SYNOPSIS

Course code:-BCSP-064

Title of the Project

Employee Management System

Guided By:-……………….. Submitted By:-………………

**Introduction**

Employee Management system is a web application of a company that enables users to create and store Employee Records. This web application is helpful to department of the organization which maintains data of employees related to an organization.

The purpose of Employee Management System is to automate the existing manual system by the help of computerized equipments and full-fledge computer software, fulfilling their requirements, so that valuable data or information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

The Employee Management System has been developed to override the problems prevailing in the practicing manual system. This web application is supported to eliminate and in some cases reduce the hardship faced by the existing system.

Moreover this system is designed for the particular need of the company to carry out operation in a smooth and effective manner.

This web application is reduced as much as possible to avoid errors while entering the data. It is also provides error message while entering invalid data. No formal knowledge is needed for the guest this system. Thus by this all it provides it is user friendly.

**Objective**

This project is aimed at developing Employee Management System that allows automating or computerizing all employee management operations.

The main objective is to manage the details of employee, salary, leaves, and dependent etc. It manages all the information about employee, skill, registration.

The project is totally built at administrative and thus only the administrator guaranteed the access. The purpose of the project is to build a web application program to reduce the manual work for managing the employee details.

* To manage the key activities available for resources like applying leave, add dependent details, see the project details etc.
* It will help to reduce the data redundancy, data loss.

**Project Category**

ERP Stands for "Enterprises Resource Planning."

ERP is Business Management Application. It is a suite of integrated application that helps users to store and manage data of their business.

One of the most important activities associated with the implementation of an ERP system is the opportunity to streamline and improve the business operations of an organization through business process re-engineering and the by implementing the best practices and standards.

An ERP system is easily scalable so adding new functionality according to the business plan is very easy.

It helps to helps make reporting easier and more customizable.

* **Front End**
* HTML, CSS, JavaScript, JSP, Servelt
* **Back End**
* MYSQL, JDBC.

**Modules of Employee Management System**

* **Employee**
* The system must allow an employee to login & logout.
* The system must allow an employee to see details of project(s) s/he working on.
* The system must allow an employee to request for leaves.
* The system must allow an employee to check his/her salary.
* The system must allow an employee to view their dependent.
* **Admin**
* The system must allow an admin to login & logout.
* The system must allow an admin to add, modify and delete (inactive) the detail of an employee.
* The system must notify an admin to about the leave request.
* The system must allow an admin to approve or reject an employee request.
* The system must allow an admin to add, view, an edit project detail.
* The system must allow an admin to generate the project report.
* **Salary**
* The system must allow an admin to calculate salary.
* **Report**
* It generates of the project report of an employee, salary, skills.
* Provide filter reports on leaves etc.

**E.R. Diagram**

N

1

Works\_for

Works\_on

Department

Employee

Has

Manages

Project

1

1

N

M

Dependent

**Schema Table**

**Employee**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Emp\_Id | First Name | Last Name | E-maill | Password | Gender | DeptID |

**Salary**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| EmpID | Basic Salary | HRA | DA | TA | Tax | Net Salary |

**Department**

**Department**

|  |  |  |
| --- | --- | --- |
| Dept\_Id | Name | Manager |

**Project**

|  |  |  |
| --- | --- | --- |
| Pro\_Id | Title | Head |

**Dependent**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Emp\_Id | Name | Age | Gender | D.O.B |

**Works On**

|  |  |  |  |
| --- | --- | --- | --- |
| Pro\_Id | Emp\_Id | Start Date | No of Hours |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emp\_Id | Date | Reason | No.of Days | Staus(app/rej) | Note |

**Leave Record**

**Admin**

|  |  |  |
| --- | --- | --- |
| User Name | Password | Last Access |

**DFD (Data Flow Diagram)**

**Zero Level DFD**

Add Project,update employee detail, calculate salary

Project details , salary details

View project,

salary detail

Admin

Employee

Acknowledgement

**First Level DFD**

Empid,pass

Employee DB

Empid,pass

Ack

Proid

Pro detail

Project DB

Employee

Pro detail

Check salary

Salary

Salary

Salary DB

userid,pass

Admin DB

Userid ,pass

Pro detail

Ack

Project DB

Ack

Proid,title,head, emp working

Salary

Salary DB

Admin

Ack

**Second Level DFD**

Pro detail

Salary

userid,pass

Pro detail

Report DB

Employee DB

Project DB

Admin DB

Proid,title,head, emp working

Ack

Userid ,pass

Ack

Admin

Ack

**Class Diagram**

|  |
| --- |
| **Employee** |
| -name: String  -gender: char  -id:integer  -phone: String  -salary: Salary |
| +getName():String  +setName(String)  +getGender(): char  +setGender(char)  +getId():integer  +setId(integer)  +getPhone():String  +setPhone(String)  +getSalary:long  +setSalary(long) |

|  |
| --- |
| **Dependent** |
| -name: String  -age: integer  -dob: date  -gender: char |
| +getName():String  +setName(String)  +getAge():integer  +setAge(integer)  +getDob():date  +setDob(date)  +getGender():char  +setGender(char) |

|  |
| --- |
| **Project** |
| -id: integer  -title: String  -head:String |
| +getId():integer  +setId(integer)  +getTitle():String  +setTitle(String)  +getHead(): |
| **Salary** | |
| -basic: integer  -hra: float  -ta:float  -tax:float  -total: double | |
| +getBasic():integer  +setBasic(integer)  +setTotalSalary(double)  +getTotalSalary():double | |

|  |
| --- |
| **Department** |
| -name: String  -id:integer  -address: String |
| +getName():String  +setName(String)  +getId():integer  +setId(integer)  +getAdd():String  +setAdd(String) |

|  |
| --- |
| **Admin** |
| -adminId:String  -adminPass:String |
| +getId():String  +setId(String)  +getPass():String  +setPass(String) |

**Case Tool Diagram**

|  |
| --- |
|  |

**Employee**

|  |
| --- |
|  |

**Admin**

**Activity Flow Diagram**

Start

No

valid

Yes

Stop

**EMPLOYEE**

**ADMIN**

**GUEST**

Start

No

valid

Yes

Valid Reason

Update

No

Yes

Stop

**Testing**

* **Unit testing: -** The purpose of this phase is to test the individual units of the developing web application component. This phase is recursive and is to be repeated, as many as there are, levels of testing. In the project, each individual form has been tested using techniques of testing namely: Client side testing using JavaScript. Each individual form has been validated so that user enters only valid data at every time.

**Requirements**

* **Hardware Requirements Specification**
* **Processor :** Intel Pentium processor 500 MHz or faster.
* **Ram :** Minimum 2 GB.
* **H.D.D :** Minimum 40GB or above.
* **C.D.D**
* **Software Requirements Specification**
* **Operating System :**  Window 2003,xp, 2007 or higher version.
* **IDE**  **:** Net beans.
* **Web Browser’s :**  Google chrome, internet Explorer, safari etc.

**Tools And Platform Used**

* **Front End**
* HTML, CSS, JavaScript, JSP, Servelt .
* **Back End**
* MYSQL, JDBC.

**Future Scope of Employee Management System**

This web application can be easily implemented under various situations. We can add new features as and when we require. Reusability is possible as and when require in this web application. There is flexibility in all the modules.