

**UNIVERSITY NAME**

MCSP-060

**“ENTERPRISES RESOURCES  
PLANNING”**

by  
Name: .....  
Enrolment No: .....

Under Guidance  
of  
.....

Submitted to the School of Computer and Information Sciences,  
.....

in partial fulfilment of the requirements  
for the award of the degree  
Masters of Computer Applications (MCA)

**UNIVERSITY  
LOGO**

**2017**

**UNIVERSITY NAME**

**CITY**

# **“ENTERPRISES RESOURCES PLANNING”**

**UNDER SUPERVISION OF** : .....

**SUBMITTED BY**

Name : .....

Programme code : .....

Enrollment No. : .....

Study Centre Code : .....

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# **“ENTERPRISES RESOURCES PLANNING”**

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# Title of the Project

## **“ENTERPRISES RESOURCES PLANNING”**

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## **1. INTRODUCTION**

This is a Project work is undertaken in context of partial fulfillment of the MCA. The project “**ENTERPRISES RESOURCES PLANNING**” is the operations of the departmental stores. These operations of the departmental stores include purchasing of raw products and supplying ready products. In this project we will try to computerize the process of production, sale, purchase, marketing, challans, Bills etc.

The stock that is available with the departmental stores is also recorded. Details like current stock level, the stock received etc. are recorded. The transactions carried out by the departmental stores are also recorded. The bills details of the bills generated by the department are also stored for future records and income tax purposes.

## **2. OBJECTIVES**

The objectives of the project are to:

- To add new products in the department.
- To display all the details of the products, purchase orders, clients etc.
- To display all the details regarding Stock currently available in the department, according to which purchase order is placed.
- To store, search or modify details of products like product number, description, quantity in hand, unit, rate etc.
- To store, search or modify details of challans like challan number, challan date, order number etc.
- To display all the details regarding Stock currently available in the department, according to which purchase order is placed.
- To purchase orders. Purchase details- purchase quantity, purchase order number, purchase rate, supplier name etc.
- To keep track of all the transactions done by the departments for future records and income tax purposes.
- To keep track of all the bills generated by the department for future records and income tax purposes.

### **3. PROJECT CATEGORY**

This Project is coupled with material on how to use the various tool, sub sets available in JSP AND MY SQL

The need of today's software development is competence in a GUI based front-end tool, which can connect to Relational Database engines. This gives the programmer the opportunity to develop client server based commercial applications.

These applications give users the power and ease of a GUI with the multi user capabilities of Novell, UNIX or WinNT based RDBMS engines such as MY SQL

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## **4. TOOLS / PLATFORM, HARDWARE AND SOFTWARE**

### **REQUIREMENT SPECIFICATION**

#### **HARDWARE**

Processor	:	Pentium 2.4 GHz or above
Memory	:	1 GB RAM or above
Cache Memory	:	128 KB or above
Hard Disk	:	3 GB or above [at least 3 MB free space required]
Pen Drive	:	5 GB
Printer	:	Laser Printer

#### **SOFTWARE**

Operating System	:	Windows 7 (Professional).
Font-End Tool	:	JSP, Servlets, Java Script
Back-End	:	My Sql

#### **FRONT END:**

We have implemented JavaScript for all the Client side validations. Client side JavaScript is designed to reside inside HTML document & ensure they run properly. It is object based, event driven, platform independent. These are important parts of any Web application to implement Client side Validations and the invalid data is not submitted. The form is not submitted until user fills in correct data. It is extremely useful to restrict mistakes by user.

#### **BACK END:**

We have used My Sql provides efficient/effective solution for major database tech.

- Large database and space management.
- Many concurrent database users.
- High transaction processing requirement
- High Availability
- Industry accepted standards

- Manageable security
- Portability

### **SQL SERVER**

Microsoft SQL Server is an application used to create computer databases for the Microsoft Windows family of server operating systems. It provides an environment used to generate databases that can be accessed from workstations, the web, or other media such as a personal digital assistant (PDA). Microsoft SQL Server is probably the most accessible and the most documented enterprise database environment right now. This also means that you can learn it a little quicker than most other database environments on the market.

### **PRINCIPLES OF SYSTEM ANALYSIS**

#### **PRINCIPLES:**

1. Understand the problem before you begin to create the analysis model.
2. Develop prototypes that enable a user to understand how human machine interaction will occur.
3. Record the origin of and the reason for every requirement.
4. Use multiple views of requirements like building data, function and behavioral models.
5. Work to eliminate ambiguity.



## **ENTITY RELATIONSHIP DIAGRAM (ERD)**

**Entity – Relationship Diagram:** This depicts relationship between data objects. The attribute of each data objects noted in the entity- relationship diagram can be described using a data object description. Data flow diagram serves two purposes:

1. To provide an indication of how data are transformed as they move through the system.
2. To depict the functions that transformation the data flow.

**Data Objects:** A data object is a representation of almost any composite information that must be understood by the software. By composite information, we mean something that has a number of different properties or attributes. A data object encapsulates data only there is no reference within a data object to operations that act on the data.

**Attributes:** Attributes define the properties of a data object and take on one of three different characteristics. They can be used to:

Name an instance of data object.

Describe the instance.

Make reference to another instance in other table.

**Relationships:** Data objects are connected to one another in a variety of different ways. We can define a set of object relationship pairs that define the relevant relationships.

### ❑ **CARDINALITY AND MODALITY:**

#### ❖ **Cardinality:**

The data model must be capable of representing the number of occurrences of objects in a given relationship. The cardinality of an object relationship pair is

- ◆ **One-To-One (1:1):** An occurrence of object 'A' can relate to one and only one occurrence of object 'B' and vice versa.

- ◆ **One-To-Many (1:N):** One occurrence of object 'A' can relate to one or many occurrences of object 'B' but an occurrence of object 'B' can relate to only one occurrence of object 'A'.
- ◆ **Many-To-Many (M: N):** An occurrences of 'B' and an occurrence of 'B' can relate to one or many occurrence of 'A'.

❖ **Modality:**

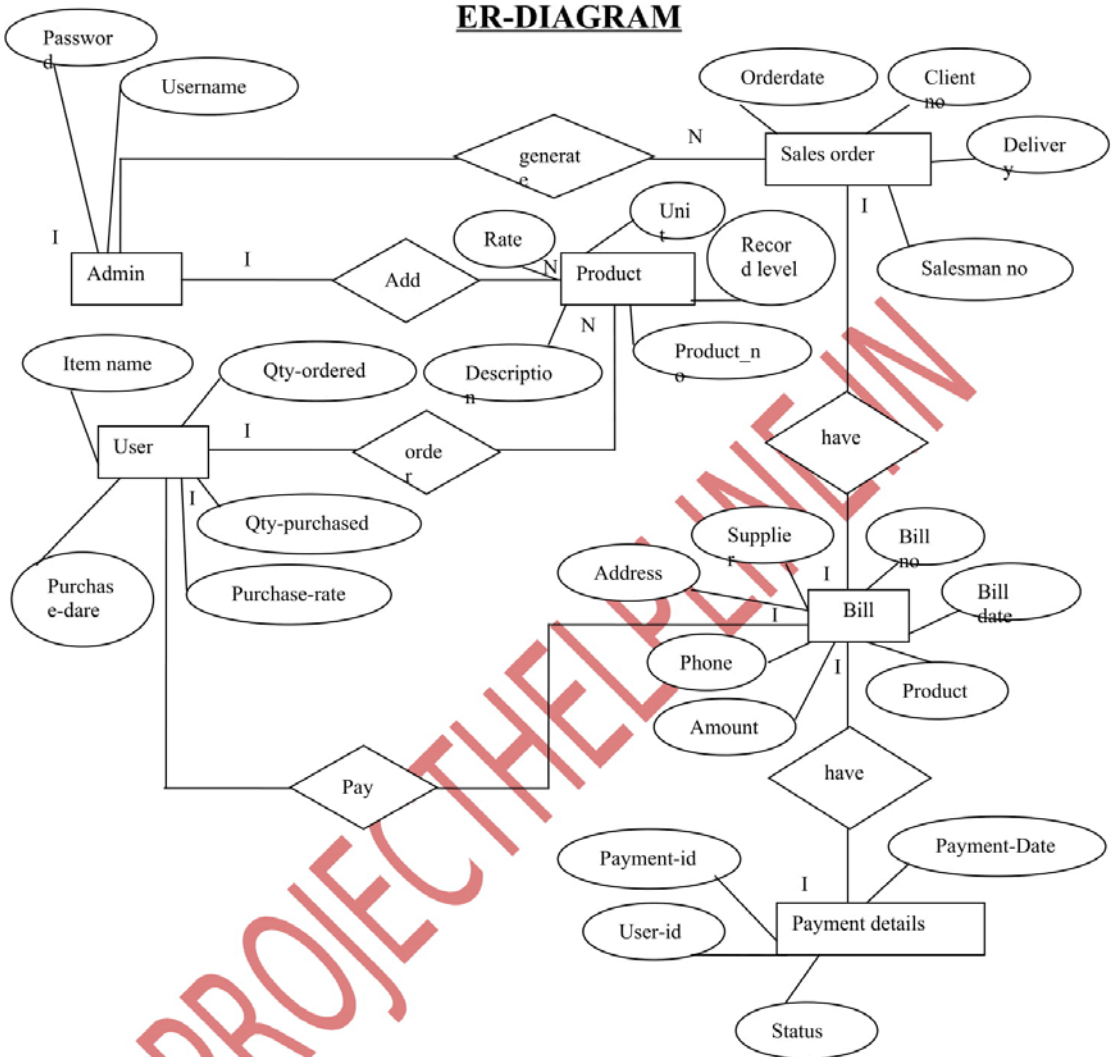
The modality of a relationship is zero if there is no explicit need for the relationship to occur or the relationship is optional. The Modality is one if the occurrence of the relationship is mandatory.

The object relationship pair can be represented graphically using the Entity Relationship Diagrams. A set of primary components are identified for the Entity Relationship Diagram.

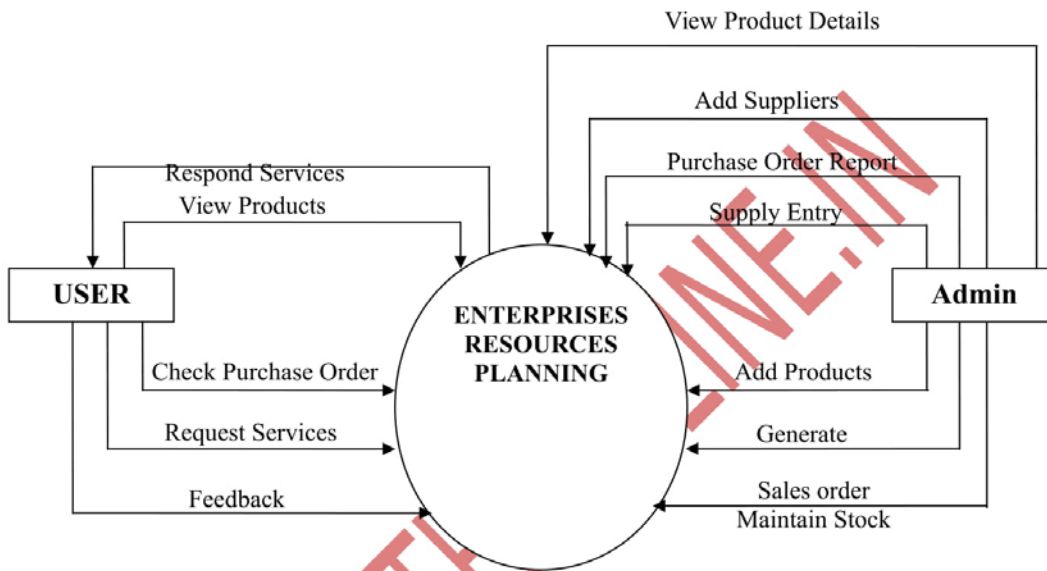
1. Attributes,
2. Relationships and
3. Various Type Indicators.

The primary purpose of the Entity Relationship Diagram is to represent data objects and their relationships.

## ER-DIAGRAM



## 5. CONTEXT LEVEL DFD



## **6. A COMPLETE STRUCTURE**

The limited time and resources have restricted us to incorporate, in this project, only the main activities that are performed in news sites, but utmost care has been taken to make the system efficient and user friendly.

For the optimum use of practical time it is necessary that every session is planned. Planning of this project will include the following things:

- Topic Understanding.
- Modular Break – Up of the System.
- Processor Logic for Each Module.
- Database Requirements.

### **Topic Understanding:**

It is vital that the field of application as introduced in the project may be totally a new field. So as soon as the project was allocated to me, I carefully went through the project to identify the requirements of the project.

### **Modular Break –Up of the System:**

- Identify The Various Modules In The System.
- List Them In The Right Hierarchy.
- Identify Their Priority Of Development
- Description Of The Modules:

### **(i).Modules**

#### **Module 1: Password Module**

In this module, this project is for multiple users. If a User enters a password and the software checks its validity. If the password is valid then option is given to change the password, otherwise “Invalid User/Password” message is displayed. There is an option for change password, new users sign in.

**Module 2: Creating new Entities ( Users, Suppliers, Clients, Purchasers, Salesman)**In this module, whenever a new entity is required to be added the corresponding forms are opened and the database is manipulated to check whether the data is already existing or not. If it already exists, then it prompts that “Entry already existing” and if not than the data is entered with the various validation checks.

#### **Module 3: Modifying / Updating Existing Entities**

In this module, whenever an existing entity is required to be modified the corresponding forms are opened and the database is manipulated and the data is fetched. Now the administrator can made the required changes and then accordingly, he updates the data. Again, the checks are followed in case there is any invalid entry.

#### **Module 4: Searching**

In this module, whenever an existing entity is required to be searched the corresponding forms are opened and the database is manipulated and the data is fetched. Again, the checks are followed in case there is any invalid entry.

#### **Module 5: Validation of Data Entered by the User & Error Handling**

In this module, the validity of data entered by the user during the various business processes is checked through various validation checks. For example, there should not be any characters entered in the numeric fields, likewise if there is any error occurs than it should handle that particular error and give the required messages.

#### **Module 6: Sales Orders**

This module keeps track sales orders. It keeps tracks of sales order number, order dates, client number, delivery, salesman number etc.

**Module 7: Challan**

This module this function is used to store, search or modify details of challans like challan number, challan date, order number etc.

**Module 8: Stock**

This module is used to display all the details regarding Stock currently available in the department, according to which purchase order is placed.

**Module 9: Purchase**

This module is related to purchase orders. Purchase details- purchase quantity, purchase order number, purchase rate, supplier name etc.

**Module 10: Transactions**

This module keeps track of all the transactions done by the departments for future records and income tax purposes.

**Module 11: Bill**

This module keeps track of all the bills generated by the department for future records and income tax purposes.

**(ii).Data Structure Requirements according to the modules:**

- Identify The Various Tables Required.
- Fields for These Tables.
- The Various Key Fields (for example Primary key and foreign key).
- Identify The Various Constraints like Not Null, Unique etc.

## **DATABASE DESIGN**

### **Tables:**

## **7. GANTT & PERT CHART**

### **GANT CHART**

Gantt charts mainly used to allocate resources to activities. The resources allocated to activities include staff, hardware, and software. Gantt charts (named after its developer Henry Gantt) are useful for resource planning. A Gantt chart is special type of bar chart where each bar represents an activity. The bars are drawn along a timeline. The length of each bar is proportional to the duration of the time planned for the corresponding activity.

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## **8. SECURITY AND VALIDATION CHECKS**

In this project we have used following validation checks.

- While entering the data into the form it will check for the fields is properly filled & it should not be null.
- Whenever we enter the data for the new product or order, details will be automatically added in the database tables and also generate the id automatically.
- Similarly in the purchase table details of purchase are automatically added.

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## **9. SCOPE OF FUTURE APPLICATION**

This project will be developed for the departmental stores, retailers etc.. Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized project. In case of system failure, the organization should be in a position to process the transaction with another organization or if the worst comes to the worst, it should be in a position to complete it manually.

## **10. CONCLUSION**

This project is designed to meet the requirements of the enterprise. The software project is very big and includes almost all aspects of Enterprise application. It has been developed in JSP, SERVLETS, keeping in mind the specifications of the system.

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