

## Código Fuente

```
1 package Drinks;
2 /**
3  * @author Victor Lavalle
4  */
5 public abstract class Drink {
6
7     private double price;
8
9     public double getPrice() {return price;}
10    public void setPrice(double price) {this.price = price;
11 }
12 }
```

```
1 package Drinks;
2
3 public class DarkToast extends Drink{
4     double price =(Math.random() * 50) + 1;
5     public DarkToast() {
6         setPrice(price);
7         System.out.println("»DarkToast");
8     }
9 }
```

```
1 package Drinks;
2
3 public class Decaf extends Drink{
4     double price =(Math.random() * 50) + 1;
5     public Decaf() {
6         setPrice(price);
7         System.out.println("»Decaf");
8     }
9 }
```

```
1 package Drinks;
2
3 public class Espresso extends Drink{
4     double price =(Math.random() * 50) + 1;
5     public Espresso() {
6         setPrice(price);
7         System.out.println("»Espresso");
8     }
9 }
```

```

1 package Drinks;
2
3 public class HouseBlend extends Drink{
4     double price =(Math.random() * 50) + 1;
5     public HouseBlend() {
6         setPrice(price);
7         System.out.println("»HouseBlend");
8     }
9
10 }

```

```

1 package Decorations;
2
3 import Drinks.Drink;
4
5 /**
6  * @author Victor Lavalle
7  */
8 public abstract class DrinkDecorator extends Drink {
9
10     private Drink drink;
11
12     public Drink getDrink() {return drink;}
13
14     public void addDrink(Drink drink) {
15         this.drink = drink;
16         setPrice(drink.getPrice() + getPrice());
17     }
18
19 }

```

```

1 package Decorations;
2 /**
3  * @author Victor Lavalle
4  */
5 public class ChocolateChips extends DrinkDecorator {
6
7     double price =(Math.random() * 20) + 1;
8     public ChocolateChips() {
9         setPrice(price);
10     }
11
12 }

```

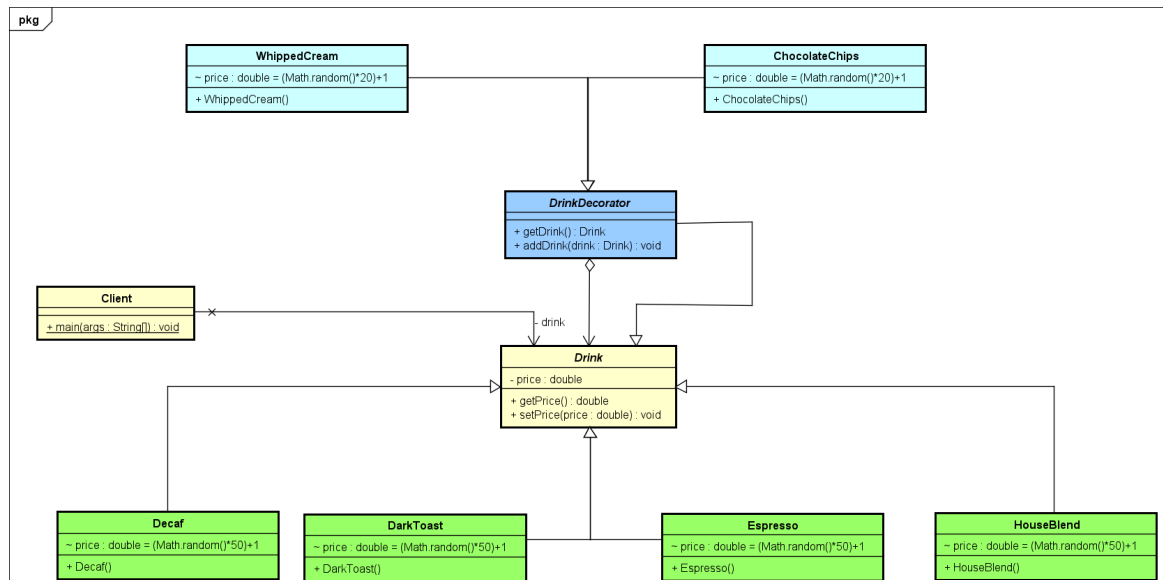
```

1 package Decorations;
2 /**
3  * @author Victor Lavalle
4  */
5 public class WhippedCream extends DrinkDecorator{
6
7     public WhippedCream() {
8         double price =(Math.random() * 20) + 1;
9         setPrice(price);
10     }
11
12 }
13

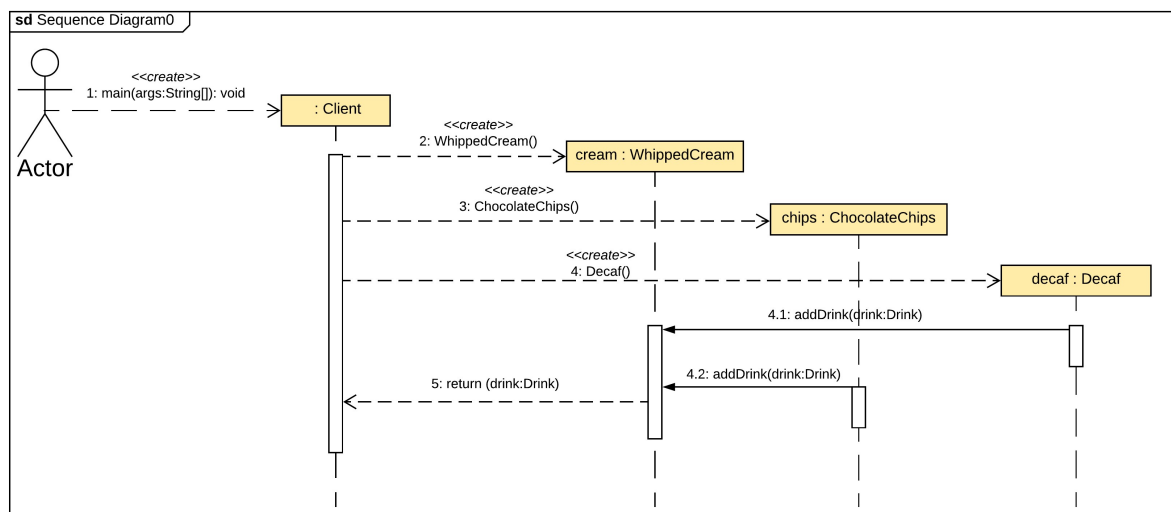
```

```
1 package Launcher;
2
3 import Decorations.*;
4 import Drinks.*;
5 import java.text.DecimalFormat;
6 /**
7  * @author Victor Lavalle
8  */
9 public class Client {
10
11     public static void main(String[] args) {
12
13         double order =(Math.random() * 10) + 1;
14         DecimalFormat formatOrder = new DecimalFormat("#");
15         System.out.println("Order # "+formatOrder.format(order)+"");
16
17         DecimalFormat formatPrice = new DecimalFormat("#.00");
18         DrinkDecorator cream = new WhippedCream();
19         DrinkDecorator chips = new ChocolateChips();
20         //_____
21
22         Drink espresso = new Espresso();
23         cream.addDrink(espresso);
24         chips.addDrink(cream);
25         System.out.println( "$"+formatPrice.format(chips.getPrice())+"\n");
26
27         //_____
28
29         Drink decaf = new Decaf();
30         cream.addDrink(decaf);
31         System.out.println( "$"+formatPrice.format(cream.getPrice())+"\n");
32
33         //_____
34
35         Drink houseBlend = new HouseBlend();
36         System.out.println( "$"+formatPrice.format(houseBlend.getPrice()));
37
38         //_____
39
40         System.out.println("\nThanks For Your Visit! :)");
41     }
42 }
```

## Diagrama de Clases



## Diagrama de Secuencia



## Ejecución

```
Output - Decorator (run)

run:
|Order # 3|
»Espresso
$58.61

»Decaf
$75.29

»HouseBlend
$1.27

Thanks For Your Visit! :)
BUILD SUCCESSFUL (total time: 0 seconds)
```