As this website provides better way to manage the whole inventory because its suitable for multiple tasks.

The following modules are used in this system:

> User Modules.
> Product Module
> Invoice Module

- Admin Module:
  User can register his/her self and then can login into system and can perform multiple operations.

- Product Module:
  This module includes operations like managing products, managing categories, managing brands, managing quantity etc.

- Invoice Module:
  Invoice of product can be manage in this module.

1.3 Technology and tool

- <u>Front End</u>: php language

- Introduction to PHP:

     PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

  - Advantages of php:

         PHP is open source. PHP is available free of cost since it is open source programming language. ...
         Open source applications. ...
         PHP is easy to learn. ...
         Large and helpful community support. ...
         Platform Independent. ...
         Database support. ...
         Coding Flexibility. ...
         Speed.

- <u>Back End</u>: MySql Database

- Introduction To MySql:

     MySQL is an open-source relational database management system (RDBMS). It is the most popular database system used with PHP. MySQL is developed, distributed, and supported by Oracle Corporation. The data in a MySQL database are stored in tables which consists of columns and rows.

- Advantages of MySql:

  Data Security. ...
  On-Demand Scalability. ...
  High Performance. ...
  Round-the-clock Uptime. ...
  Comprehensive Transactional Support. ...
  Complete Workflow Control. ...
  Reduced Total Cost of Ownership. ...
  The Flexibility of Open Source.

- Environment: Microsoft Visual Studio Code

  Introduction To Microsoft Visual Studio Code

  Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity).

CHAPTER – 2 PROJECT MANAGEMENT

2.1 Project Planning

We are total two members in our group of mini project, At first we gathered information regarding our project like advantages, needs & other requirements, Then we prepared a power point presentation of our project, Then we prepared a project report and we started development of our project.

2.2 Project Scheduling

We are following spiral model for developing our system.
Spiral combines the advantages of top-down and bottom-up concepts. Hence, we are using this model due to its following reasons:
Our system needs continuous development. We will describe the characteristics with high priority first and then develop a prototype based on these. This prototype will be tested and desired changes will be made in the new system. This continual and steady approach will minimize the risks or failure associated with the change in the system.
We will be developing the system in small segments that will make it easier to do cost calculations.
The client will be involved in the development of each segment and retains control over the direction and implementation of the system.
The client's knowledge of the project grows as the project grows,
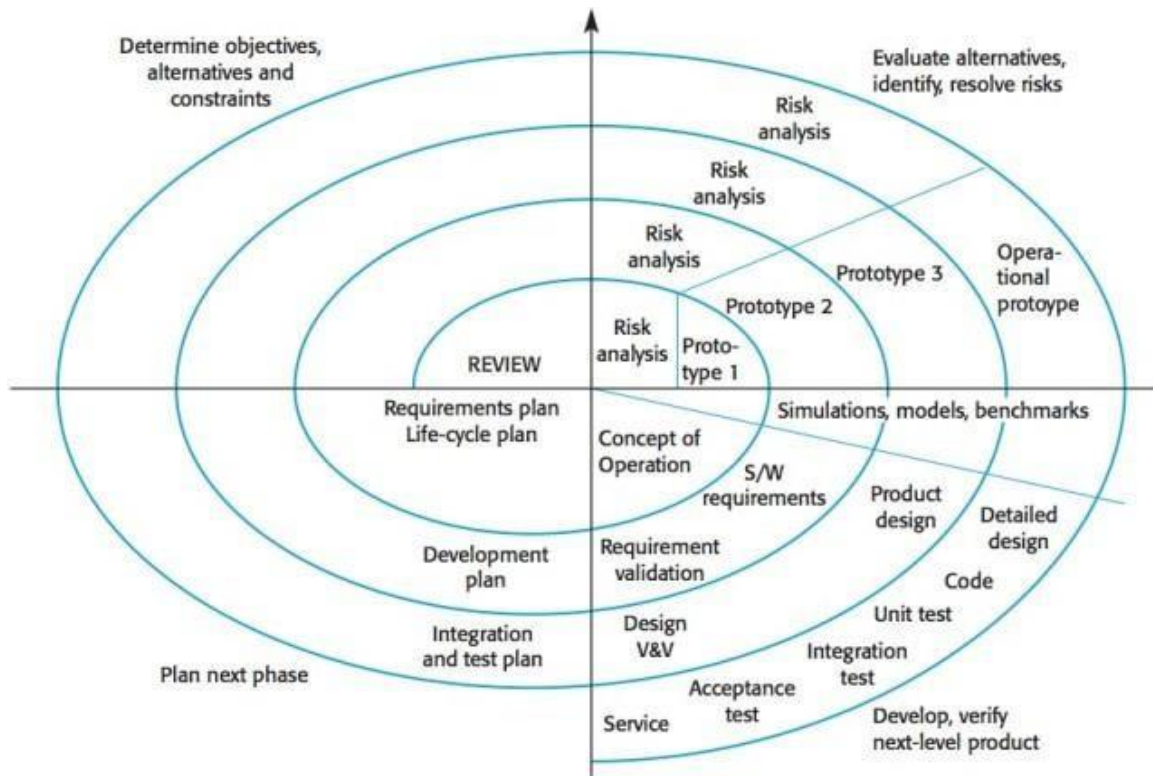
Fig 1.1 Spiral Model

CHAPTER – 3 SYSTEM REQUIREMENTS STUDY

3.1   Minimum Hardware Requirements

800 MHz Intel Pentium III or equivalent
256 MB of RAM
750 MB of free disk space
Display (800 x 600 resolution or higher and 256 color mode)

3.2   Minimum Software Requirements

Windows Operating System

Visual Studio Code/ Notepad++

Chrome Or Other Browser

My Sql

CHAPTER – 4 SYSTEM ANALYSIS

4.1 Study of Current System

Indian retail sales market is growing fast and as well as the market of wholesalers is also growing fast and these days, time is very important for everyone but also the accuracy of information is priority of sealers, a person can face loss in their business if the information of stock is not accurate.

4.2 Problem and Weaknesses of Current System

The current system is paper based and human error could occur or information can be misplaced.
Requires lots of time and human effort.

4.3 Requirements of New System

4.3.1 User Side System Requirements

- **Software Requirement:**

  Windows Operating System
  Chrome Or Other Browser
- **Hardware Requirement:**

  800 MHz Intel Pentium III or equivalent

  256 MB of RAM

  750 MB of free disk space

CHAPTER – 5 SYSTEM DESIGN

5.1 Diagrams

- The data flow diagram(DFD) is a graphical tool used for expressing system requirements in a graphical form. The DFD also known as the "bubble chart" as the purpose of clarification system requirements and identification major transformation that will become program in system design. Thus DFD can be stated as the starting point of the design phase that functionality decomposes the requirements specification down to the lowest level of details. The DFD consists of series of bubble joined by lines. The bubble represents data transformation and the lines represents the data flows in the system. A DFD describes what data flow is does not to construct a Data Flow Diagram, we use.

  Arrow: An arrow identifies the data flow in motion. It is a pipeline through which information is flow like the rectangle in the flowchart.

  Circle: A circle stands for process that converts data into information
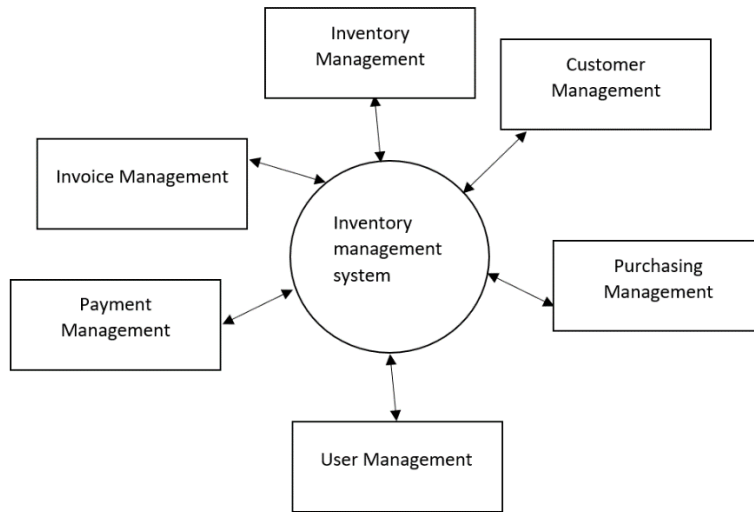
  Open End Box: An open ended box represents a data store, data at rest or a temporary repository of data.

  Squares: A square defines a source or destination of system.
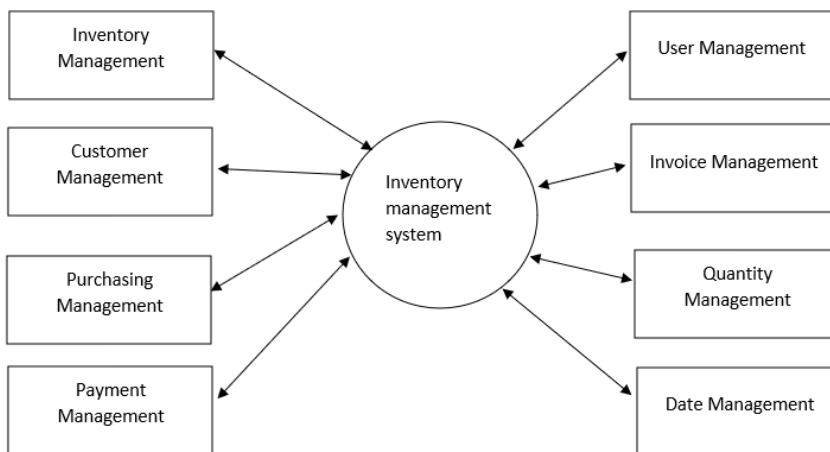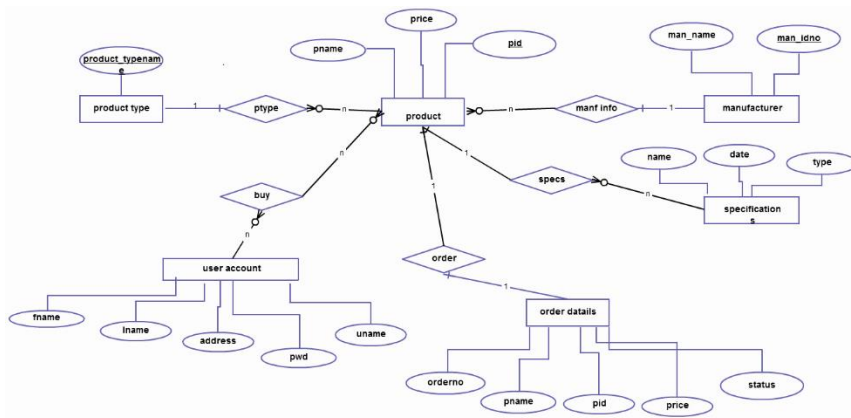
5.1.1 DFD Level 0

5.1.2 DFD Level 1

5.1.3 E-R Diagram
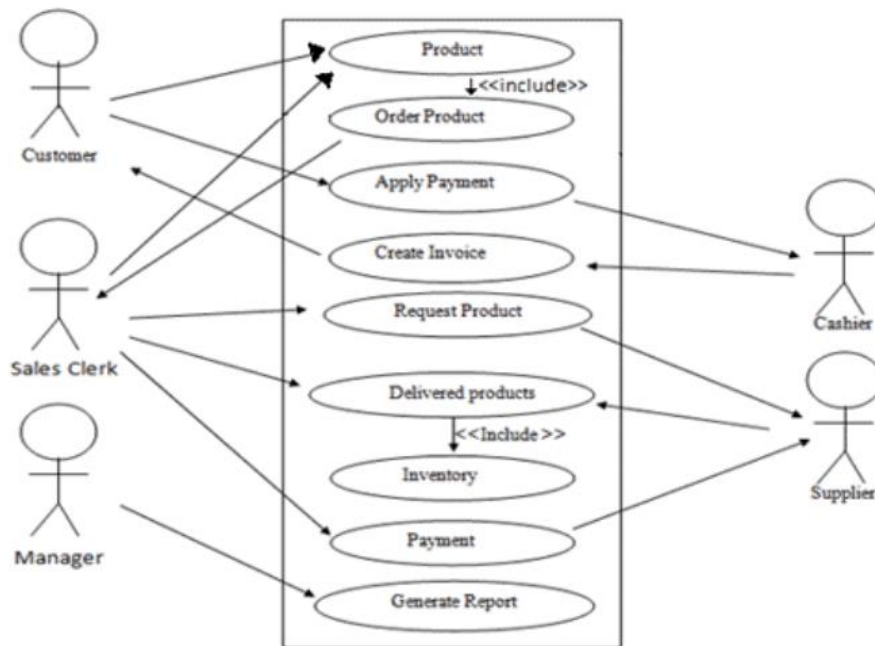

5.1.4 Use Case Diagram

5.2 Data Dictionary

Brand Table

Name	Type	Key	Description
<u>Bid</u>	Int(11)	Primary Key	Shows Brand's ID
Brand_Name	Varchar(255)	Null	Shows Brand's name
Status	Int(1)	Null	Shows status

Categories Table

Name	Type	Key	Description
<u>cid</u>	int(11)	Primary Key	Shows category's Id
Parent_cat	int(11)	Null	Shows Parent category
Category_Name	varchar(255)	Null	Shows category's name
Status	Varchar(255)	Null	Shows status of category

Invoice Table

Name	Type	Key	Description
<u>Invoice _no</u>	int(11)	Primary Key	Shows number of invoice
Customer_Name	Varchar(100)	Null	Shows customer's name
Order_date	Date	Null	Shows date of order
Sub_total	Double	Null	Shows sub total
GST	Double	Null	Shows gst
Discount	Double	Null	Shows discount
Net_total	Double	Null	Shows net total
Paid	Double	Null	Shows paid amount
Due	Double	Null	Shows due amount
Payment_type	Varchar(100)	Null	Shows type of payment

INVENTORY MANAGEMENT

Invoice detail Table

Name	Type	Key	Description
<u>Id</u>	int(11)	Primary Key	Shows Id of invoice
Invoice_no	int(11)	Null	Shows number of invoice
Product_name	Varchar(100)	Null	Shows name of product
Price	Double	Null	Shows price of product
Qty	int(11)	Null	Shows quantity of product

Product Table

| Name	Type	Key	Description
<u>Pid</u>	int(11)	Primary Key	Shows Product's Id
Cid	int(11)	Null	Shows Category's ID
Bid	int(11)	Null	Shows Brand's ID
Prouct_name	Varchar(100)	Null	Shows Product's name
Prouct_price	double	Null	Shows Product's price
Prouct_stock	double	Null	Shows Product's stock
Added_date	Date	Null	Shows add date of product
P_status	Varchar(100)	Null	Shows Product's status

User Table

| Name	Type	Key	Description
<u>Id</u>	int(11)	Primary Key	Shows User's Id
Username	Varchar(100)	Null	Shows User's Name
Email	Varchar(100)	Null	Shows User's Email
Password	Varchar(300)	Null	Shows User's Password
usertype	Varchar(100)	Null	Shows User's Type
Register_date	Date	Null	Shows Registration Date
Last_login	Datetime	Null	Shows When Last login
Notes	Varchar(255)	Null	Shows User's status

CHAPTER – 6 CODE IMPLEMENTATION

6.1 Screenshots

Login Page:
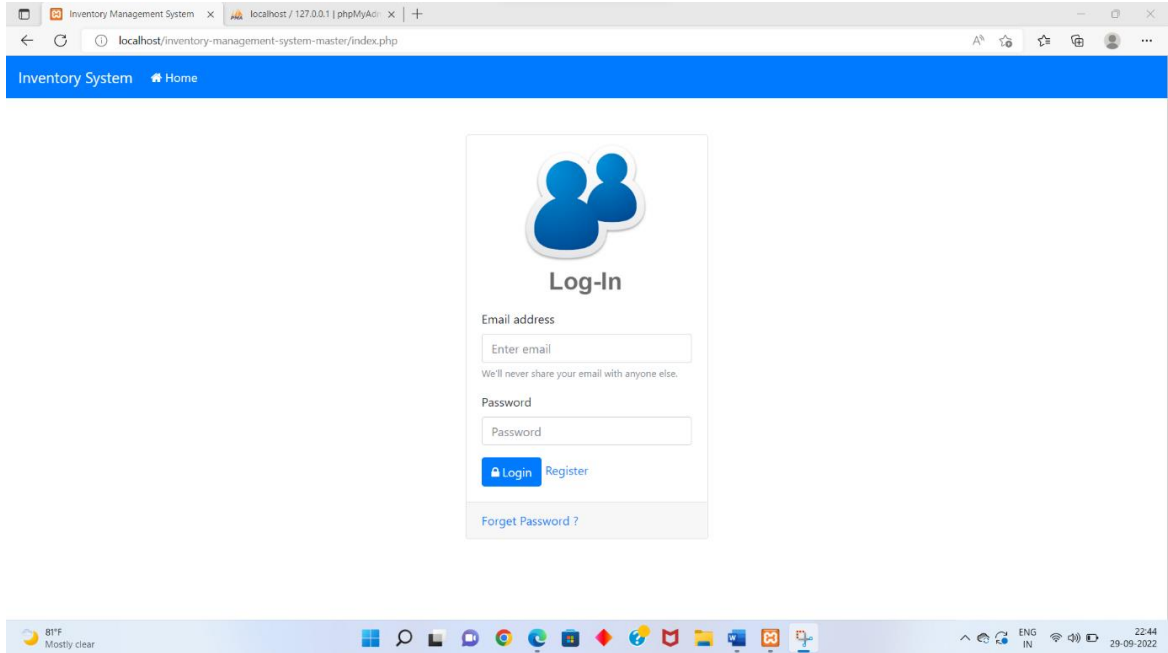
Dashboard:
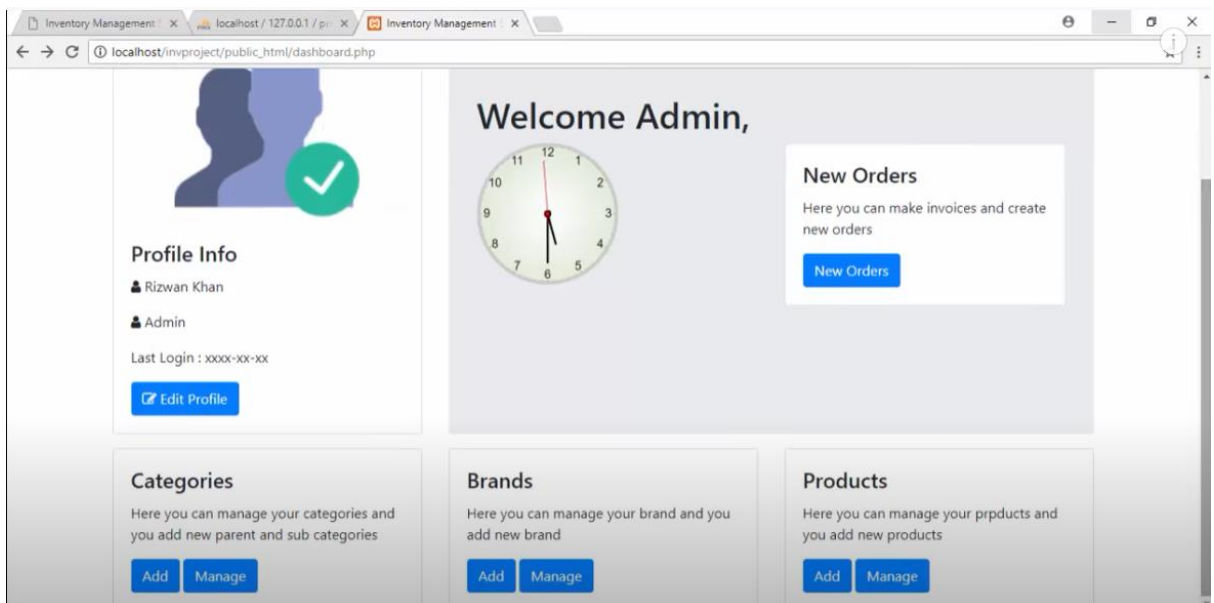
CHAPTER – 7 LIMITATIONS AND FUTURE ENHANCEMENT

7.1 Advantages and Disadvantages

- **Advantages:**

  ➢ With the help of our system user can save their important time.
  ➢ User can perform multiple tasks in single system.
  ➢ Easy to understand for any person who has basic knowledge of computers.
  ➢ Our system is portable.
  ➢ Convenient and easy to use.

- **Disadvantages**

  ➢ A person who has all the authority Can Manage all the data in the system.
  ➢ Our system does not provide high level security.

CHAPTER – 8 CONCLUSION

- ## Conclusion:

If a single person is managing whole inventory by him/her self it gets difficult to manage when they are using old systems, if they use our latest system, it will get easier for them to manage the whole inventory from where ever they want because its portable, time saving, easy to understand and our system does not require high end system which has high configuration, Our system will work on any low end PCs or laptops, So it makes our system budget friendly.

We are also planning to add much more features as per client's requirement in future. like to barcode scanning.

<u>CHAPTER – 9 REFERENCES</u>

- **References**

  - ➤ w3school.com
  - ➤ www.google.com
  - ➤ Youtube.com