Integrated assessment for Object Oriented programming With Java

Modules combined:

1. SPFOO401 -Introduction To Object Oriented Programming With Java

2. SFPAJ401 -Advanced Java

3. SFPWD401-Web services Development

4. SFPBD301-Basics of Database development

5. SFPAD401-Advanced Database development

1. INTEGRATED SITUATION:

National Bank of Rwanda wants to provide customized management of customer account by providing all in one operations that includes Saving, withdraw and transfer money to other accounts. The system should also provide interactive messaging to the customer on each transaction performed but also create records on each transaction.

TASK

As a Java developer, you have been hired to develop the Backend of the Banking system describe with these minimum features:

- Manage Clients by registering their details.

Customer(id, firstName, lastName, email, mobile, dob, account, balance, lastUpdateDateTime)

- Saving management Banking(id, customer, account,amount, type(saving),bankingDateTime)

- Withdraw Management Banking(id, customer,account, amount, type(withdraw), bankingDateTime)

- Enable a Customer to perform a transfer(Saving) of a given amount to another Customer account

Banking(id, customer,account, amount, type(transfer), bankingDateTime)

- Update customer account on each saving(+) and withdraw(-) transactions.

- On each Saving and withdraw send an email to the Customer

Dear <CUSTOMER NAMES> Your <SAVING/WITHDRAW> of <AMOUNT> on your account <ACCOUNT> has been Completed Successfully.

- Use a trigger to register the message sent to each customer based on each transaction

In the message table.

Message(id, customer, message, dateTime)

Instructions:

- After proper configuration of backend, the records of customer and respective transactions should be added manually using either postman/swagger/application main class/DBMS level.

- All information to be stored in a relational DBMS of your choice.

- Spring boot to configure database and generate API to be used for backend implementation.

- Indicated database tables are required to complete this task

The timing of this project is 4 hours