SOFTWARE PERSONAL MANAGEMENT SYSTEM

AIM

To implement a software for software personnel management system

PROBLEM ANALYSIS AND PROJECT PLANNING

Human Resource management system project involves new and/or system upgrades of software of send to capture information relating to the hiring termination payment and management of employee. He uses system to plan and analyze all components and performance of metrics driven human resource functions, including recruitment, attendance, compensation, benefits and education. Human resources management systems should align for maximum operating efficiency with financial accounting operations customer relationship management,security and business lines as organization.

PROBLEM STATEMENT

Software personnel management system allows employees to record time card electronically and automatically generates pay slips based on number of hours worked and total amount of sales. The system will run on individual employee desktops where the employee can access and edit only their personal details. The system will maintain information on the employee in the company in order to calculate the payroll. The employees will also be able to know from the system, the number of hours worked per day and total of all hours spent on a project and total pay received year-to-date etc. Payroll administrators keep track of all the information including adding new employees, deleting employees, and edit information and run reports. The system will generate records and performance report of the employees.

1. INTRODUCTION PURPOSE

The Software Personnel Management system is an interface between Employee and the Administrator responsible for generation of payment slip. It aims at improving the efficiency in the generation of Pay slip and reduces the complexities involved in it to the maximum possible extent

SCOPE

- Software system allows Administrator to manage its employee in a better way.
- When needed, it will take just a few second to find out the background of an employee and his/her contribution to the organization, it will also facilitate keeping all the records of employee.
- So all the information about an employee will be available in a few seconds, it will also make it very easy to generate statistical data or custom data, line finding a certain set of employee.

REFERENCES

IEEE Software Requirement Specification format.

TECHNOLOGY TO BE USED

- HTML
- JSP
- Javascript
- Java
- XML
- AJAX

TOOLS TO BE USED

- Eclipse IDE (Integrated Development Environment)
- Rational Rose tool (for developing UML Patterns

OVERVIEW

SRS includes two sections overall description and specific requirements Overall Description will describe major role of the system components and inter-connections.

Specific Requirements will describe roles & functions of the actors.

2. OVERALL DESCRIPTION PRODUCT PERSPECTIVE

The SPMS acts as an interface between the 'ADMINISTRATOR' and the 'employee'. This system tries to make the interface as simple as possible and at the same time not risking the security of data stored in. This minimizes the time duration in which to manage the software personnel.

SOFTWARE INTERFACE

- **Front End Client** - The applicant and Administrator online interface is built using JSP and HTML. The ADMINISTRATOR's local interface is built using Java.
- **Web Server** – Apache Tomcat application server(Oracle Corporation).
- **Back End** – Oracle 11g database.

HARDWARE INTERFACE

The server is directly connected to the client systems. The client systems have access to the database in the server.

SYSTEM FUNCTIONS

Payment Slip

The payment module greatly reduces the workload of the ADMINISTRATOR department by automating the payroll process, allowing ADMINISTRATOR to ensure the payroll functions are completed on time and without errors.

View Salary

The employee views the salary details efficiently from the SPMS. The employees will also be able to know from the system, the number of hours worked per day and total of all hours spent on a project and total pay received year-to-date etc.

USER CHARACTERISTICS

- **Employee**

These are the person who desires to view the salary details.

- **Administrator**

Administrator has the certain privileges to generate pay slip for the employee.

- **Database manager**

DB manager stores all the data related to Employee and Administrator.

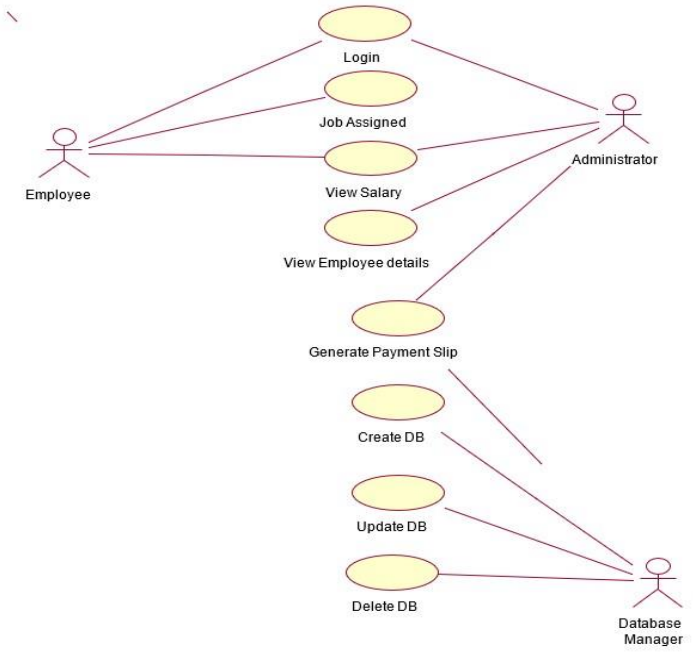
ASSUMPTIONS AND DEPENDENCIES

 The employee and Administrator must have basic knowledge of computers and English Language.

UML DIAGRAMS

The following UML diagrams describe the process involved in the online recruitment system

- Use case diagram
- Class diagram
- Sequence diagram
- Collaboration diagram
- State chart diagram
- Activity diagram
- Component diagram
- Deployment diagram



CLASS DIAGRAM:

The class diagram is referred as object modeling in the static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects. The Software Personnel Management system class diagram consists of four classes

1. Employee class
2. Administrator class
3. Database Manager class
4. Payment class

1. EMPLOYEE CLASS

It consists of seven attributes and two operations. The attributes are empid, empname, emppassword, address, mobile number, date, Hours Worked. The operations of this class are Login( ) and viewsalary( ).

2. ADMINISTRATOR CLASS

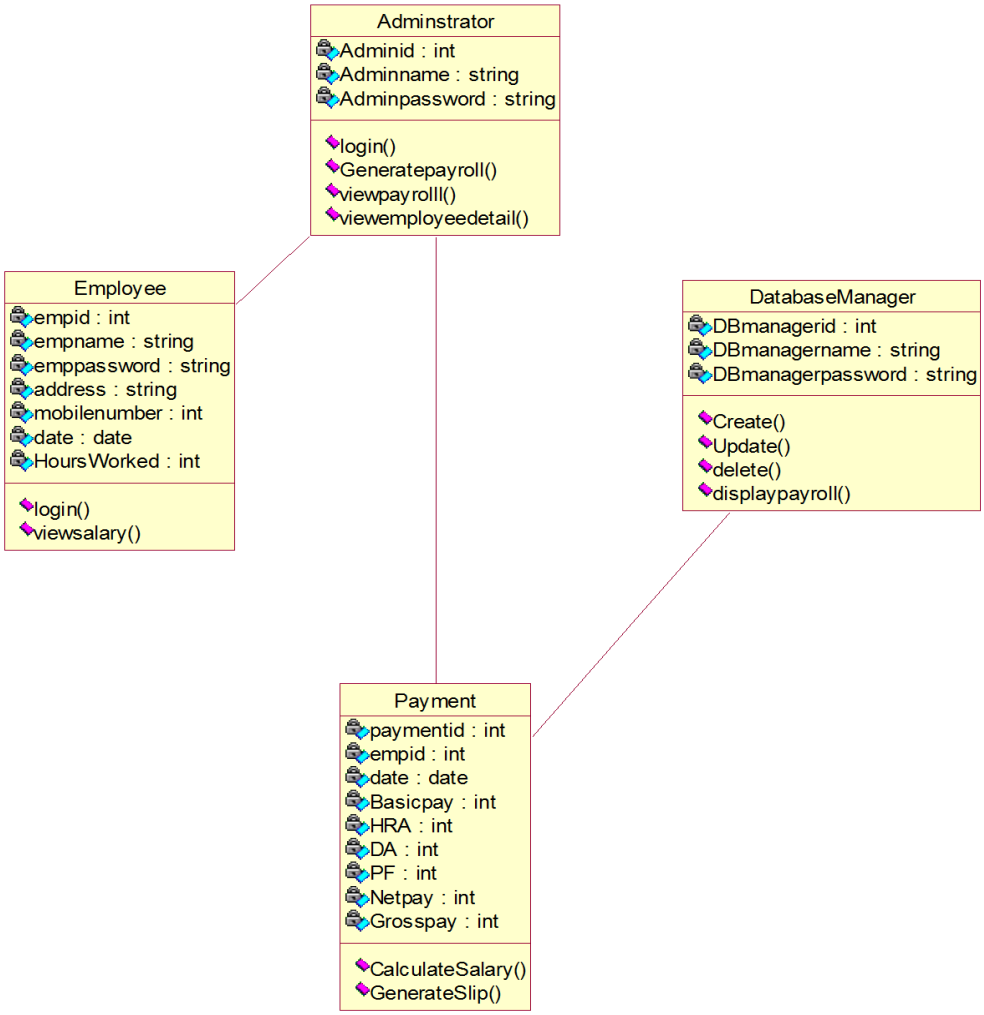
It consists of attributes Adminid, Adminname and Adminpassword. The operations are login ( ), Generate payroll ( ), view payroll ( ) and viewemployeedetail ( ).

3. DATABASE MANAGER CLASS

The attributes of this class are DBmanagerid, DBmanagername( ) and DBmanagerpassword. The operation are create( ), update( ),delete( ) and display payroll( ).

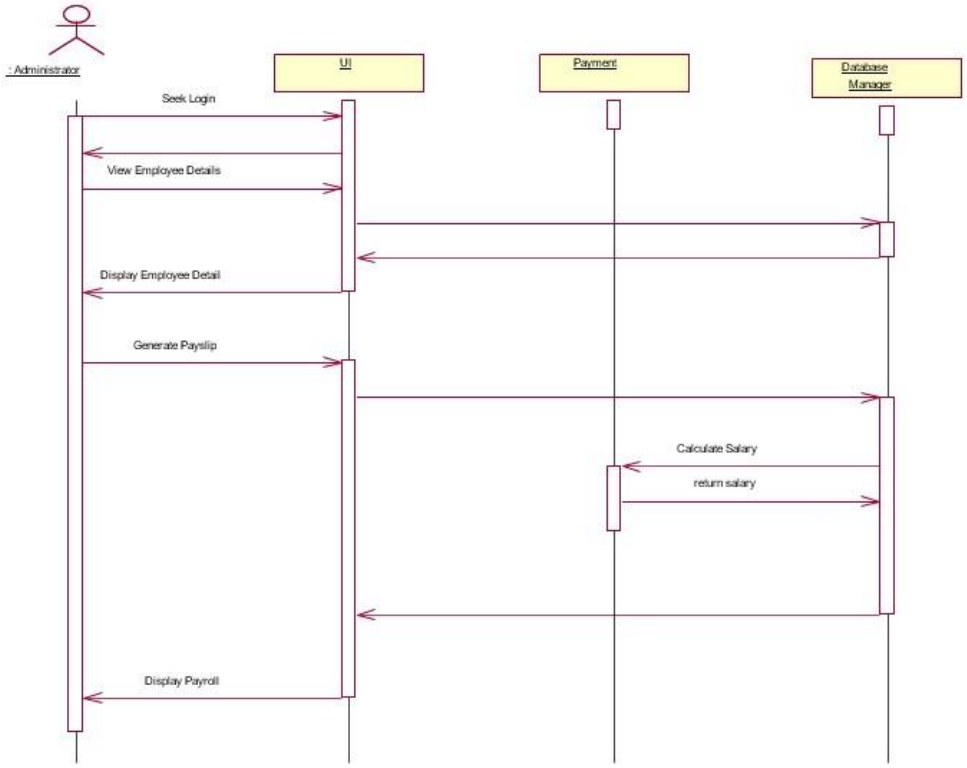
4. PAYMENT CLASS

The attributes of this class are paymentid, empid, date, Basic pay, HRA, DA, PF, Netpay and Gross pay. The operation are calculatesalary( ) and GenerateSlip( ).



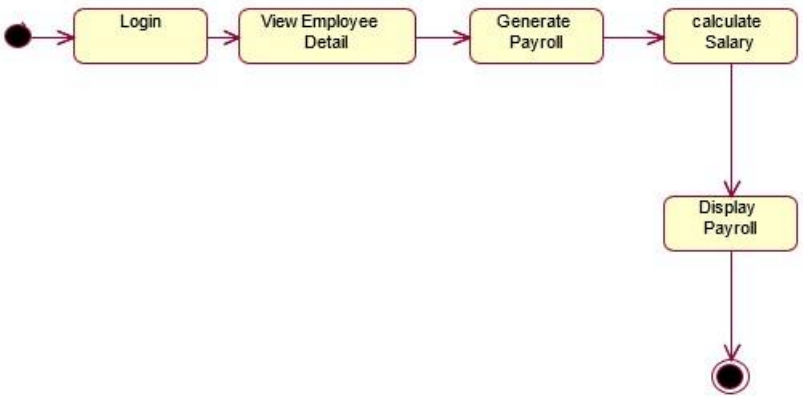
SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.



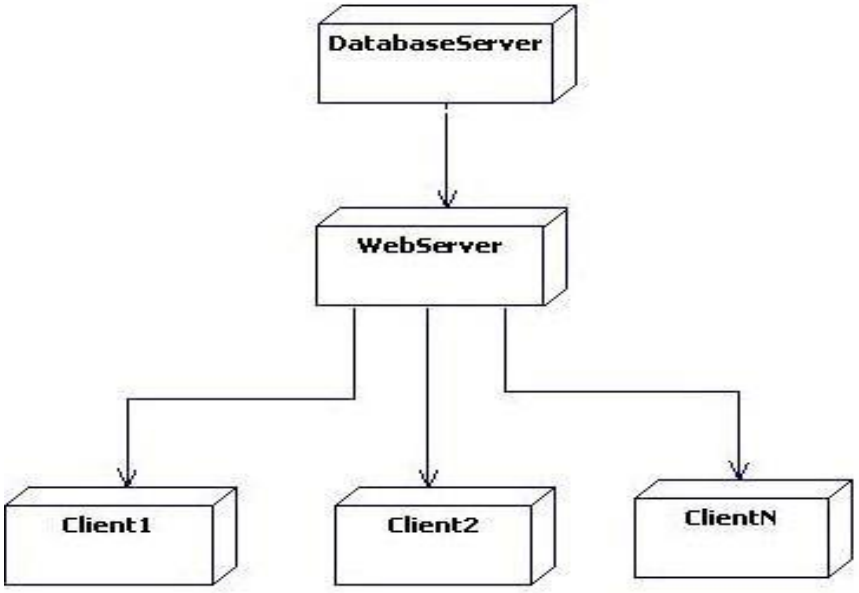
STATE CHART DIAGRAM:

- States of object are represented as rectangle with round corner, the transaction between the different states.
- A transition is a relationship between two state that indicates that when an event occur the object moves from the prior state to the subsequent.



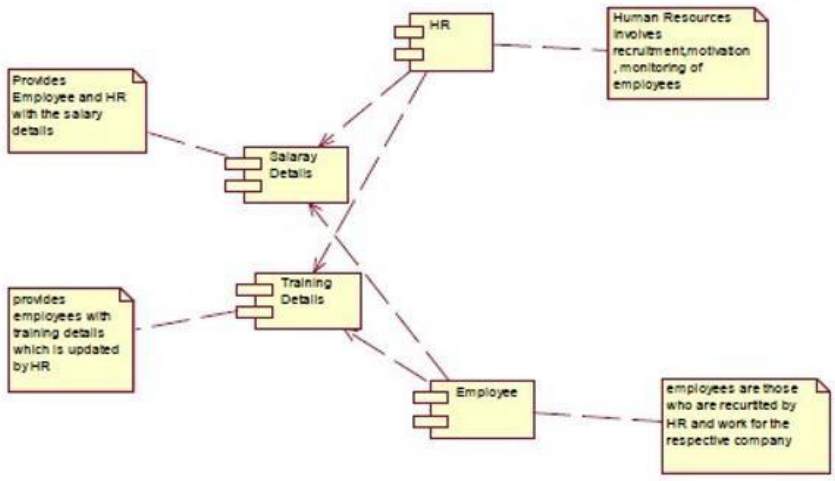
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed



COMPONENT DIAGRAM

Component diagrams are used to visualize the organization and relationships among components in a system.



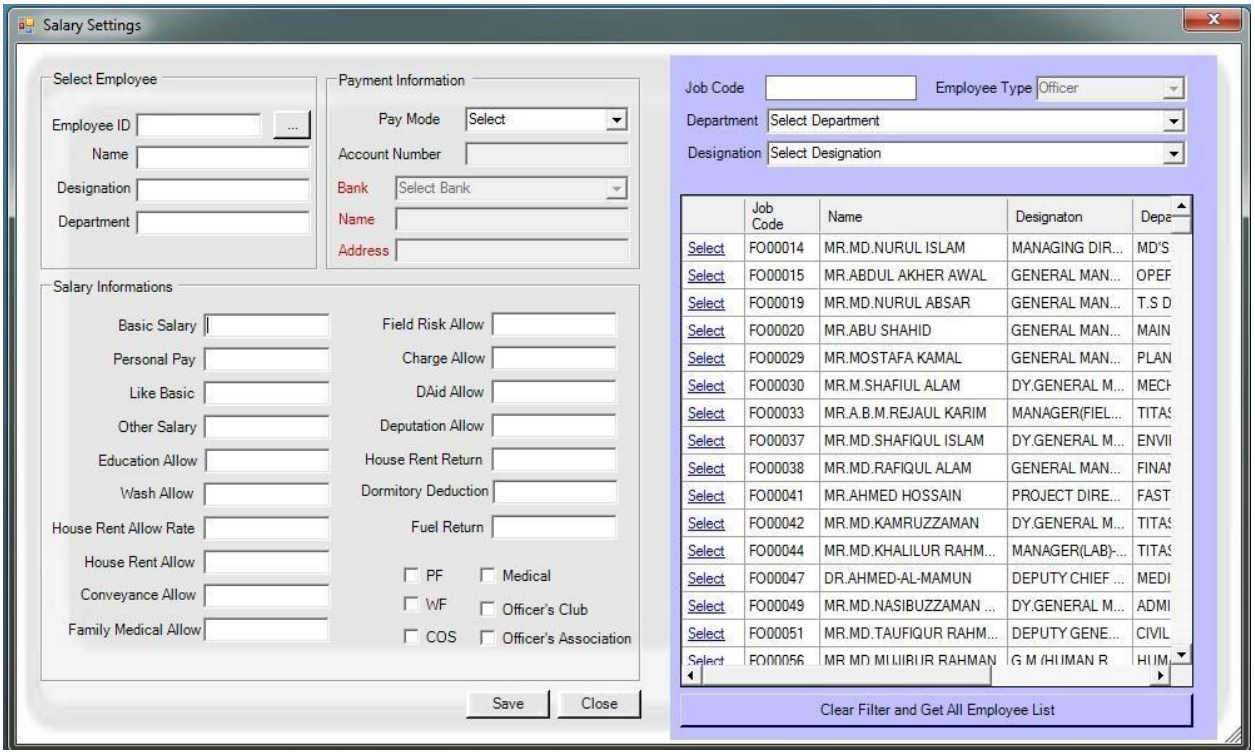
Program:

```
//Source file: employee.java

public class employee   {
private int emp_id;
private string emp_name;
private string adrr1;
private string addr2;
private string addr3;
  public administrator1 theAdministrator1;

  /**
  @roseuid 515D15470203
   */
  public employee()
  {

}
/**
  @roseuid 515D1509029F
   */
  public void login()
  {

}

  /**
  @roseuid 515D150D031C
   */
  public void view()
```

```
  {


  }
}
//Source file: administrator1.java public class
administrator1
{    private int admin_id;
private string admin_name;
private string admin_pwd;
public employee theEmployee;

  /**
  @roseuid 515D154701A5
   */
  public administrator1()
  {

}

  /**
  @roseuid 515D130F030D
*/   public void login()     {

}

  /**
  @roseuid 515D13140271
   */
  public void generatePayroll()
  {
```

```
}

  /**
  @roseuid 515D131F0251
   */
  public void viewPayroll()
  {

  }
}
```

OUTPUT :



CONCLUSION:

Thus the mini project for software personnel management system has been successfully executed and codes are generated.