

# Deen Dayal Upadhyay Kaushal Kendra

## Mini Project Report

Topic – Payroll management System

Bachelors of Vocational Studies

3rd Semester (Software Development & e-Governance)

Year -2018

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## ACKNOWLEDGMENT

Working in good environment and motivation enhance the quality of the work and we get it from our college through our Object Oriented Programming Language Using JAVA Project.

We have been permitted to take this golden opportunity under the expert guidance of Mr. Anees Alam.

We are heartily thankful to him to make complete our project successfully. He has given us his full experience and extra knowledge in practical field. We are also thankful to our head of department Dr. Amitabha Yadav and all Software Department staff to guide us.

Finally we thank all the people who had directly or indirectly help as to complete our project.

**Candidate name** - Abhishek Sahu

**Enrollment number** - 717658

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## **PROJECT DEFINITION**

A payroll system is software designed to organize all the tasks of employee payment and the filing of employee taxes. These tasks can include keeping track of hours, calculating wages, withholding taxes and deductions, printing and delivering checks and paying employment taxes to the government.

Payroll software often requires very little input from the employer. The employer is required to input employee wage information and hours—then the software calculates the information and performs withholdings automatically. Most payroll software is automatically updated whenever a tax law changes and will remind employers when to file various tax forms.

## **PROJECT DESCRIPTION**

The Payroll Management System deals with the financial aspects of employee's salary, allowances, deductions, gross pay, net pay etc. and generation of pay-slips for a specific period. The outstanding benefit of Payroll Management System is its easy implementation. Other advantages of Payroll Management System are its extensive features and reports.

## **PURPOSE**

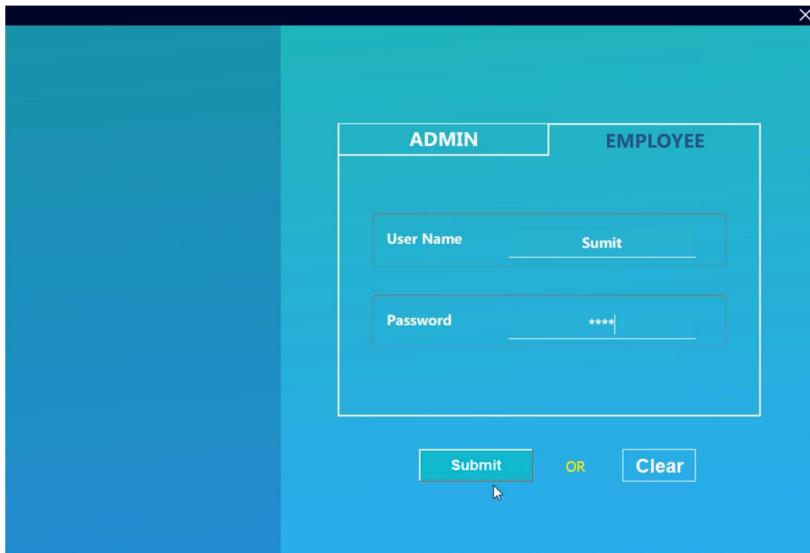
Payroll Management System gives you the power to:

- Manage Employee Information Efficiently.
- Define the emoluments, deductions, leave etc.
- Generate Pay-Slip at the convenience of a mouse click.
- Generate and Manage the Payroll Processes according to the Salary Structure assigned to the employee.
- Generate all the Reports related to employee, attendance/leave, payroll etc.
- Manage your own Security

It may be difficult to decide which system to choose, but there are some factors to keep in mind when deciding. First, analyse the size of your business and decide how much you are willing to spend on payroll processing. While it is possible for smaller businesses to handle payroll duties in-house through a manual process, much time can be wasted while attempting to calculate everything correctly. One miscalculation and the business owner could find themselves in legal or financial trouble. Mid-sized companies with up to 100 employees benefit greatly by investing in a payroll system.

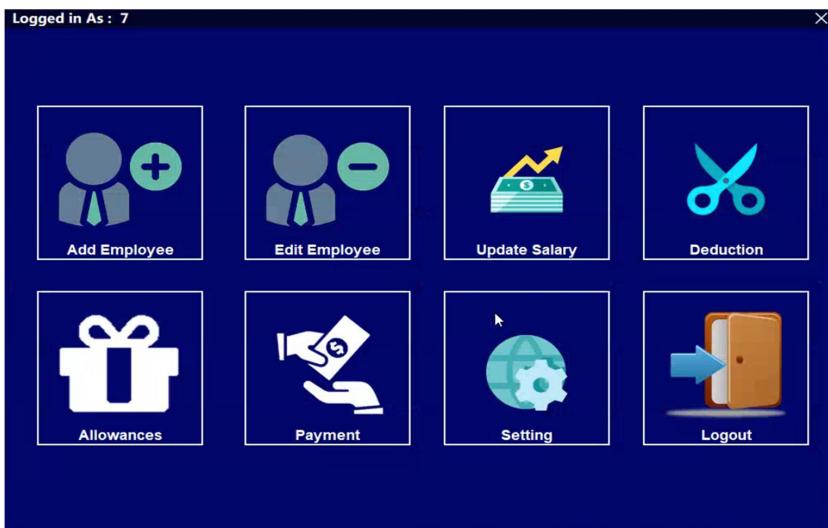
## PROJECT MODULES :

### 1. Login Screen :

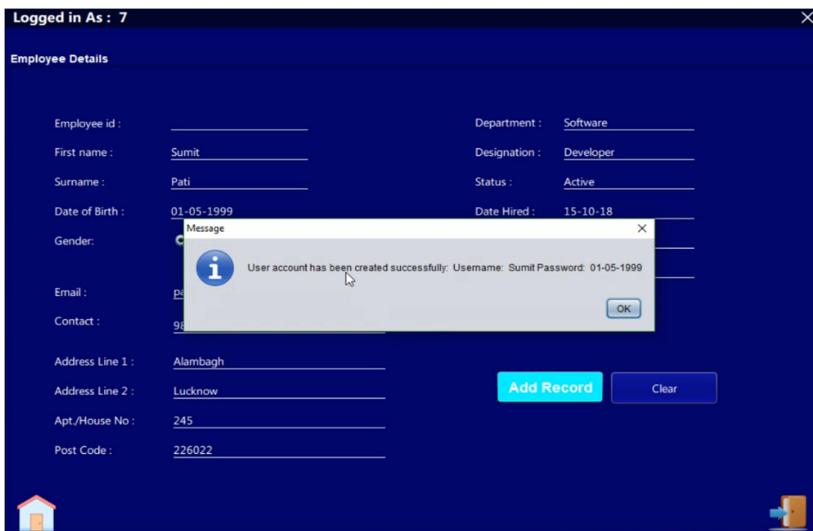


- Login Screen

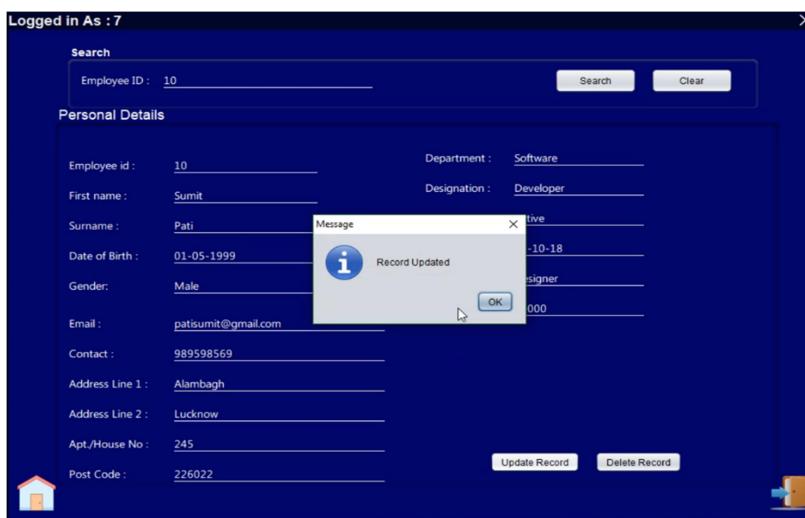
**2. Admin :** This module is controlled by the admin, where he can add new employee records, edit these records, update the salary of the employees, generate payment slips and provide any deductions or allowance according to the need. These things are managed through a AdminMenu window where he gets access to these operations and also there are some of the admin settings provided.



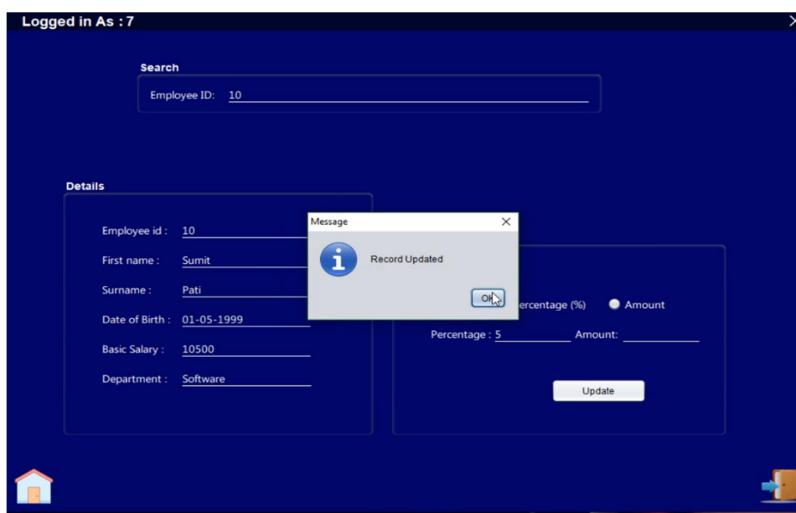
- AdminMenu



- AddEmp



- EditEmp



- UpdateEmpSalary

Logged in As : 7

**Search**

Employee ID : 10

Employee id :	10	Designation :	Developer
First name :	Sumit	Status :	Active
Surname :	Pati	Message	X
Date of Birth :	01-05-1999	15-10-18	
Department :	Software	Designer	10500

**Message**

Data is saved successfully

**OK**

Update Salary by :  Percentage (%)  Amount

Percentage : \_\_\_\_\_ Amount: 200

Total Deduction: 200

Salary after deduction: 10300

Reason: \_\_\_\_\_

**Calculate** **Save** **Clear**




- Deduction

Logged in As : 7

**Search**

Employee ID: 10

Please enter the amounts

Employee id :	10	Overtime :	5	Total Overtime:	7.5
First name :	Sumit	Medical :	0	Rate Per Hour :	52.5
Surname :	Pati	Bouns :	0		
Date of Birth :	01-05-1999	Other :	0		
Basic Salary :	10500				
Department :	Software				

**Total Amount : 393.75**

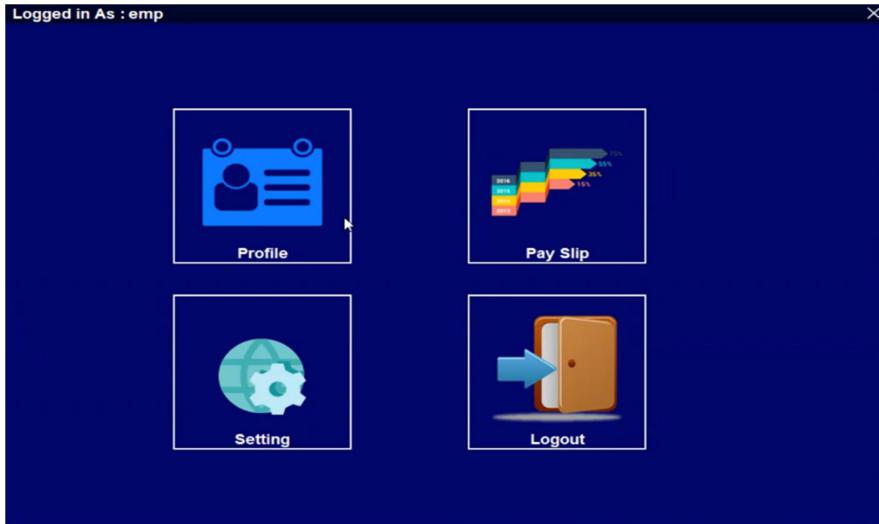
id	ov...	me...	bo...	other	em...	sal...	rate	tot...	firs...	sur...	cre...
1	2	2	20	0	8	820	4.1	34.3	Jay...	Goe...	0
2	15	200	15...	100	9	22...	11...	42...	Ab...	Sa...	7
3	5	0	0	0	10	10...	52.5	39...	Su...	Pati	7

**Calculate** **Save** **Clear**




- Allowance

**3. Employee :** This module is used by the employee to edit or view his/her individual information. These include viewing the profile of the employee, settings regarding the employee details and can also generate the payment slip. From the same window you came logout and move to the login screen for new login-id to log in and view their details. The employees cannot edit there information



- EmpMenu

The screenshot shows a dark-themed application window titled "Logged in As : 10". It displays detailed employee information in two columns:

Employee id :	10	Department :	Software
First name :	Sumit	Designation :	Developer
Surname :	Pati	Status :	Active
Date of Birth :	01-05-1999	Date Hired :	15-10-18
Gender:	Male	Job Title :	Designer
Email :	patisumit@gmail.com	Basic Salary :	10500
Contact :	989598569		
Address Line 1 :	Alambagh		
Address Line 2 :	Lucknow		
Apt./House No :	245		
Post Code :	226022		

- ViewDetails

The screenshot shows a dark-themed application window titled "Logged in As : 10". It displays a password change form:

Password	
Current Password	*****
New Password	****
New Password	****

At the bottom right of the form is a **SAVE** button.

- EmpSettings

Logged in As : 10

Employee id :	10	Designation :	Developer
First name :	Sumit	Status :	Active
Surname :	Pati	Date Hired :	15-10-18
Date of Birth :	01-05-1999	Job Title :	Designer
Department :	Software	Basic Salary :	10500



- EmpPaySlip

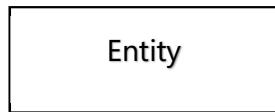
## E-R DIAGRAM:

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases.

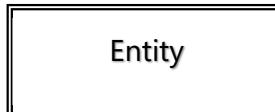
When documenting a system or process, looking at the system in multiple ways increases the understanding of that system. ERD diagrams are commonly used in conjunction with a data flow diagram to display the contents of a data store. They help us to visualize how data is connected in a general way, and are particularly useful for constructing a relational database.

### NOTATIONS

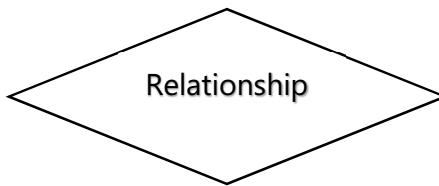
- Entities :



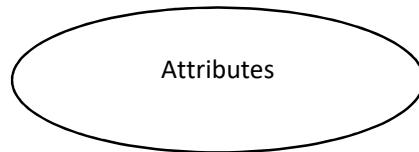
- Weak Entity :



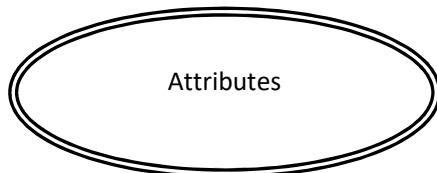
- Actions :



- Attributes :



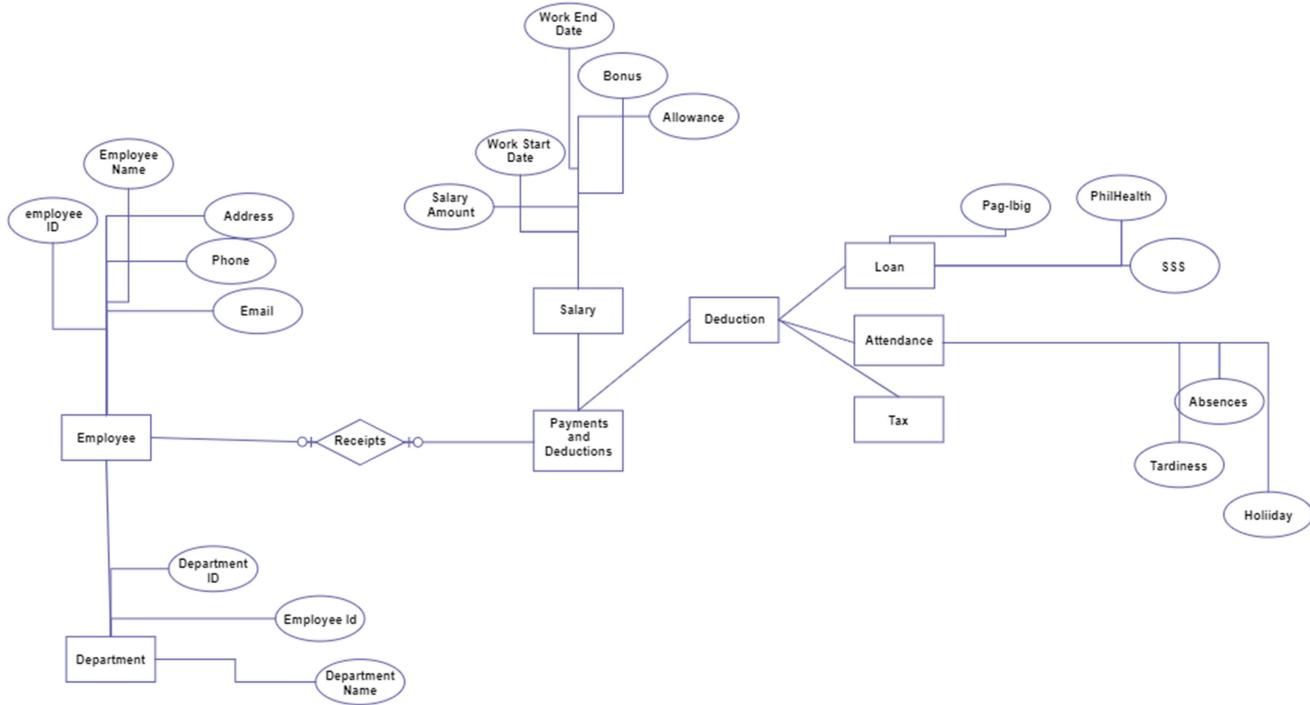
- Multivalued Attributes :



- Links :



## DIAGRAM :



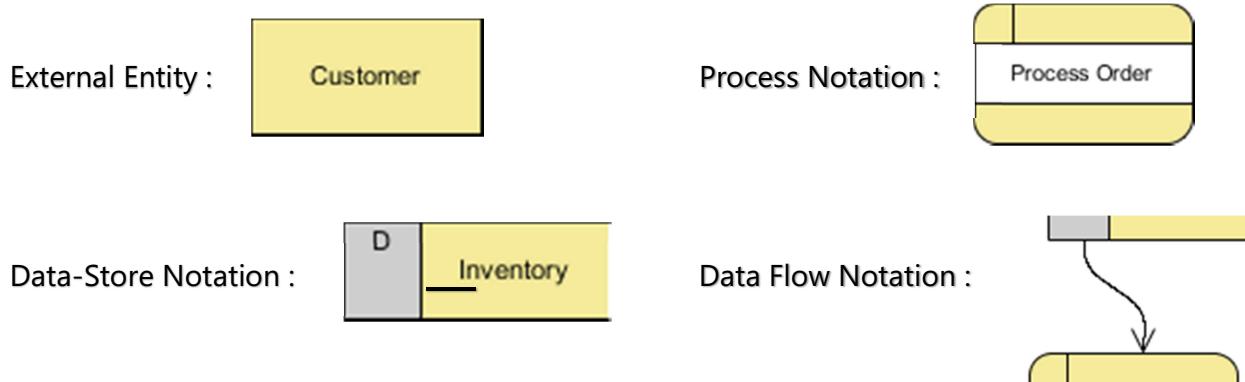
## DFD (DATA FLOW DIAGRAM)

A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.

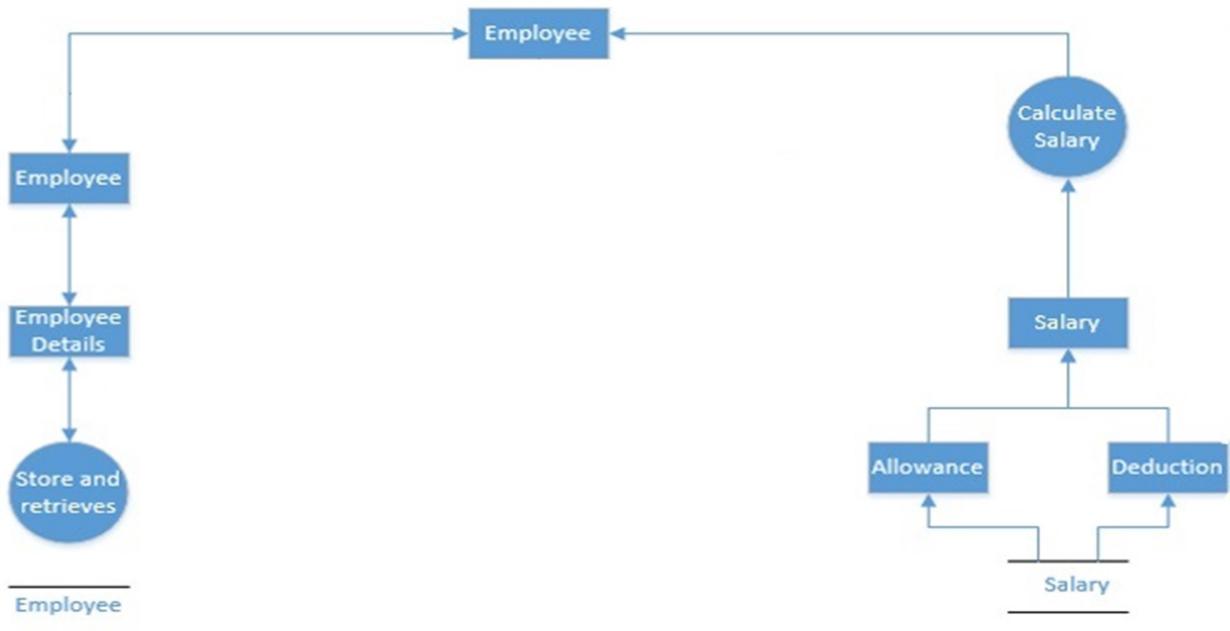
**DFD Layers:** Draw data flow diagrams can be made in several nested layers. A single process node on a high level diagram can be expanded to show a more detailed data flow diagram. Draw the context diagram first, followed by various layers of data flow diagrams.

**DFD Levels:** The first level DFD shows the main processes within the system. Each of these processes can be broken into further processes until you reach pseudo code.

### NOTATIONS



### DIAGRAM :



## PROJECT SCOPE

This is an introduction of a simple Java Employee Payroll Management System (Payroll System) using SQL database that was developed using Java Netbeans. Furthermore the use of GUI components to achieve this project are as follows:

- JButton
- JTable
- IText
- JComboBox
- JLabel
- JRadioButton
- JFrame
- JPanel
- JTextField.

### **Functions used :**

- Add Record
- Deleted Record
- Update Record
- Clear Fields
- Login
- Logout
- Date & Time
- PDF

# **OBJECTIVE OF JAVA PAYROLL PROJECT EMPLOYEE MANAGEMENT SYSTEM.**

The main objective of the Java Project on Payroll Management System is to manage the details of Employees, Payments, Salary. It also manages all information about the Employee, Payroll and Salary Slips. The project is totally built at administrator end of things. Only the administrator is guaranteed the access. The purpose of the project is to build an application that reduces the manual work and it can be used as a school project.

Functionalists provided by the Java Project on Employee Payroll Management System.

- 1- Provides search facility such as searching for Employees, Salaries and reports.
- 2- Tracks all salaries and employee payments.
- 3- Stores all information about employees to a secure Sql database.
- 4- Generates reports using iText.
- 5- Manages all information of Employees.
- 6- Simple GUI.
- 7- Editing, adding, deleting and updating records couldn't be easier.
- 8- Manages all information of employees salaries.
- 9- Audit Trail to monitor activities.
- 10- Manages all information of employee payslips.
- 11- Manages all information of employee allowance.
- 12- Manages all information of employee deduction.

## **Report generation:**

- 1- It generates PDF of salary slips.
- 2- Save PDF to any location.