

Exercise 2 – Company

In this exercise we are going to implement a little program that is capable of storing data about the employees of a company.

First Step – Implement an ‘Employee’ class

Implement an Employee class that has following attributes:

- id
- first name
- last name
- salary

Find suitable datatypes and don't forget that this attributes are private. Add getter and setter methods for your attributes and define a constructor for this class, that allows you to set all attributes.

Second Step – Implement the ‘Company’ class

Implement a Company class that has following attributes:

- company name
- year of foundation

In addition, a company object should be able to store a fixed amount of employees (maybe arrays could be useful here ☺). It should be possible to define this maximum size in the constructor of the company object.

e.g.

```
public Company(String companyName, int yearOfFoundation, int maxSize){  
    ...  
}
```

Define a constructor that sets all attributes and does the initialization of your company object.

Beside the getter and setter methods also implement a method ‘public Boolean addEmployee(Employee emp)’. This method should add a new Employee to your Company. If the maximum size of the company is exceeded this method returns false otherwise true is returned.

Thirde Step – Test our implementation

Define a new variable of type company in your main method. Instantiate it with a new Company object with the name “myCompany”, that was founded in 2016 and that has a maxSize of 2.

Define three Employee variables and instantiate two Employee objects for those variables.

Try to assign all three Employees to your company. Print the return value of the ‘addEmployee’ method to the console every time you call it.

Observer how your program behaves when the maxSize of your company is reached.