

**PROJECT REPORT**

**ON**

**Smart Warehousing  
Management System.**

**By**

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**L.J.POLYTECHNIC, AHMEDABAD**

**2021-2022**

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**CERTIFICATE**

**Date:\_\_\_/\_\_\_/\_\_\_**

This is to certify that **Mr. Azim Baldiwala, Mr. Raj Bhatt, Miss. Aayushi Chauhan, Mr. Ohm Panchal, Mr. Manya Patel** from LJ POLYTECHNIC having **196330307005, 196330307008, 196330307010, 196330307061, 196330307537** have completed project documentation and partial development on the problem definition of semester V during the academic year 2021-22 having Title **Smart Warehousing Management System** in a group consisting of **5** persons.

**Institute Guide**

**Head of the Department**

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## Abstract

- *Before Digitalization bill books, man power etc. were used which was very time consuming and wasn't easy to keep track of, there were many miss calculations and human errors and it wasn't feasible and was accessible to everyone which poses a threat to data and stock of a franchise. This system is becoming extinct day-by-day as the 21st century takes place. So to reduce time consumption and to increase the efficiency. This software provides advanced technological features which can help you to create an efficient and smoother management in your work place.*
- *The Warehouse Management System is a real-time warehouse database capable of handling large inventories of an organization. This can be also use to track the inventory of a single store, or to manage the distribution of stock between several stores of a larger franchise. However, the system records sales and restocking data and provides notification of low stock at any location at a specified interval. The goal is to reduce the strain of tracking rather than to handle all store maintenance. The main goal of Warehouse Management System is to ensure consistent availability of supplies for consumers. This system facilitates the proper and accurate management of data and stocks with help of BARCODE scanning feature.*

## INTRODUCTION

### 1.1 Need for the system

- In this fast pace world it becomes more and more difficult to manage the warehouse daily.
- Some businesses still hire manpower to manage their warehouse which is time consuming and it is total waste of money
- Sometimes due to the use of bill books miss calculations may occur.
- There is a lack of precision and perfection as the management was done manually.
- In the existing management system, record of everything was maintained manually which led to some fatal errors.
- Though existing system is very useful for small warehouses but it could not full fill the needs of big and huge warehouses.
- All the solutions are provided in "Warehouse Management System (WMS)".

### 1.2 Detailed problem definition

- Managing Warehouse Space/Layout.
- Inventory Accuracy/Tracking
- Product Picking Optimization.
- Handling Product Damages.

### 1.3 Viability of system

- It will be able better maintain perpetual real-time inventory count.
- User can increase the visibility of the systems and this will also increase your credibility and viability.
- The system will be able to easily monitor customer concerns as such obtaining order status in real-time.

- Software will help user to ship the right goods on time every single time.
- Lastly, it will also help considerably to reduce costs.

### **1.4 Presently available system for the same**

- [www.softeon.com](http://www.softeon.com)
- In this system Function of re-stocking and function that shows lesser sold products is not available.
- The interface of this system is seems to be little complicated for common men/women.
- This system does not facilitates the package location in the warehouse.

### **1.5 Future prospects**

- It provide secure and flawless management.
- Using IOT WAREHOUSING gets smarter.
- Further optimization of working capital.
- Inventory flow optimization becomes possible and effortless.



## CHAPTER – 2

### ANALYSIS

#### 2.1 Requirement Analysis

In the 21st century with technology to its best it has become very imp for every type of business to have a proper inventory management for their goods/stocks

Many small and medium-sized businesses are stuck to the traditional way of keeping a register or book of all there sales, which is very time consuming and not secure at all.

So form managing the inventory to making your workplace effect productive and smart we are introducing you to smart warehousing.

There are some modules and functionalities

##### 2.1.1 Admin:-

- Login
- Employee Management
- Access employee control
- Product management
- Can view accounts
- Add or remove employee
- Add or remove product
- Can view purchase and sales history
- Can set minimum selling amount/quantity

##### 2.1.2 Employee:-

- Login/Register

- Product inventory management
- Bill approval
- Supply management
- Customer order management

### **2.1.3 Customer:-**

- Sign-up/sign-in
- Order placement
- Order status tracking
- Order cancelation
- Can view softcopy of bill

### **2.1.4 Supplier :-**

- Raise bill
- Request payment
- View order summary

## **2.2 Project Model**

This system uses the Iterative waterfall model for development of this web-based application. In this model the system is divided into small modules which is combined to run this system. This model is far by most widely used model, almost every other model is derived from this model.

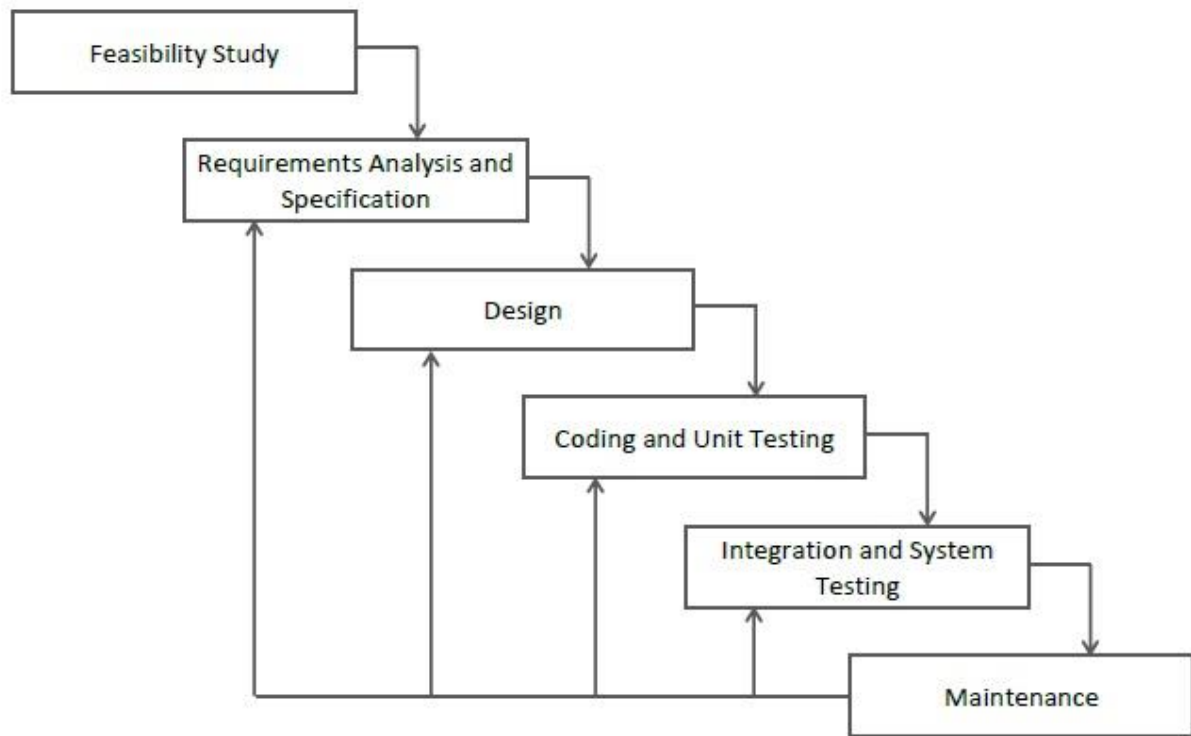
Before starting the development of system a proper feasibility study and requirement analysis and gathering should be done. It is used to design core of the project.

### **2.2.1 Advantages of Iterative Waterfall Model:-**

- The core modules of the system are tested thoroughly, reducing chance of error in final product.
- This model is flexible and less costly to change the scope and requirement.
- This model helps finding exact user requirements which helps with overall design of the system.

### **2.2.2 Dis-advantages of Iterative Waterfall Model:-**

- Sometimes it is difficult to sub-divide problems into functional units.
- It needs good planning and design to execute this model.
- Model cannot be used for very large problems, if user requirements are not well specified at initial stage.



Iterative Waterfall Model

## 2.3 Schedule Representation

Generalized project scheduling tools and technique can be applied with little modification to software projects.

Program evolution and review techniques (PERT) and critical path method (CPM) are two project scheduling method that can be applied to software development. Both techniques are driven by information already developed in earlier project planning activities:

- Estimate of effort.
- A decomposition of the product function.
- The selection of appropriate process model and task set.
- Decomposition of tasks.

[Table 1 : Schedule Representation]

ACTIVITY	START DATE	FINSH DATE
Requirement Analysis		
System Analysis		
System Design		
System Coding		
Testing and Integration		