Report: Employee Management System

The Employee Management System is a C++ program designed to handle employee information, including their basic details, job title, payroll calculation, department affiliation, and benefits. The program consists of several classes, each serving a specific purpose and containing relevant attributes and functions.

1. Employees class: This base class stores the fundamental information of an employee, such as their name, ID, job title, phone number, email, and a list of benefits. There are four types of employees derived from this base class, namely Hourly Employee, Salaried Employee, Manager Employee, and Commission Employee. Each derived class has its own specific attributes and a custom payroll calculation equation, as shown in the starter diagram.

2. • Hourly Employee: This type of employee receives payment based on an hourly rate and

the number of hours worked. The payroll calculation equation for an Hourly Employee is rate * hours.

3. • Salaried Employee: Salaried employees receive a fixed salary, regardless of the number of hours worked. The payroll calculation equation for a Salaried Employee is simply their salary.

4. • Manager Employee: Managers have a base salary and an additional bonus amount. The payroll calculation equation for a Manager Employee is salary + bonus.

5. • Commission Employee: Commission-based employees earn their income based on a rate multiplied by their sales target. The payroll calculation equation for a Commission Employee is rate * target. Additionally, the Employees class provides a function called getDetail that customizes the output based on the employee type. This function is responsible for displaying the employee's

details, including their specific attributes and benefits.

6. 2. Department class: This class represents a department within the organization. It stores information about the department's name and ID. Each employee belongs to a department, ensuring proper organization and categorization of employees.

7. 3. Benefits class: This base class determines the different types of benefits available for employees. It primarily consists of two types of benefits: Health Benefit and Dental Benefit. Each benefit has its own calculation equation for determining the amount.

8. • Health Benefit: This benefit type calculates 20% of the total amount.

9. • Dental Benefit: This benefit type calculates 10% of the total amount.

10. 4. HRSystem class: This class serves as the main class for the program. It maintains a list of employees and manages various

operations such as adding, removing, and searching for departments and employees. The HRSystem class also provides methods to display specific employee information and calculate the average salary of a department. The HRSystem class acts as a central hub, coordinating the interactions between employees, departments, and benefits. It ensures proper management of employee records and facilitates easy access to relevant information. With the combination of these classes, the Employee Management System offers a robust and efficient solution for handling employee information, payroll calculations, department management, and benefits allocation. It provides a comprehensive tool for HR professionals to manage and organize employee-related data effectively. Please note that the information provided here is based on the description and table provided in your request. Actual implementation details may vary depending

on the specific design choices made by the programmer.