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 microservice using [Spring Boot](#) or a similar framework 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 CRUD (create, read, update, delete) RESTful APIs to manage the entities mentioned above (Accounts, Products, Invoices). You can use the datastore/database of your preference (PostgreSQL, MySQL, MongoDB, etc.).
2. Implement any required unit tests needed to test the methods implemented that will also include the corresponding assertions.
3. Extra points: Package the microservice using Docker and provide a Docker compose file that will include any dependency (i.e. database engine)

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 to compile and execute the code.