Structural Design Patters

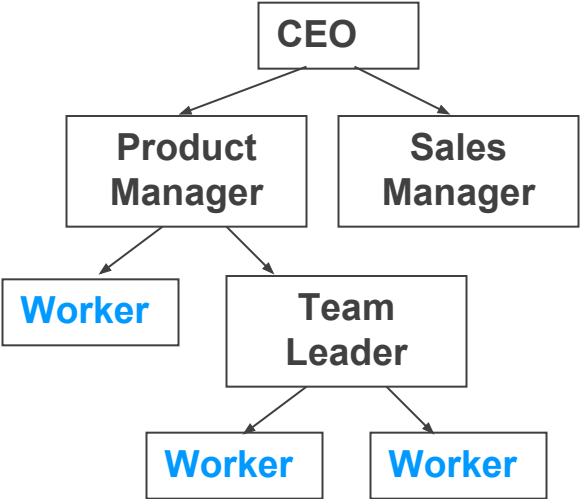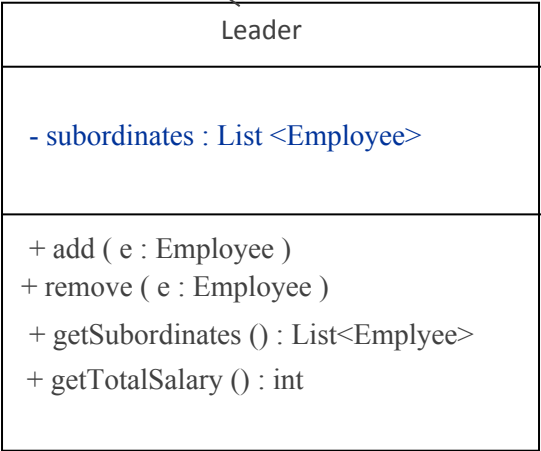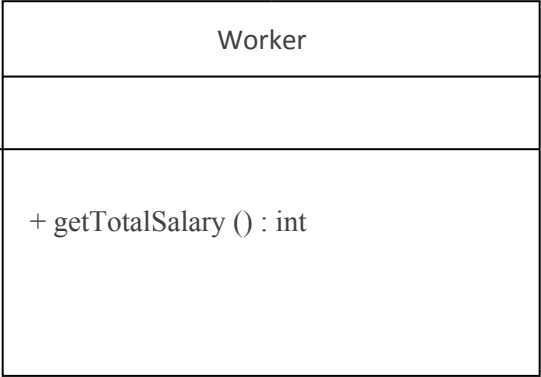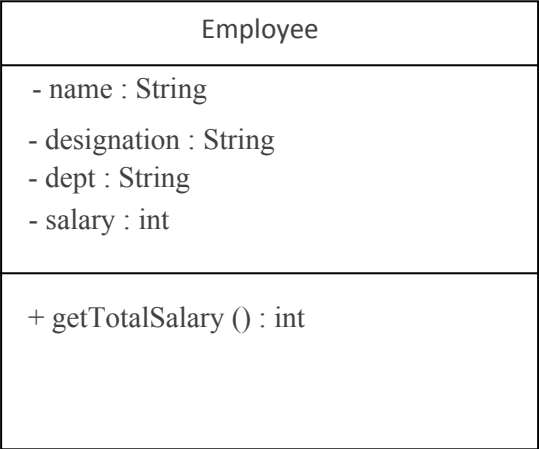*Presented By*

Sunirmal Khatua

Visvesvaraya Young Faculty Fellow, Govt. of India

Asst. Professor, University of Calcutta

Classification of Design Pattern

Creational	Structural	Behavioural
Reflections	Adapter	Interpreter
Singleton	Bridge	Template Method
Object Pool	Composite	Chain of Responsibility
Factory	Decorator	Command
Abstract Factory	Flyweight	Iterator
Factory Method	Facade	Mediator
Builder	Proxy	Memento
Prototype		Observer
		State
		Strategy
		Visitor

Composite Design Pattern

CEO

Product Manager **Sales Manager**

Worker **Team Leader**

Worker **Worker**

```
int getTotalSalary () {
    int totalSal = salary;
    for(Employee e : subordinates) {
        totalSal += e.getTotalSalary();
    }
    return totalSal;
}
```

Employee
- name : String
- designation : String
- dept : String
- salary : int

+ getTotalSalary () : int

Worker

+ getTotalSalary () : int

Leader
- subordinates : List <Employee>

+ add (e : Employee)
+ remove (e : Employee)
+ getSubordinates () : List<Emplyee>
+ getTotalSalary () : int

1

Component
+Operation1()

Leaf
+Operation1()

Composite
+Operation1()
+add()
+remove()

Thank You