

Strategy Pattern(Source Code)

all the abstract and concrete action classes(inside the EventActions package) are responsible for the strategy pattern.

(example: AbstractDisplayMsg, DisplayMsg1, DisplayMsg2)

Source code in AbstractDisplayMsg class:

```
public abstract class AbstractDisplayMenu {
    Data data;

    public AbstractDisplayMenu(Data data) {
        this.data = data;
    }
    //encapsulate a group of individual factories that have a common theme without
    specifying their concrete classes.
    public abstract void displayMenu();
}
```

Source code in DisplayMsg1 class:

```
public class DisplayMenu1 extends AbstractDisplayMenu {

    public DisplayMenu1(Data data) {
        super(data);
    }

    //one of the concrete implementations of displayMenu function, called by gasPump-1
    @Override
    public void displayMenu() {
        //call the data from the data storage class for gasPump-1, in order to display the
        unite price of the gas;
        DataForGasPump1 d = (DataForGasPump1) data;
        System.out.println("Approverd!");
        System.out.println("Please select gas type:");
        System.out.println(
            "Input 5 to select Regular Gas, it is " + d.getrPrice() + " dollars per
            gallon. " + "\nInput 6 to select Super Gas, it is " + d.getsPrice() + " dollars per
            gallon.");
        System.out.println("input 7 to cancel the transaction.");
    }
}
```

Source code in DisplayMsg2 class:

```
public class DisplayMenu2 extends AbstractDisplayMenu {

    public DisplayMenu2(Data data) {
        super(data);
    }
    //one of the concrete implementations of displayMenu function, called by gasPump-2;
    @Override
    public void displayMenu() {
        //call the data from the data storage class for gasPump-2, in order to display the
        unite price of the gas;
        DataForGasPump2 d = (DataForGasPump2) data;
```

```
System.out.println("Approverd!");
System.out.println("Please select gas type:");
System.out.println(
    "Input 3 to select Regular Gas, it is " + d.getrPrice() + " dollars per
liter. \nInput 4 to select Super Gas, it is " + d.getsPrice() + " dollars per
liter. \nInput 5 to select Premium Gas, it is " + d.getpPrice() + " dollars per liter.");
System.out.println("input 6 to cancel the transaction.");
    }
}
```