

Assignment

1. Write a Java based web application to calculate and pay the salary of employees?

Details:

There are total six grades /ranks; Grade one is the highest and grade 6 is the lowest. There are total 10 employees at the company - grade one: 1, grade two: 1, grade three: 2, grade four: 2, grade five: 2, grade six: 2. Each employee has employee ID, name, grade/rank, address, mobile and a bank account. The bank account has account type – savings/current, account name, account number, current balance, bank and branch name etc. The salary is divided into the following heads -

Basic

House rent - 20% of the basic

Medical allowance - 15% of basic

The basic salary of the lowest grade will be taken as input. The basic of the others grade will be calculated as basic of the previous grade + 5000 taka.

The company will have a main bank account. The initial balance will be taken as input. From the company account the salary will be transferred to the employees account. If during the salary transfer, the company bank account run out of money, there will be an input option to add more money to the account and then continue the salary payment.

Summary:

Inputs:

1. Basic salary of the lowest grade
2. Balance of the company bank account
3. Employee Information

Tasks and outputs:

1. Prepare CRUD functionality for each entity
2. Employee ID should be 4 digit and unique
3. Maintain proper relation among entities
4. Provide proper validation to input data
5. Calculate the salary of each employee
6. Transfer the salary amount from main account to employee's accounts
7. Print / display the name, rank and salary of each employee (A salary sheet)
8. Print / display the total paid salary and remaining balance of the company account

Preferred Technology Stacks:

- ✓ Spring boot, Spring data JPA, Hibernate
- ✓ Rest Controller
- ✓ MySQL/ PostgreSQL
- ✓ Maven/Gradle
- ✓ Thymeleaf/JSP/Bootstrap/html/CSS/SCSS/jQuery/ Vue Js / Angular (Typescript)