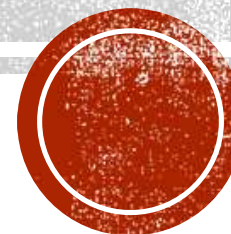# DECORATOR

Ever Hinojosa Aguirre

DECORATOR

- For the decorator and its encapsulating nature i wanted to do a PC building software as the pieces are added into a cabinet forming a pc and adding up the Price. All the pieces extending the component class which defines their name and prices and the <u>get</u> method for description and total cost.

```
Cabinet.java    Component.java    CoolingFan.java    Decorator.java ×    MotherBoard.java    PCBuild.java
1
2 public abstract class Decorator extends Component {
3     public Component component;
4     public Decorator(Component component) {
5         this.component = component;
6     }
7
8     @Override
9     public String getDescription() {
10        return component.getDescription() + (component.getDescription().isEmpty() ? "" : ", "
11    }
12    @Override
13    public double getTotalCost() {
14        return component.getTotalCost() + accessoryPrice;
15    }
16 }
<
Problems  Javadoc  Declaration  Console ×  Coverage
terminated> PCBuild [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20
abinet $50.0
abinet, MotherBoard $150.0
abinet, MotherBoard, Graphics Card $350.0
abinet, MotherBoard, Graphics Card, Cooling Fan $410.0
```

```
2 public class PCBuild {
3
4     public static void main(String[] args) {
5
6         Component computer = new Cabinet();
7         System.out.println(computer.getDescription() + " $" + computer.getTotalCost());
8
9         Component motherBoardComputer = new MotherBoard(computer);
0         System.out.println(motherBoardComputer.getDescription() + " $" + motherBoardComputer.ge
1
2         Component graphicsCardComputer = new GraphicsCard(motherBoardComputer);
3         System.out.println(graphicsCardComputer.getDescription() + " $" + graphicsCardComputer.
4
5         Component fullyLoadedComputer = new CoolingFan(graphicsCardComputer);
6         System.out.println(fullyLoadedComputer.getDescription() + " $" + fullyLoadedComputer.ge
7     }
8 }
9
<
Problems  Javadoc  Declaration  Console ×  Coverage
```