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## **Introduction Of Inventory Management System**

Inventory management is the process of efficiently monitoring the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into difficulties. Inventory management is very important for big business and private owned organizations especially where there are a lot of orders are being placed everyday and there are lot of materials and the maintenance is really important which the system will do and also will record the time taken to process an order and this system is really important as it can help the organizations to be alerted when the level of inventory is very low and focuses on the three aspects of inventory management and prevent from failure in the future. Inventory management also demands a solid understand in how long it will take for those materials to transfer out of the inventory to be established.

### **Background:**

Inventory management is a prime task for an organisation to achieve its goals of maintaining appropriate level of inventory and minimizing waste. A web –based system of managing inventory ,we expected to help various facilities keep and update on the status of their(manager)tools and equipments. In designing such a system java script has been employed as a developinf language and MY SQL as a backend database with sevlet implemented for the interface.

### **Objectives:**

The main objective of the system is to keep record of the complete inventory.

It support for inventory management helps you record and track material on the basis of both quantity and value.

It improve cash flow,visibility and decision making.

### **Overview:**

Inventory management refers to the process of ordering ,storing ,and using a company's inventory .These include the management of raw materials,components and finished product as well as warehousing and processing such items.

### **Existing System:-**

In the existing system, the inventory management is handled manually, which is highly tedious. Some of the important business operations are estimating the requirement of new raw material, dealing in the production of Purchase order, purchase invoice, sales invoice and debit note. All these operations are performed by a team of skilled members which are prompt in financial calculations and have a sharp memory. The operations are handled in an effective way, but the process is time taking and subjected to human errors.

### **Proposed System:-**

In the proposed system, all the business operations will be automated. Some of the features which the new system will provide are Auto generation of Daily Demand report, Auto generation of Purchase Order of various raw materials. As everything is auto generated, the production delays are avoided. It makes the system more secure as only authenticated users can access the system. Also, there are privileges in which we can authorize a particular user for accessing system or particular modules of the application.

### **Advantage of proposed system:**

- Manage track sales
- Manage contacts
- Manages accounts
- Track product issues
- Manage product feature
- Manage product life cycle
- Manage opportunity

## **SPECIFIC REQUIRMENT :-**

### **Software Requirements**

Operating_system	:	Window XP/2003 or Linux
User interface	:	HTML/CSS
Clint-side scripting	:	Java Script
Programming language	:	Java
Web technologies	:	Servlet , JSP
Database	:	My Sql
Database connectivity	:	JDBC
Web Server	:	Tomcat 6/7

### **Hardware Requirements**

1. Hard Disk – 2 GB.
2. RAM – 1 GB.
3. Pentium 133MHZ Processor.
4. Mouse.
5. Keyboard.
6. Monitor
7. Printer.

## **FUNCTIONAL SPECIFICATIONS**

### **USER SPECIFICATION :**

**ADMIN :** admin can add the item and manage the inventory order and cost and also view feedback and enquiry.

- **USER :** user can view information of available inventory & track their own order,easily can order and give feedback and enquiry.

### **MODULE SPECIFICATIONS :**

**The following modules are covered under this application:-**

#### **Admin:**

Primarily, user which will interact the system will be the administrator of institution assign to take care of all data transaction and insertion or update. It will have to go through an authorization process of login and logout.

**Name:** Name of Admin.

**Admin ID:** It will be a unique value which will act as the primary key and will be same as employee id in the company.

**Email ID:** For contacting purpose every user must enter their email id.

**Address:** Employee address is also an attribute which help to get more about employee.

#### **Manager:**

Secondary, user which will interact the system will be the Manager of institution assign to take care of management services. It will have to go through an authorization process of login and logout.

**Name:** Name of Manager

**Emp ID:** It will be a unique value which will act as the primary key.

**Email ID:** For contacting purpose every user must enter their email id.

**Address:** Employee address is also an attribute which help to get more about employee.

#### **Storage:**

Storage is used to store raw material and product that has been produced but not being order

**S no:** Serial number is assign to every product or raw material to keep their records. It is Primary key.

**Bar Code:** To make record update process faster.

**Name:** Name of product or raw materials.

### **Inventory:**

Inventory is basically having records of items and their quality. It has following attributes.

**Inventory ID:** Inventory Id is primary key to identify each record.

**Item ID:** We have already Items table in our Database. Here ItemID is foreign key to that table.

**Quantity:** Quantity describe the number of unit available or amount of product or material available.

### **Items:**

Item is actual product we produce in our company. It has following Attributes.

**Item No:** Item number is numeric data assign to every product. This is unique for every product. That means this Primary key.

**Bar Code:** Item No is converted into bar code and updated in barcode field. This would increase the process of tracking and getting actual information.

**Item description :** This attribute basically keep the record of every information about product.

### **Orders:**

Whenever an order is received from customer. It fetches the item from the item table and tag Order No. To it. It has following attributes.

**Order No:** This is primary key to Order table. It uniquely identifies every record of this table.

**Barcode:** Every order No is convert to bar code and tag to product and barcode is generate and pasted over product. This will help to track the product.

**Date Required:** This is attribute store the information of dead line of product.

**Date Completed:** When product is delivered to client. Date should be updated and payment clearance should to noted.

### **Shipments:**

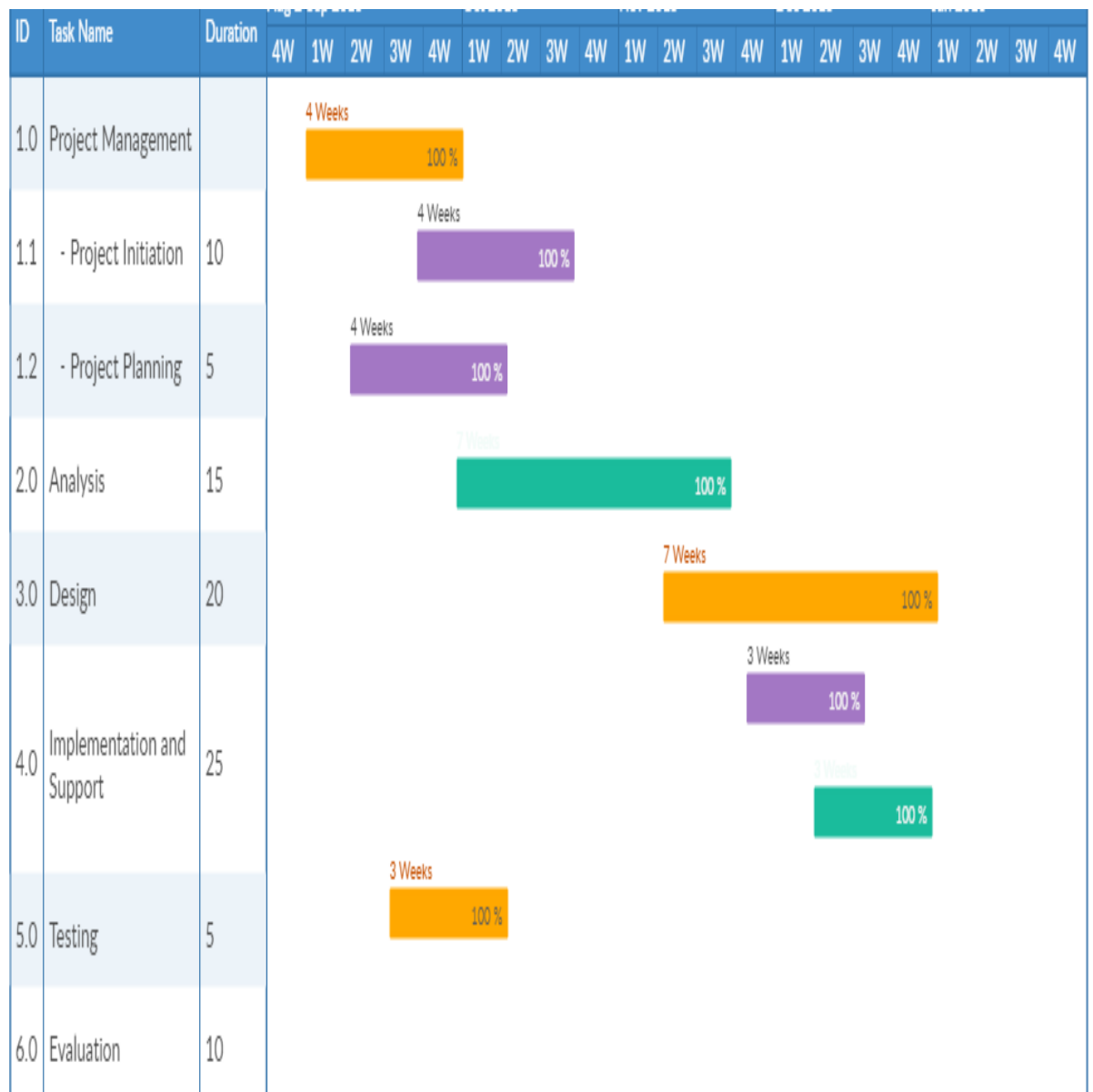
When product is successfully ordered. Its time ship the product. It contains following attributes.

**Shipment No:** This is primary key for Shipment table. It uniquely defines every shipment.

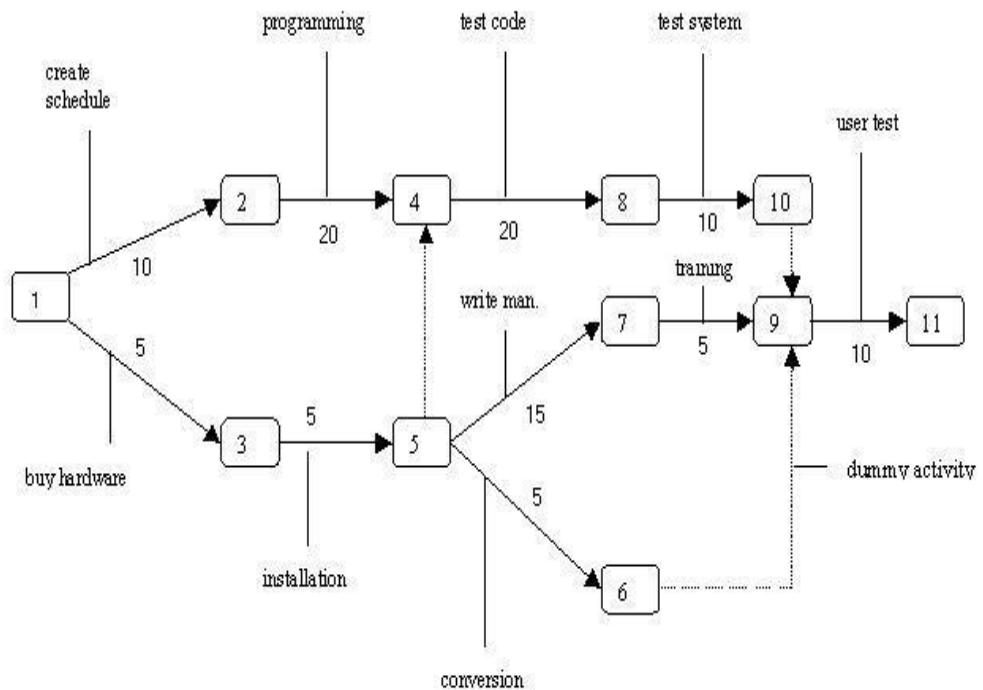
**Address:** Address is mandatory field without this field data would not be save in database

**Shipment Date:** When data is successfully shipped date of that day would updated to our database.

## Time Line Chart :

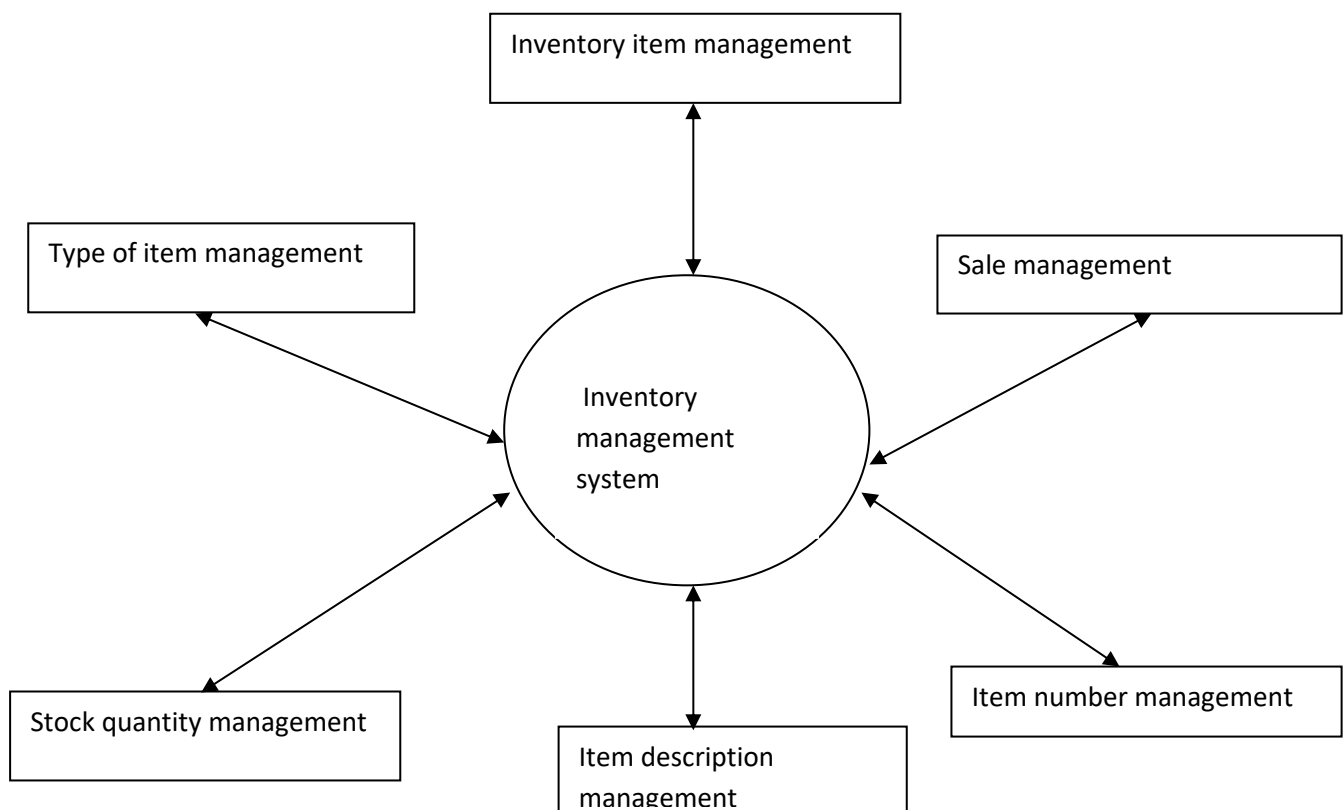


## Pert chart :-

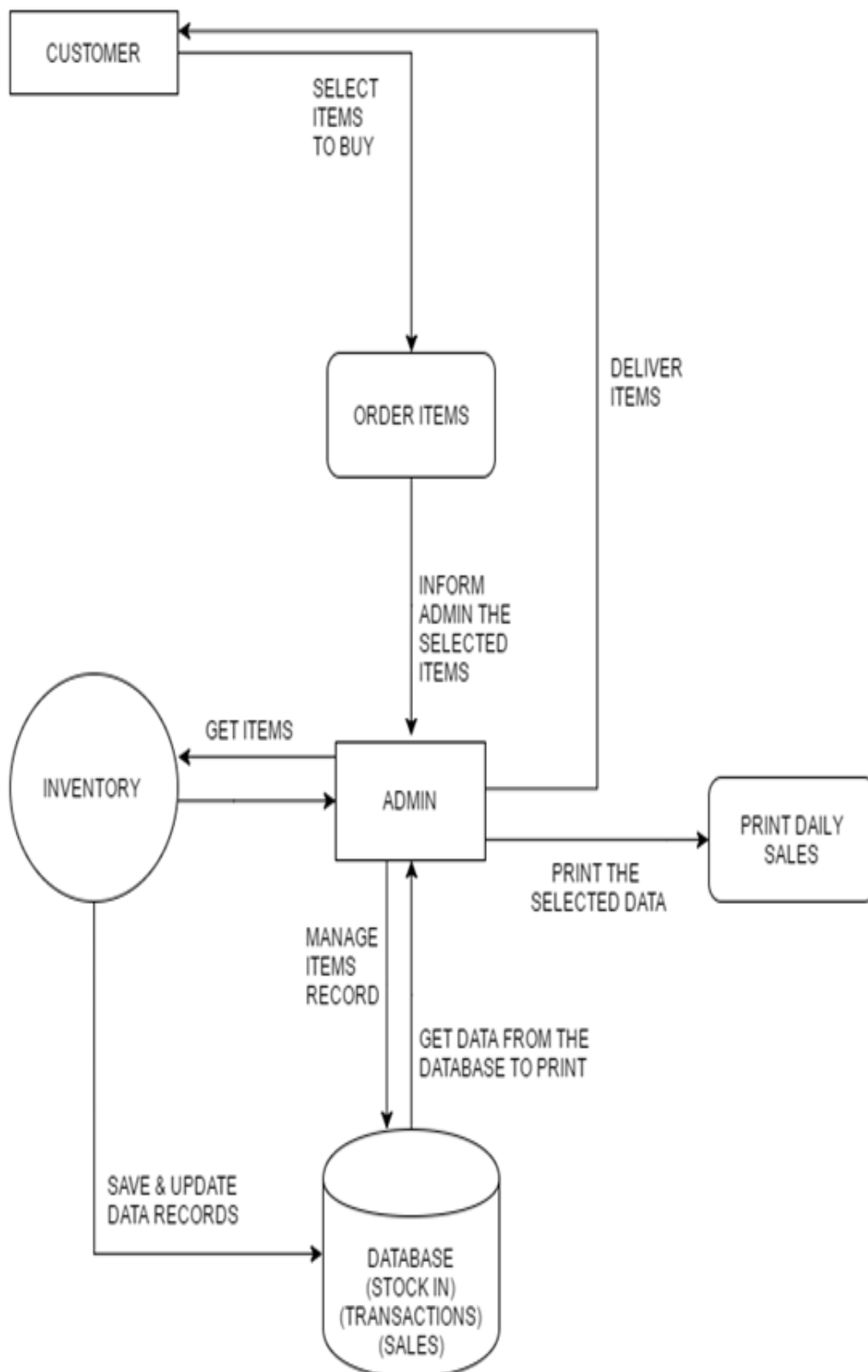


## DATA FLOW DIAGRAM

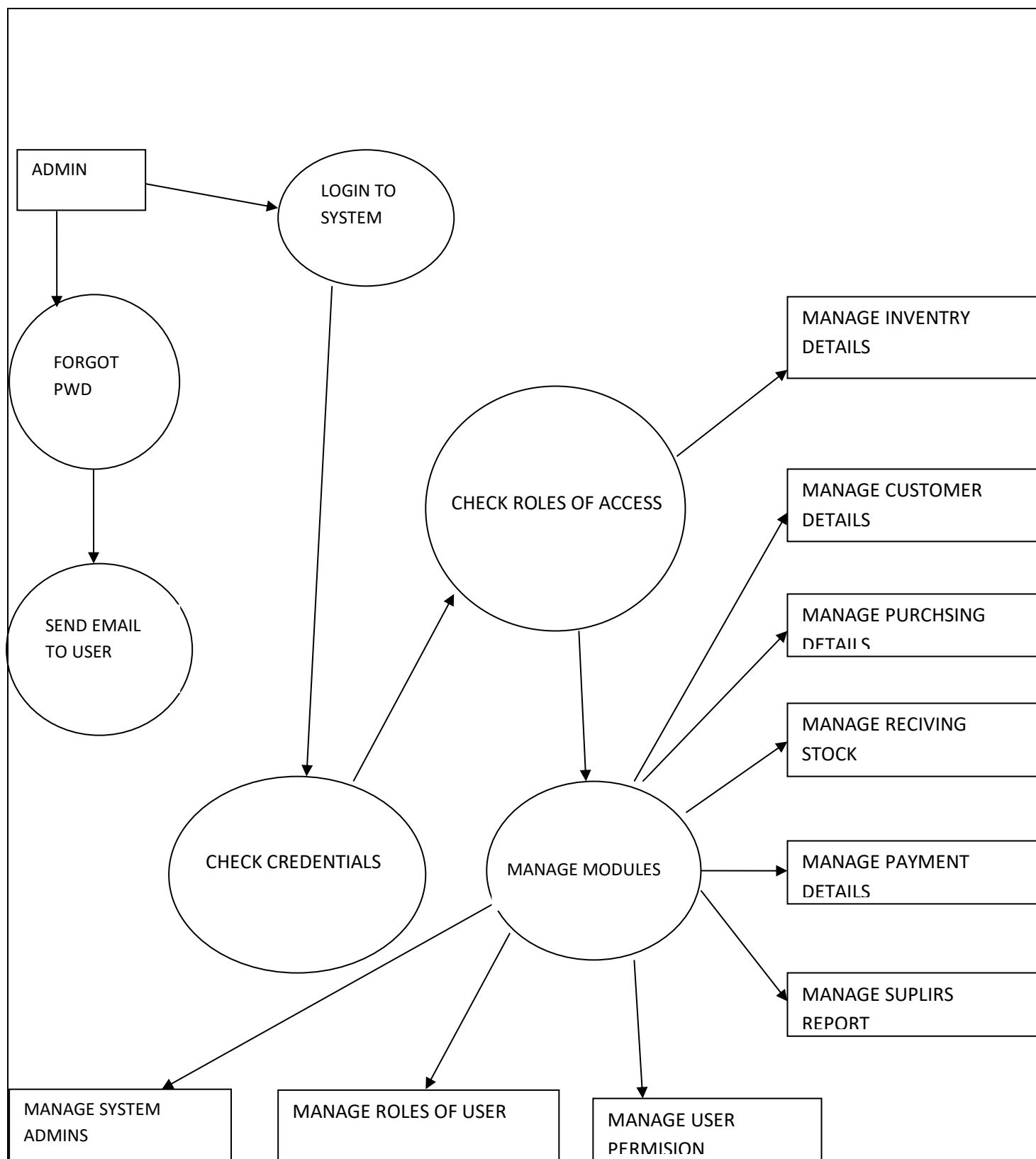
### (0 level)





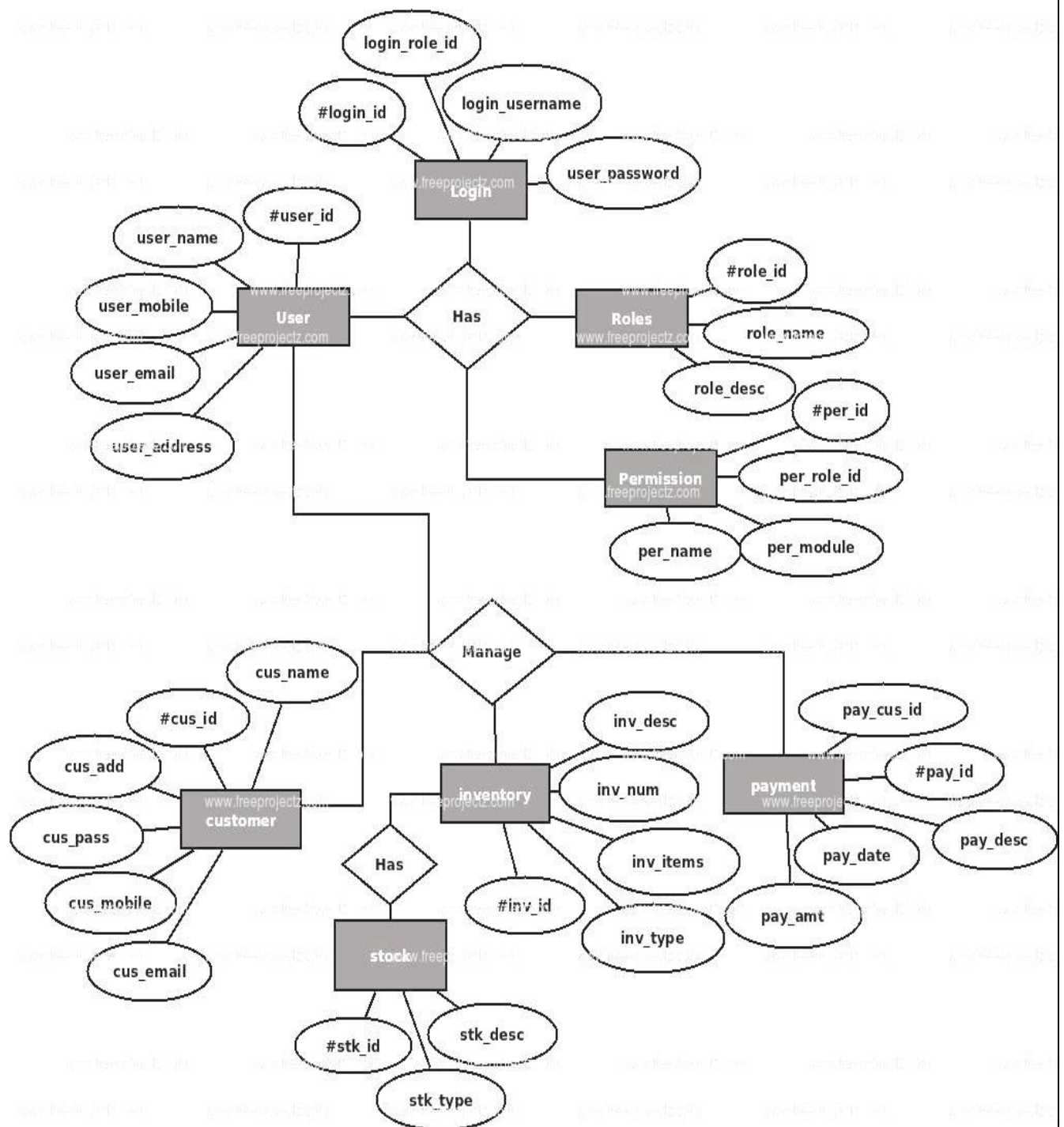


**1<sup>ST</sup> LEVE**

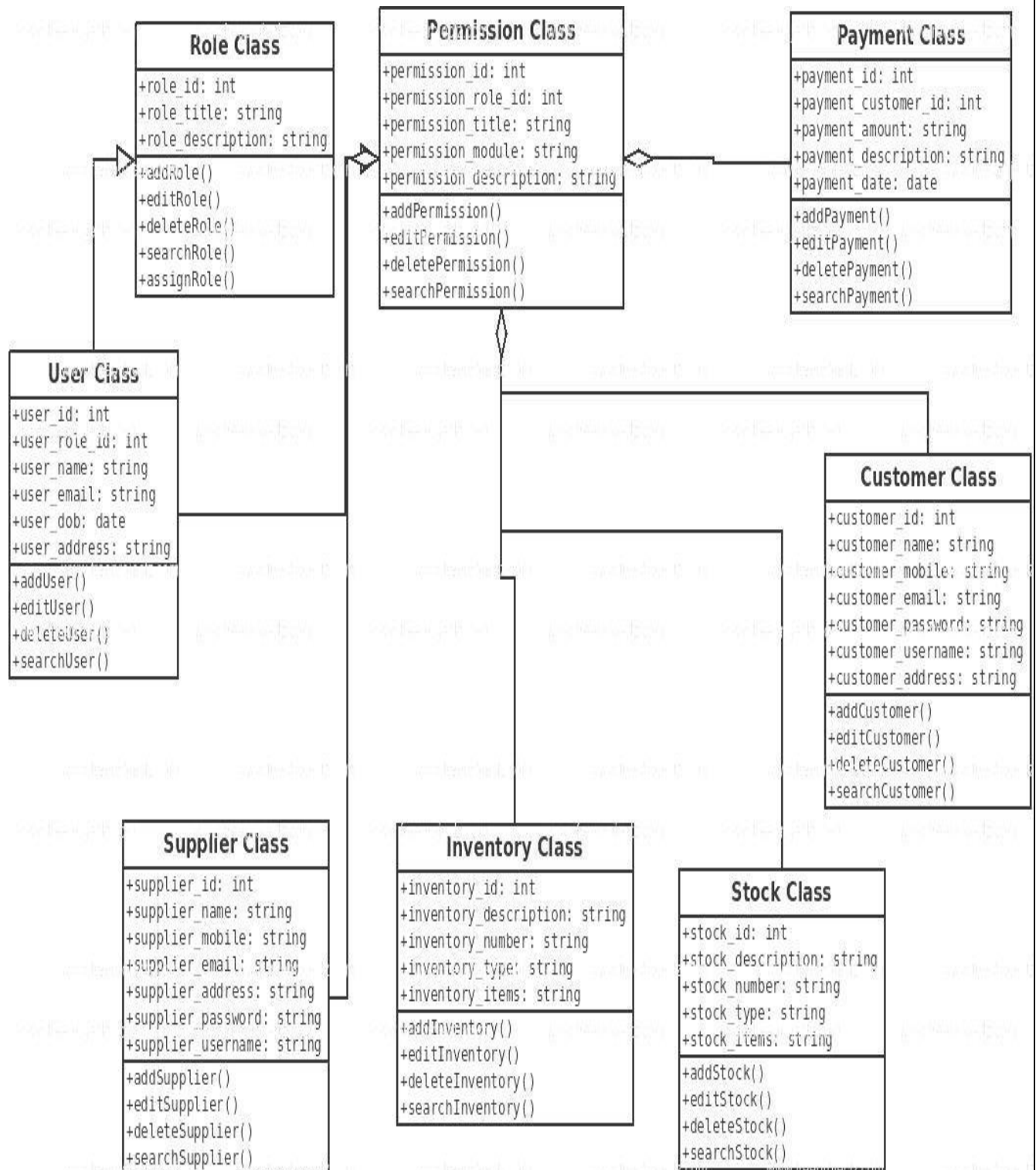


**2<sup>ND</sup> LEVEL DFD**

## ENTITY RELATIONSHIP DIAGRAM



## CLASS DIAGRAM:-



## **DATA DICTIONARY**

**Table:-Admin**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>CONSTRAINTS</b>	<b>DESCRIPTION</b>
Admin_name	Varchar(20)	Not null	Store admin name
Admin_id	Int	Primary key	Store admin id
Email_id	Varchar(70)	Not null	Store E id
Address	Varchar(100)	Not null	Store the address of Admin
Admin_pwd	Varchar(20)	Not null	Store password of admin

**Table:-Manager**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>CONSTRAINTS</b>	<b>DESCRIPTION</b>
Man_name	Varchar(20)	Not null	Store the manager name
Man_id	Int	Primary key	Store the manager id
Email_id	Varchar(70)	Not null	Store manager E id
Address	Varchar(100)	Not null	Store manager full address

**Table:-Storage**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>CONSTRAINTS</b>	<b>DESCRIPTION</b>
S_no	Int	Primary key	Keep storage no
Bar_code	Int	Not null	Keep the bar code
Name	Varchar(20)	Not null	Store the name of storage

**Table:-Inventory**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>CONSTRAINTS</b>	<b>DESCRIPTION</b>
Invent_id	Int	Primary key	Store inventory id no
Item_id	Int	Not null	Store item no
Quantity	Int	Not null	Store the quantity of inventory

**Table:-Item**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Item_no	Int	Primary key	Store item no
Bar_code	Int	Not null	Store bar code of item
Item_desc	Varchar(100)	Not null	Store details of item

**Table:-Order**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Order_no	Int	Primary key	Store oerder no
Bar_code	Int	Foreign key	Store bar code of ordered item
required_date	Date/time	Not null	Store the date when user has been ordered product
Completed_date	Date/time	Not null	Store the date when product has been shipped at given address

**Table:-Employee**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Emp_name	Varchar(20)	Not null	Store employee name
Emp_id	Int	Primary key	Store employee id
Address	Varchar(100)	Not null	Store employee address
Phone_no	Large_int	Not null	Store phone no. Of employee

**Table:-Shipment**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Shipment_no	Int	Primary key	Keep product shipment no
Address	Varchar(100)	Not null	Store the address where order will deliver
Shipment_date	Date/time	Foreign key	Store the shipment date

**Table:Search**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Searched_by_item_id	Int	Primary key	Search or track inventory by item id
Searched_by_emp_id	Int	Primary key	Search employee detail by emp id
Searched_by_order_no	Int	Primary key	Search /track order by order no

**Table:- Feedback**

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Feedback	Varchar(250)		Store feedback of every user that give their opinion

## **FUTURE SCOPE**

The scope of the project includes that what all future enhancement can be done in this system to make it more feasible to use-

- The scope of the project includes that's what all future enhancements can be done in this system to make it more feasible to use.
- Database for different projects range and storage can be provided.
- More graphics can be added to make it more user friendly and understandable.
- Manage and backup version of document.



## **Conclusion**

While developing the system a conscious effort has been made to create and develop a software package making use of available tools , techniques and resources that would generate a proper System.

While making the system an eye has been kept on making it as user friendly ,as cost effective and as flexible as possible. As such one may hope that the system will be acceptable to any user and will adequately meet her/his needs.

As in case of system development processes where there are a number of shortcoming ,there hav been some short coming in the development of this system also .The project is still under modification.

# **BIBLIOGRAPHY**

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**By (Herbert Schildt)**

## **Web link:**

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