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 :

ACKNOWLEDGEMENT

With Candor and Pleasure I take opportunity to express my sincere thanks and obligation to my esteemed guide **………….** It is because of his able and mature guidance and co-operation without which it would not have been possible for me to complete my project.

It is my pleasant duty to thank all the staff member of the computer center who never hesitated me from time during the project.

Finally, I gratefully acknowledge the support, encouragement & patience of my family, and as always, nothing in my life would be possible without God, Thank You!

DECLARATION

I hereby declare that this project work titled "*Enterprise Resource Planning*" is my original work and no part of it has been submitted for any other degree purpose or published in any other from till date.

TABLE OF CONTENT

1. INTRODUCTION

1.1 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.

INTRODUCTION TO JSP

Adding dynamic content via expressions

As we saw in the previous section, any HTML file can be turned into a JSP file by changing its extension to .jsp. Of course, what makes JSP useful is the ability to embed Java. Put the following text in a file with .jsp extension (let us call it **`hello.jsp`**), place it in your JSP directory, and view it in a browser.

```
<HTML>
<BODY>
Hello!  The time is now <%= new java.util.Date() %>
</BODY>
</HTML>
```

Notice that each time you reload the page in the browser, it comes up with the current time.

The character sequences `<%=` and `%>` enclose Java expressions, which are evaluated at run time.

This is what makes it possible to use JSP to generate dyamic HTML pages that change in response to user actions or vary from user to user.

Exercise: Write a JSP to output the values returned by `System.getProperty` for various system properties such as `java.version`, `java.home`, `os.name`, `user.name`, `user.home`, `user.dir` etc.

Scriptlets

We have already seen how to embed Java expressions in JSP pages by putting them between the **<%=** and **%>** character sequences.

DATA TYPE

Built-in data types

In My Sql, each object (such as column, variable, or parameter) has a related data type, which is an attribute that specifies the type of data that the object can hold.

My SQL ships with 27 built-in (system) data types. They are:

SYSTEM STUDY

2.1 PRELIMINARY INVESTIGATION

System development, a process consisting of two major steps of system analysis and design, start when management or sometimes system development personnel feel that a new system or an improvement in the existing system is required. The system development life cycle is classically thought of as the set of activities that analysts, designers and users carry out to develop and implement an information system. The system development life cycle consists of the following activities:

- Preliminary investigation
- Determination of system requirements
- Design of system
- Development of software
- System testing
- Implementation, evaluation, and maintenance

A request to take assistance from information system can be made for many reasons, but in each case someone in the organization initiates the request is made, the first system activity the preliminary investigation begins. This activity has three parts:

1) Request clarification
2) Feasibility study
3) Request approval

Request clarification: Many requests from employees and users in the organizations are not clearly defined, therefore it becomes necessary that project request must be examined and clarified properly before considering systems investigation.

SYSTEM ANALYSIS

3.1 IMPORTANCE OF COMPUTERIZED ENTERPRISE RESOURCE PLANNING

There are several attributes in which the computer based information works. Broadly the working of computer system is divided into two main groups:

- Transaction System
- Decision Support System

Transaction System:

A transaction is a record of some well-defined single and usually small occurrence in a system. Transactions are input into the computer to update the database files. It checks the entering data for its accuracy. This means that numeric data appears in numeric field and character data in character field. Once all the checks are made, transaction is used to update the database. Transaction can be inputted in on-line mode or batch mode. In on-line mode, transactions are entered and updated into the database almost instantaneously. In batch mode, transactions are collected into batches, which may be held for a while and inputted later.

Decision Support System:

It assists the user to make analytical decision. It shows the various data in organized way called analysis. This analysis can be made to syrdy preferences and help in making decisions.

Computer system works out best with record maintenance. It will tell you which customer would get how much pending/reports statements. It will also help to search the information about a particular person by simply entering his telephone number. User can store information as per requirement, which can be used for comparison with other reports.

SYSTEM DESIGN

4. SYSTEM DESIGN

The design document that we will develop during this phase is the blueprint of the software. It describes how the solution to the customer problem is to be built. Since solution to complex problems isn't usually found in the first try, iterations are most likely required. This is true for software design as well. For this reason, any design strategy, design method, or design language must be flexible and must easily accommodate changes due to iterations in the design. Any technique or design needs to support and guide the partitioning process in such a way that the resulting sub-problems are as independent as possible from each other and can be combined easily for the solution to the overall problem. Sub-problem independence and easy combination of their solutions reduces the complexity of the problem. This is the objective of the partitioning process. Partitioning or decomposition during design involves three types of decisions: -

Define the boundaries along which to break;

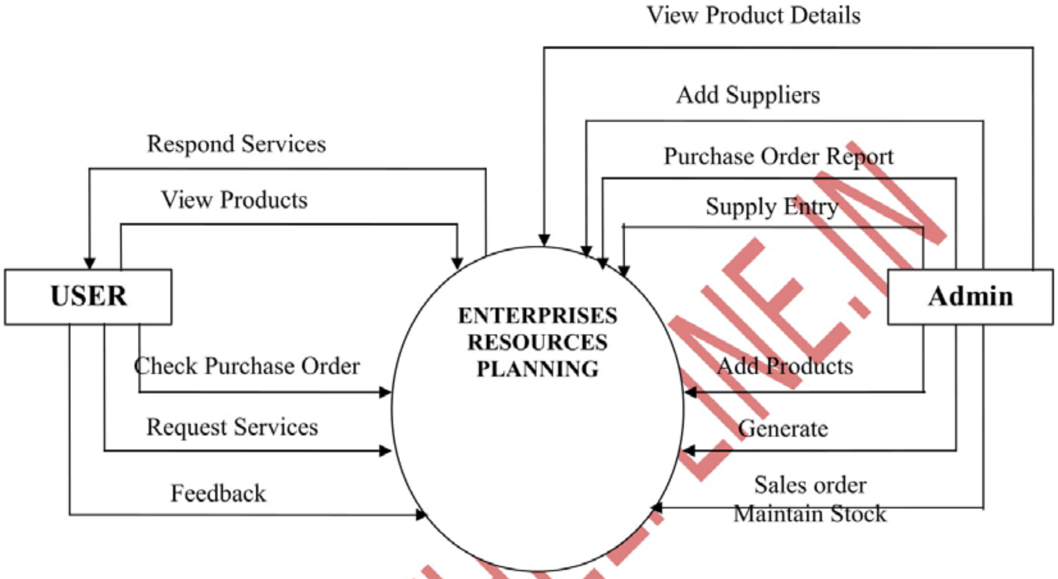
Determine into how money pieces to break; and

Identify the proper level of detail when design should stop and implementation should start. Basic design principles that enable the software engineer to navigate the design process suggest a set of principles for software design, which have been adapted and extended in the following list:

Free from the suffer from "tunnel vision." A good designer should consider alternative approaches, judging each based on the requirements of the problem, the resources available to do the job.

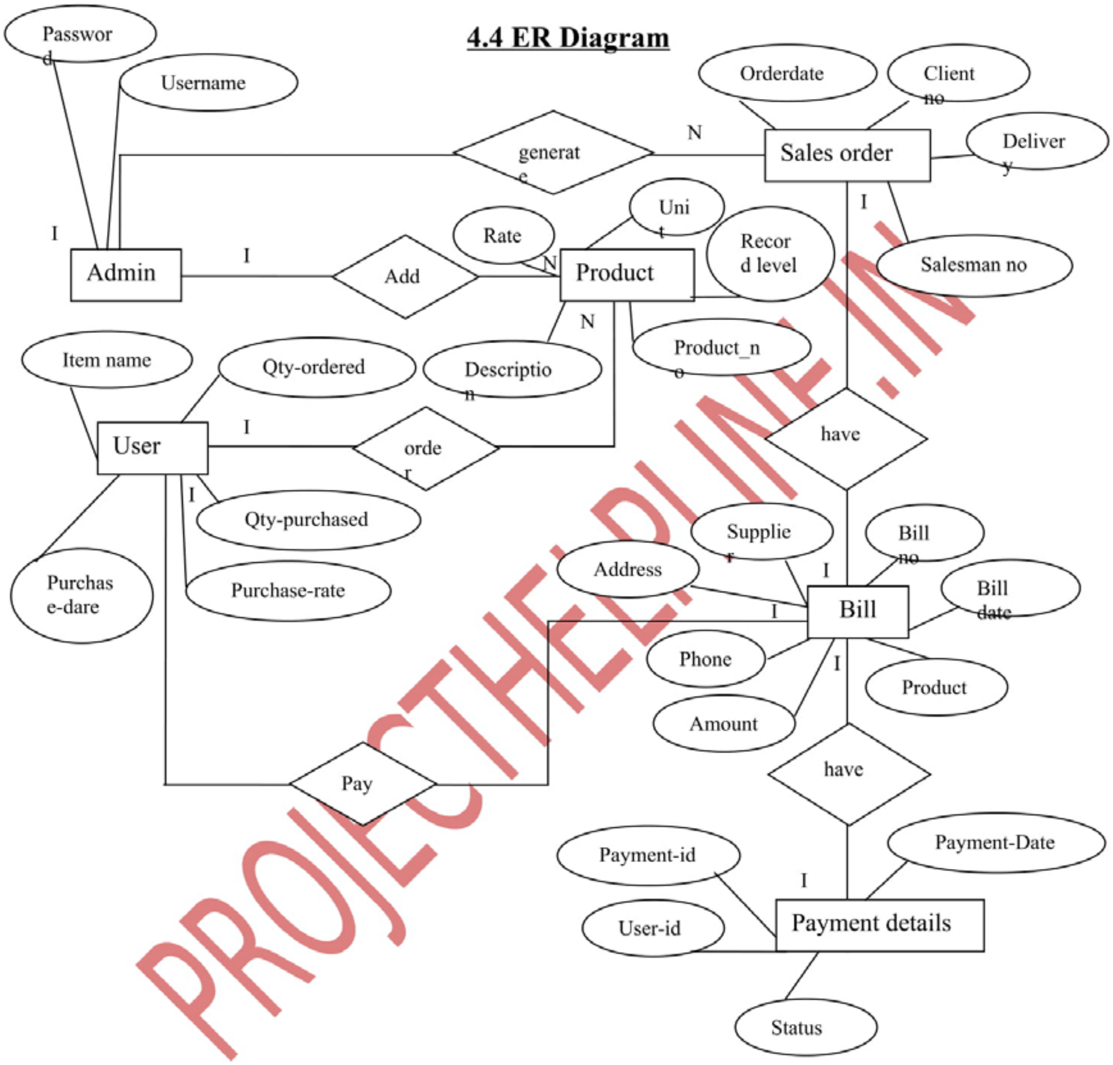
The design should be traceable to the analysis model. Because a single element of the design model often traces to multiple requirements, it is necessary to have a means for tracking how requirements have been satisfied by the design model. The design should not repeat the same thing. Systems are constructed using a set of design patterns, many of which have likely been encountered before. These patterns should always be chosen as an alternative to reinvention. Time is short and resources are limited! Design time should be invested in representing truly new ideas and integrating those patterns that already exist.

4.3 CONTEXT LEVEL DFD

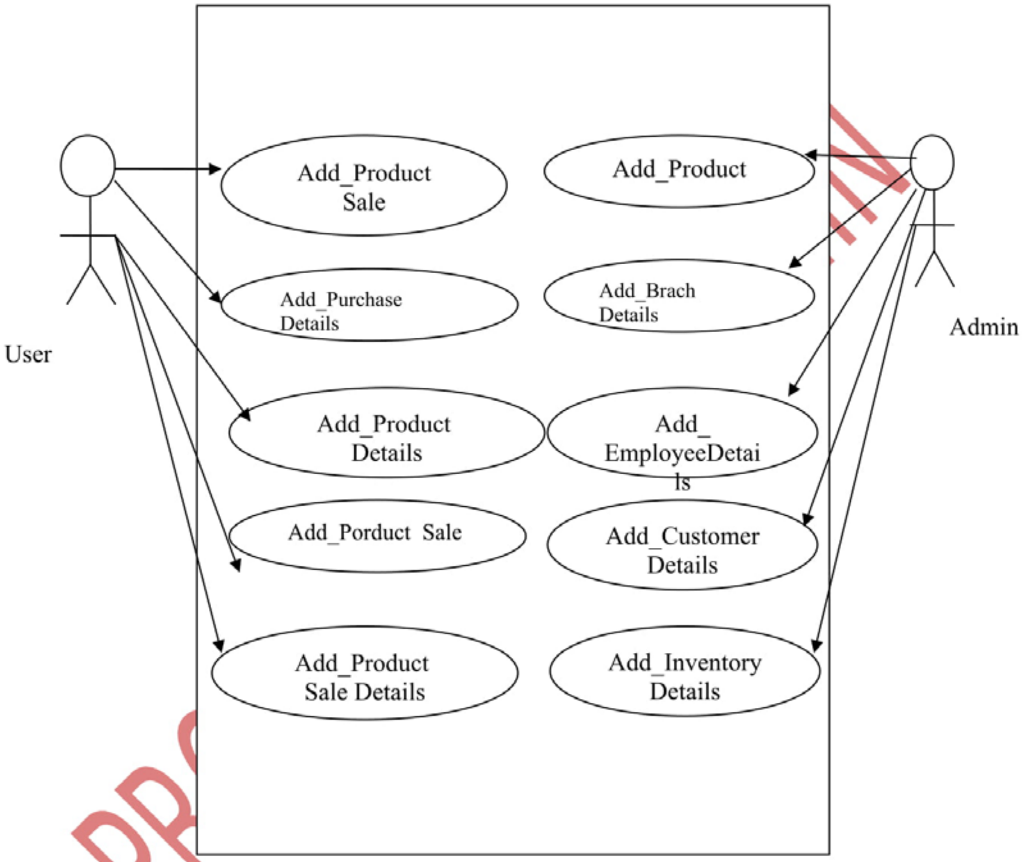


-

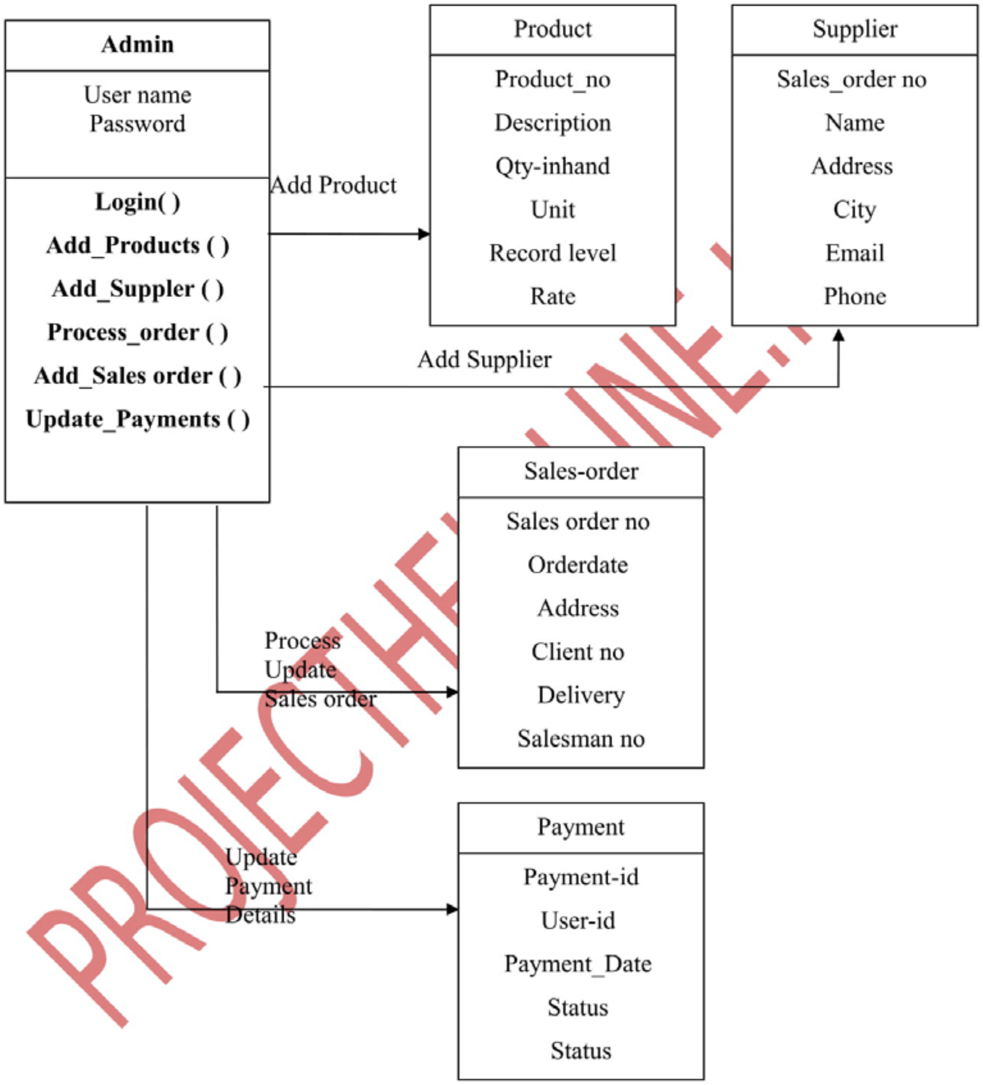
4.4 ER Diagram



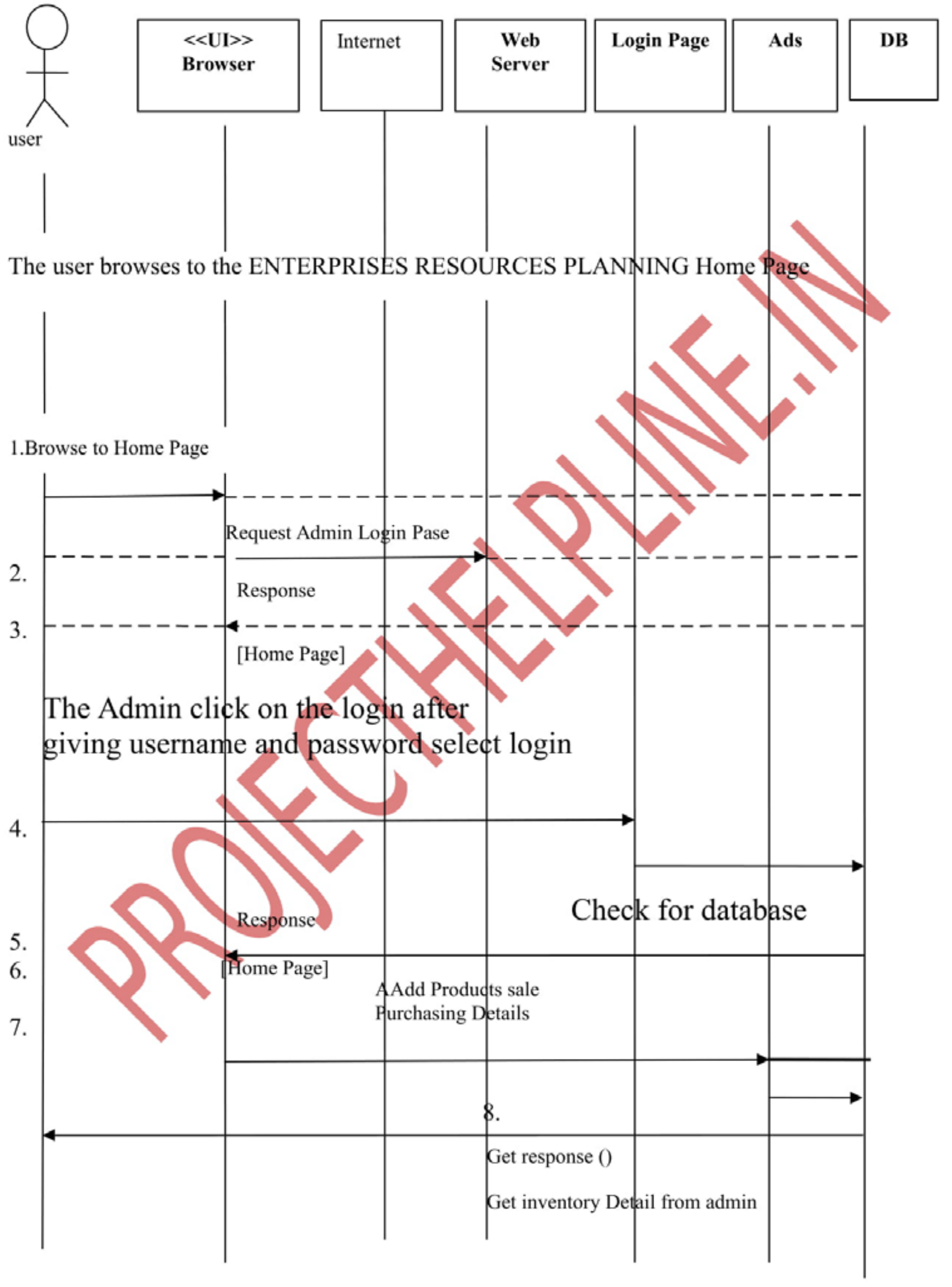
Class Diagrams



Class Diagrams



Sequence Diagram



SYSTEM DEVELOPMENT

5.1 Source Code

Index.jsp

```
<%@ page language="java" import="java.sql.*" %>
<%@ page session="true" %>
<html>
<head>
<title>Enterprise Resource Planning</title>

<style type="text/css">
<!--
.style2 {
        font-size: 16px;
        font-weight: bold;
        color: #990000;
}
.style7 {font-size: 16px; color: #1863a6; }
.style9 {color: #990033}
.style10 {color: #990000}
-->
</style>
<script type ="text/javascript">
function validation(){
   var c = document.forms ["f1"]["cap1"].value;
        var h = document.forms ["f1"]["cap2"].value;
   if(c==null||c=="")
   {
     alert ("Please Enter Captcha");
     return false;
   }
        if(c!=h)
   {
     alert ("Please Enter Correct Captcha");
     return false;
   }
}
</script>
</head>
<body>
<%
StringBuffer sb=new StringBuffer();
for(int i=1;i<=5;i++)
{
   sb.append((char)(int)(Math.random()*79+23+7));
}
String cap=new String(sb);
%>
<form name="f1" method="post" action="log.jsp">
```

5.2 CODE EFFICIENCY

Reviewing of Code efficiency for a module is carried out after the module is successfully compiled and all the syntax errors eliminated. Code efficiency review is extremely cost-effective strategies for reduction in coding errors in order to produce high quality code. Normally, two types of efficiency are carried out on the code of a module - code optimization and code inspection. The procedure and final objective of these two efficiency techniques are very different as discussed below.

5.3 OPTIMIZATION OF CODE

Code optimization is an informal code analysis technique. In this technique, after a module has been coded, it is successfully compiled and all syntax errors are eliminated. Some members of the development team are given the code a few days before the optimization meeting to read and understand the code. Each member selects some test cases and simulates execution of the code by hand (i.e. trace execution through each statement and function execution). The main objectives of the optimization are to discover the algorithmic and logical errors in the code. The members note down their findings to discuss these in a optimization meeting where the coder of the module is also present.

TESTING

6.1 TESTING

Software Testing is an empirical investigation conducted to provide stakeholders with information about the quality of the product or service under test , with respect to the context in which it is intended to operate. This includes, but is not limited to, the process of executing a program or application with the intent of finding software bugs. It can also be stated as the process of validating and verifying that a software program/application/product meets the business and technical requirements that guided its design and development, so that it works as expected and can be implemented with the same characteristics.

SYSTEM IMPLEMENTATION

7.POST IMPLEMENTATION MAINTENANCE AND REVIEW

As we know, creating software is one thing and the implementation of the created software is another. The process of implementing software is much difficult as compared to the task of creating the project. First we have to implement the software on a small scale for removing the bugs and other errors in the project and after removing them we can implement the software on a large scale.

Before we think in terms of implementing the Software on a large basis, we must consider the Hardware requirements.

Whenever we develop software or project a certain hardware and software is being used by the programmer for developing the project. The hardware and software to be used by the programmer for developing the project should be such that it would result in the development of a project, which would satisfy all the basic needs for which the project has been created by the programmer. The Hardware should be such that cost constraints of the Client should also be taken into account without affecting the performance.

8. COST ESTIMATION OF THE PROJECT

Cost in a project is due to the requirements for software, hardware, and human resources. Hardware resources are computer time, terminal time and memory required for the project. Software resources include the tools and compilers needed during development. The bulk of cost of software development is due to human resources needed. Cost estimates are determined in terms of person-months (PM).

Total No. Of Persons Involved In This Project:

1. Administrator
2. Senior Programmer
3. Junior Programmers
4. On line Users.

Since this Project will complete in 4 months

COST ESTIMATE: (Salary of Project Manager + Salary of Senior Programmer + 2 * Salary of Junior Programmer) * 2

9. 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.

Gantt chart is a project scheduling technique. Progress can be represented easily in a Gantt chart, by coloring each milestone when completed. The project will start in the month of December and end after 4 months at the end of March.

12. 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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