Tutorial 04

Professors can teach several courses. A course, in turn, can be taught by several professors. For example, the course Business Information Systems is taught by Ms. Lakmali and Mr. Jagath. The course Database Management is taught by Ms. Samanthi only. When there are too many students registered for a course, an exam can be distributed among several exams running simultaneously, e.g. the same exam taking place in different lecture halls or even on different dates. For example, the multiple choice exam of Business Information Systems is taken by 300 students distributed across lecture hall 301, lecture hall 302 and lecture hall 303. Ms. Samanthi takes oral exams. She takes 15 students per day, meaning that she requires 4 days to interrogate the 60 registered students find the objects and class of the senario

Objects:

- Professors
- Courses
- Exams
- Lecture halls
- Students

Classes:

- Professor
- Course
- Exam
- LectureHall
- Student

The software system is supposed to manage information about Employees. Employees can be of two categories, namely Permanent Employees and Contract Basis Employees. An Employee has a name, address, phone number and an employee id. A Permanent Employee has a name, address, phone number, employee id and basic salary. A Contract Basis employee has a name, address, phone number, employee id, hourly rate and hours worked. At the end of the every month, the system must calculate the total payments for each Employee. The company sells products such as Milk powder, liquid milk, yoghurt and butter. Ajith is a Permanent Employee who received an allowance (30% of basic salary) for last month as he met with his targets in selling more than 10000 packs of Milk powder last month. find the objects and the classes of this senario

Objects:

- Employees
- Permanent Employees

- Contract Basis Employees
- Products

Classes:

- Employee
- PermanentEmployee
- ContractEmployee
- Product

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Employee:

- Name
- Address
- Phone number
- Employee ID

Employee Class will consist both properties for sub classes (permanent Employee and Contract base employee)

Then Inheritance is used to give those subcategories their parent class properties

PermenetEmployee:

b) Permanent Employee:

- Basic salary

ContractBaseEmployee

c) Contract Employee:

- Hourly rate
- Hours worked