

Object Oriented Programming 2

Mid Term Lab Assignment

Marks:10

A renowned football club of Bangladesh was maintaining their employee records manually. Now they want to move towards a software system to store and maintain their employee records and thinking so they came to you. The partial requirement is kind of following.

Employee class has an *id*, *name* and *address* and a method called **PrintInfo** which will print all the information for a particular Employee (**Player/Manager**). There are 2 types of employees in the system i) **Player** ii) **Manager**. **Player** class has 3 additional fields named *rating* (0-100%), *wagePerMatch* which is fixed 1000 BDT for per player for per match and *noOfMatches*. **Manager** class has one additional field *yearsOfExperience* (in years).

A method called **EmployeeStatus** in **Employee** class will calculate the eligibility of bonus for different type of employees. For player anyone will be eligible for bonus when he has *rating* upper than 70% with at least 10 *noOfMatches*. A manager is eligible for bonus when his/her *yearsOfExperience* become higher than 4 years. A method called **TotalEarn** in **Player** class will calculate the total earn of a player.

Now when the system invokes **PrintInfo** method for a particular employee it will show the usual information as well as whether the employee is eligible for bonus or not. Also, for player it will show the total earnings.

There is a class called **EmployeeInformationProvider** which will contain the information of every employee. From there **ProvideDetails** Method will print the information of every employee. Also, a Method called **GetSkilledPlayers** will find all player having *rating* more than 80%.

[There is a specific format for both Player's and Manager's id. For Player it's PL-XXX and Manager its M-XX. The id number needs to be auto generating. You cannot use any random method to generate the value for id. Use proper naming conventions, class, properties, methods, object oriented programming principles to implement and demonstrate the above scenario]

WHAT & HOW TO SUBMIT

You need to demonstrate your work by sharing the screen in the Microsoft TEAMS.

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