

Zalex Inc. Customer Invoicing Solution

Zalex Inc. is a multinational organization specialized in manufacturing and selling of Kamado-style grills. The company has locations in over 30 geographies around the world involving either manufacturing facilities or sales offices.

Business Objective

You are requested to implement a Java application that will manage the invoicing of the company's customer accounts based on the products their customers buy.

A customer account record should include the following information:

- Account No.
- Customer Name (First, Middle and Last Name)
- Address
- Phone
- Account balance (Auto-calculated - Sum of all the customer's invoice total amounts)
- List of invoices

A product includes the following information:

- Name
- Model No.
- Description
- Price

An invoice includes the following information:

- No.
- Date created
- List of items - each item should include the following:
 - Product name
 - Quantity
 - Amount (Auto-calculated - Product price * quantity)
- Total amount (Auto-calculated - Sum of item amounts)

Solution Requirements

1. Implement the required Java classes for the above. The OOP principles should be followed where possible.
2. Implement any required unit tests needed to test the methods implemented that will also include the corresponding assertions.
3. Implement a main method that can be executed to capture the customer's data and products purchased, and will generate the customer's invoice. This method should also print the customer's updated balance on every invoice creation in the console.
4. Your code should also include any inline implementation comments needed.

Delivery

You can provide a link to a Github repository or a compressed archive with your code, the compiled classes and .jar.

In addition, you should provide any documentation / instructions and dependencies required in order to compile and execute the code.