



PES University, Bengaluru

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Department of Computer Science & Engineering

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UE19CS353 – Object Oriented Analysis and Design with Java

Theory ISA (Mini Project)

Report on

Payroll System

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6th Semester B section

1. Project Description :

Payroll management system is a administrative software tool to effectively manage employee details, salary reports and modifications to salaries based on employee performance. It can also be used to manage the leave application submitted by employees. It is also helpful for keeping track of reports generated by the various employees. In this software we can provide privilege to various users and grant them permission based on their roles in the company.

Link to Github repository:

<https://github.com/Radioactive-67/Payroll>

2. Analysis and Design Models :

We are using Incremental Design ,we implemented each section(Manager,Accountant,Employee) incrementally which simplified the Development Process

3. Tools and Frameworks Used :

NetBeans IDE

Swing Library

4. Design Principles and Design Patterns Applied

Singleton: Used in Database.java for connecting to database,as connecting to database is computationally expensive procedure,so by utilising singleton pattern we ensure that this process occurs only once.

Home Screen(All the 3 section are visible Manager,Accountant and Employee).

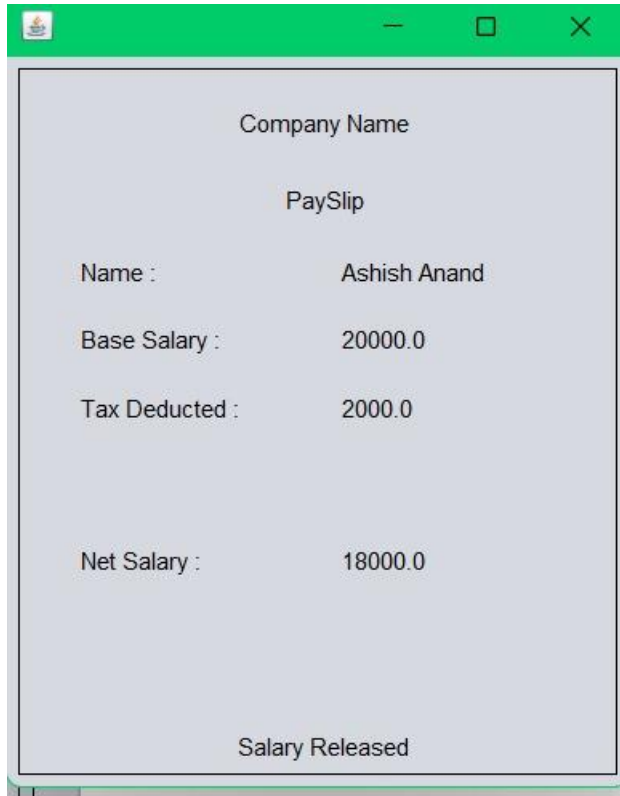
Add Employee Button pressed and database has been updated accordingly.

SELECT * FROM "public".em... ✕

Max. rows: 100 | Fetched Rows: 1

#	id	fname	lname	type	address	salary
1	1	Ashish	Anand	1234	Pg	1,000

Release Salary button pressed and pay Slip generated with tax calculations handled by the software.



The image shows a screenshot of a software window titled "Pay Slip". The window has a green title bar with standard Windows window controls (minimize, maximize, close). The main content area is light gray and contains the following text:

Company Name

Pay Slip

Name : Ashish Anand

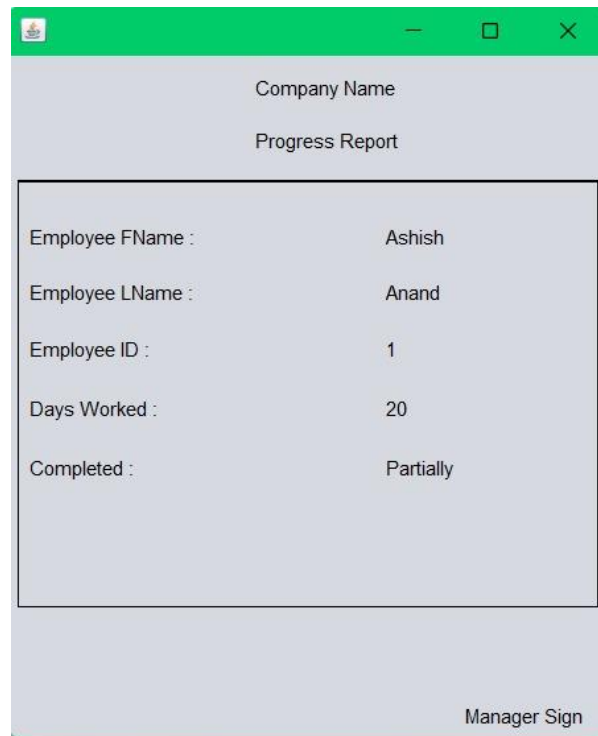
Base Salary : 20000.0

Tax Deducted : 2000.0

Net Salary : 18000.0

Salary Released

Progress Report generated by the employee as per the details entered



A screenshot of a web application window titled "Progress Report". The window has a green header bar with standard window controls (minimize, maximize, close). Below the header, the text "Company Name" is displayed. The main content area is a light blue box containing a table with employee details. The table has two columns: a label column and a value column. The data rows are: Employee FName : Ashish, Employee LName : Anand, Employee ID : 1, Days Worked : 20, and Completed : Partially. At the bottom right of the light blue box, the text "Manager Sign" is visible.

Employee FName :	Ashish
Employee LName :	Anand
Employee ID :	1
Days Worked :	20
Completed :	Partially

Leave Application generated and penalty calculated after pressing the Apply Leave Button.

Leave Application

Dear Ashish Anand

Based on the leave period you have entered your base pay may be

ed and a penelaty of RS.10 WILL BE DEDUCTED for each extra day

after an acceptable leave period of 5 days.

Deducted Amount(from base pay) :	50
New Base Pay for the month :	950.0
Salary for the month if no extra leaves :	19000.0

Application Accepted

Manager Sign

New salary after deducting tax and leave penalty.

Company Name

PaySlip

Name :	Ashish Anand
Base Salary :	19000.0
Tax Deducted :	1900.0
Net Salary :	17100.0

Salary Released

Database Table updated after penalty deduction.

