

Sprint 15: Unit Testing with JUnit

Problem Statement: Mastery Challenge 3 - An Online Pizza Ordering System

Wat-a-pizza started as a takeaway joint from a small city in India about a year back and soon became very popular in its vicinity for its custom-made vegetarian pizzas. Considering its popularity, the owner of Wat-a-pizza decided to offer home delivery as an option to attract customers who were willing to pay an additional delivery charge. The business of this joint has now grown exponentially.

Recently, the owner has started receiving complaints related to mix-up of orders and incorrect billing. To address this problem, the owner wants to move from a manual order intake and billing process to an automated one. She would like the person in charge to be able to take orders and generate bills for all customers automatically.

The owner has engaged you to build a system that helps manage the order intake and billing process.

They have shared the following details with you.

Main Menu

S. No.	Item Category
1	Pizza
2	Garlic Bread
3	Beverages

Pizza Menu

S. No	Pizza	Regular	Medium	Large
1	African Peri Peri Veg	NA	350	450
2	Barbecue Veg	NA	300	400
3	Jamaican Jerk Veg	250	350	450
4	What-a-pizza Exotic	200	300	400
5	English Cheddar and Veggies	175	375	500

Crust Choices

S. No.	Crust	Price (in Rupees)

1	Wheat Thin Crust	60
2	Fresh Pan Base	80
3	Hand Tossed	70

Toppings

S. No.	Toppings	Price (in Rupees)

1	Extra Cheese	80
2	Veg Toppings	120

Garlic Bread

S. No.	Bread	Price (in Rupees)

1	Stuffed Garlic Bread	90
2	Plain Garlic Bread Sticks	80

Beverages

S. No.	Beverage	Price (in Rupees)

1	Pepsi	60
2	Coke	60

Discounts

S. No.	Amount	Discount
1	If total bill amount \geq Rs 500 and $<$ Rs 1000	5%
2	If total bill amount \geq Rs 1000 and $<$ Rs 1500	10%

Home Delivery Fee: Rs 100

You need to perform the following tasks:

Task 1.

Build the system such that it first records the customer details as follows:

- Name
- Email address
- Contact number
- Delivery address
- Order type (Takeaway or Home Delivery)

Task 2:

Incorporate the functionality to accept the order details in the following sequence.

1. Display the Main Menu
2. Specify the Sr. No. of the Item Category that the customer wants to order and gather relevant information about the item category (quantity, type, and size).
 - a) If 1 is entered:
 - i) Specify the total number of pizza to order.
 - ii) Display the Pizza Menu (as per the case study).
 - iii) Specify the Srno of the pizza that the customer wants to order.

- iv) Specify the required size of the pizza as R, M or L based on the customer preference for a regular, medium or large size pizza.
- v) Display the choices for the crust (as per the case study).
- vi) Specify the Srno. of the crust that the customer wants for the pizza.
- vii) Display the choices for Toppings (as per the case study).
- viii) Specify the Srno. of the Toppings they want.
- ix) If the number of pizza required is more than 1, repeat steps b to g for each pizza selection.
- x) Go back to the Main menu
- xi) Calculate and display the total amount
- b) If 2 is entered:
 - i) Specify the total number of breads to be ordered.
 - ii) Display the Garlic Bread menu (as per the case study).
 - iii) Specify the Srno of the bread that the customer wants to order.
 - iv) If the number of bread required is more than 1, repeat step iii for each bread.
 - v) Go back to the main menu
 - vi) Calculate and display the total amount
- c) If 3 is entered:
 - i) Specify the total number of beverages to order.
 - ii) Display the Beverages menu (as per the case study).
 - iii) Specify the Srno of the beverage that the customer wants to order.
 - iv) If the number of beverages required is more than 1, repeat step iii for each beverage ordered.
 - v) Go back to the main menu
 - vi) Calculate and display the total amount

Task 3:

Display the final bill in the following format.

Customer name

Contact number

Total amount

Discount applied

Delivery fee

Total amount to be paid

Practice Challenge – 15 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/mc3_pizzaorderingsystem.git