Superset ID: 6413402

Exercise 2: Implementing the Factory Method Pattern

Code:

interface Coffee {

void serve();

}

class Latte implements Coffee {

public void serve() {

System.out.println(" Here's your creamy Latte!");

}

}

class Cappuccino implements Coffee {

public void serve() {

System.out.println("Enjoy your strong and foamy Cappuccino!");

}

}

class Espresso implements Coffee {

public void serve() {

System.out.println(" One shot of pure energy Espresso!");

}

}

class CoffeeFactory {

public Coffee getCoffee(String type) {

if (type == null || type.isEmpty()) return null;

switch (type.toLowerCase()) {

case "latte":

return new Latte();

case "cappuccino":

return new Cappuccino();

case "espresso":

return new Espresso();

default:

throw new IllegalArgumentException(" Sorry, we don't serve: " + type);

}

}

}

public class factory {

public static void main(String[] args) {

System.out.println(" Welcome to Java Coffee Shop!");

CoffeeFactory barista = new CoffeeFactory();

Coffee order1 = barista.getCoffee("Latte");

order1.serve();

Coffee order2 = barista.getCoffee("Cappuccino");

order2.serve();

Coffee order3 = barista.getCoffee("Espresso");

order3.serve();

}

}

Output:

Welcome to Java Coffee Shop!

Here's your creamy Latte!

Enjoy your strong and foamy Cappuccino!

One shot of pure energy Espresso!

