**Software Design Patterns**

Continuous Assessment Activity 1 – CAT1

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**Design Principles and Analysis Patterns**

Question 1

*Statement*

We have developed a system for personnel management of a company. For each employee we will store their first name, last name and salary. In our company we have three types of employees: regular, interns and contractors. Regular workers receive their fixed salary at the end of the month, interns do not receive payment and contractor workers receive payment according to hours worked.

Our system also has a class that is responsible for calculating the total pay of all employees. To do this, it has a list of all employees and a calculateTotalPayroll function that goes through the list and adds up the salaries of all employees

Below is a possible model that represents the personnel management system described above:



**NOTE:** The constructors of the different classes have been omitted from the diagram.