

## **Método “Builder” – Constructor de pizzas**

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Modelos de Programación I

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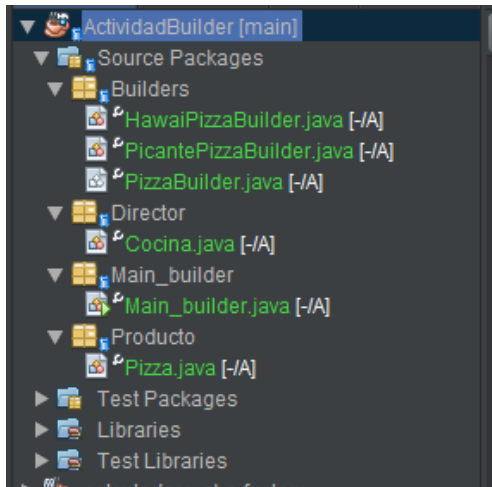
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## Paquetes



## Builders

### HawaiiPizzaBuilder.java

```
1  package Builders;
2  import Producto.Pizza;
3
4  public class HawaiiPizzaBuilder extends PizzaBuilder {
5
6      public HawaiiPizzaBuilder() {
7          super.pizza = new Pizza();
8      }
9
10     public void buildMasa() {
11         pizza.setMasa("suave");
12     }
13
14     public void buildSalsa() {
15         pizza.setSalsa("dulce");
16     }
17
18     public void buildRelleno() {
19         pizza.setRelleno("chorizo+alcachofas");
20     }
21
22 }
23
```

## PicantePizzaBuilder.java

```
1  package Builders;
2  import Producto.Pizza;
3
4  public class PicantePizzaBuilder extends PizzaBuilder {
5
6      public PicantePizzaBuilder() {
7          super.pizza = new Pizza();
8      }
9
10     public void buildMasa() {
11         pizza.setMasa("cocido");
12     }
13
14     public void buildSalsa() {
15         pizza.setSalsa("picante");
16     }
17
18     public void buildRelleno() {
19         pizza.setRelleno("pimienta+salchichón");
20     }
21
22 }
23
```

## PizzaBuilder.java

```
1  package Builders;
2  import Producto.Pizza;
3
4  public abstract class PizzaBuilder {
5
6      protected Pizza pizza;
7
8      public Pizza getPizza() {
9          return pizza;
10     }
11
12     public abstract void buildMasa();
13
14     public abstract void buildSalsa();
15
16     public abstract void buildRelleno();
17 }
18
```

## Director

Cocina.java

```
1  package Director;
2
3  import Builders.PizzaBuilder;
4  import Producto.Pizza;
5
6  public class Cocina {
7
8      private PizzaBuilder pizzaBuilder;
9
10     // public void setPizzaBuilder(PizzaBuilder pb) {
11     //     pizzaBuilder = pb;
12     // }
13     //
14     // public Pizza getPizza() {
15     //     return pizzaBuilder.getPizza();
16     // }
17     //
18     // public void construirPizza() {
19     //     pizzaBuilder.buildMasa();
20     //     pizzaBuilder.buildSalsa();
21     //     pizzaBuilder.buildRelleno();
22     // }
23
24     // Se hace el arreglo solicitado en clase para evitar el error de
25     // construccion que se puede presentar:
26
27     public Pizza cocinarPizza(PizzaBuilder pb) {
28         pizzaBuilder = pb;
29         pizzaBuilder.buildMasa();
30         pizzaBuilder.buildSalsa();
31         pizzaBuilder.buildRelleno();
32         return pizzaBuilder.getPizza();
33     }
34 }
35
```

## Main\_builder

Main\_builder.java

```
1  package Main_builder;
2
3  import Director.Cocina;
4  import Builders.HawaiPizzaBuilder;
5  import Builders.PicantePizzaBuilder;
6  import Builders.PizzaBuilder;
7  import Producto.Pizza;
8
9  public class Main_builder {
10
11     public static void main(String[] args) {
12         Cocina cocina = new Cocina();
13
14         PizzaBuilder objHawaiPizzaBuilder = new HawaiPizzaBuilder();
15         PizzaBuilder objPicantePizzaBuilder = new PicantePizzaBuilder();
16
17         Pizza pizza = cocina.cocinarPizza(objPicantePizzaBuilder);
18     }
19
20 }
21
```

## Producto

Pizza.java

```
1  package Producto;
2
3  public class Pizza {
4
5      private String masa;
6      private String salsa;
7      private String relleno;
8
9      public void setMasa(String masa) {
10         this.masa = masa;
11     }
12
13     public void setSalsa(String salsa) {
14         this.salsa = salsa;
15     }
16
17     public void setRelleno(String relleno) {
18         this.relleno = relleno;
19     }
20
21     public String getMasa() {
22         return masa;
23     }
24
25     public String getSalsa() {
26         return salsa;
27     }
28
29     public String getRelleno() {
30         return relleno;
31     }
32
33 }
34
```