

Introduction

The Salary Management System is a database project developed using PostgreSQL to efficiently manage employee salaries, bonuses, and deductions. This system provides a structured way to track financial transactions related to employee compensation.

Objectives

The primary objectives of this project are:

- To maintain an organized structure for employee salary management.
- To provide an easy way to track employee base salaries, bonuses, and deductions.
- To automate salary calculations and generate net salary reports.

Database Schema

The system consists of the following relational tables:

1. Departments Table

- Stores department details.
- Attributes: dept_id, dept_name.

2. Employees Table

- Maintains employee information.
- Attributes: emp_id, emp_name, emp_email, hire_date, dept_id.

3. Salaries Table

- Records base salary information for employees.
- Attributes: salary_id, emp_id, base_salary, pay_date.

4. Bonuses Table

- Tracks bonuses awarded to employees.
- Attributes: bonus_id, emp_id, bonus_amount, bonus_date.

5. Deductions Table

- Captures deductions applied to employees' salaries.
- Attributes: deduction_id, emp_id, deduction_amount, deduction_date.

Data Relationships

- Each employee belongs to a department.

- Each salary entry is linked to a specific employee.
- Bonuses and deductions are tied to employees to compute their net salary.

Features and Benefits

- Automated salary computation for accurate net pay calculation.
- Secure data relationships with referential integrity.
- Ease of maintenance with structured schema design.
- Scalability to accommodate new employees and transactions.

Conclusion

This Salary Management System ensures seamless payroll processing and financial tracking for employees. It showcases PostgreSQL capabilities in managing structured data with efficient querying, making it a valuable project for HR and finance departments.