Amazon E-Gift Card Application

IIHT

Time To Complete: 3 hrs

Contents

1 Problem Statement

The Amazon E-Gift Card Application provides users with the capability to perform not only CRUD (Create, Read, Update, Delete) operations and search functionalities in different criterias on e-gift cards, payments, and user profiles but also analytical operations like getting suggestion as per user's last purchase, getting % of all redeemed gift cards shared by user, grouping the cards by amount and many more for analysis and viewing.

2 Business Requirements:

Screen Name	Console input screen
Problem Statement	1. User needs to enter into the application. 2. The user should be able to do the particular operations 3. The console should display the menu 1) create a new user 2) update a user 3) get details of a user 4) create a new egiftcard 5) update a egiftcard 6) get details of a egiftcard 7) create a new payment 8) update a payment 9) get details of a payment 10) get suggestions for egiftcards for user 11) get shared giftCards by user 12) get redeemed giftCard percentage 13) get giftCards grouped by amount 14) search eGift cards 15) exit

3 Implementation/Functional Requirements

3.1 Code Quality/Optimizations

1. Associates should have written clean code that is readable.
2. Associates need to follow SOLID programming principles.

3.2 Template Code Structure

Package: com.amazonegiftcardapplication

Resources

Class/Interface	Description	Status
EGiftCardApplication.java(class)	This represents bootstrap class i.e class with Main method, that shall contain all console interaction with the user.	Partially implemented

Package: com.amazonegiftcardapplication.model

Resources

Class/Interface	Description	Status
EGiftCard.java(class)	This represents entity class for EGiftCard	Partially Implemented
Payment.java(class)	This represents entity class for Payment	Partially Implemented
User.java(class)	This represents entity class for User	Partially Implemented

Package: com.amazonegiftcardapplication.repository

Resources

Class/Interface	Description	Status
EGiftCardDAO.java(interface)	This is an interface containing declaration of DAO method	Already Implemented
EGiftCardDAOImpl.java(class)	This is an implementation class for DAO methods. Contains empty method bodies, where logic needs to written by test taker	Partially Implemented
PaymentDAO.java(interface)	This is an interface containing declaration of DAO method	Already Implemented
PaymentDAOImpl.java(class)	This is an implementation class for DAO methods. Contains empty method bodies, where logic needs to written by test taker	Partially Implemented
UserDAO.java(interface)	This is an interface containing declaration of DAO method	Already Implemented
UserDAOImpl.java(class)	This is an implementation class for DAO methods. Contains empty	Partially Implemented

	method bodies, where logic needs to written by test taker	

4 Execution Steps to Follow

1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers need to go to the Application menu (Three horizontal lines at left top) -> Terminal ->New Terminal.
3. To build your project use command:
   mvn clean package -Dmaven.test.skip
4. This editor Auto Saves the code.
5. If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B-command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.
6. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.

7. Default credentials for MySQL:
   a. Username: root
   b. Password: pass@word1

8. To login to mysql instance: Open new terminal and use following command:

a. sudo systemctl enable mysql
b. sudo systemctl start mysql

NOTE: After typing the second sql command (sudo systemctl start mysql), you may encounter a warning message like :

System has not been booted with systemd as init system (PID 1). Can't operate. Failed to connect to bus: Host is down

>> Please note that this warning is expected and can be disregarded. Proceed to the next step.

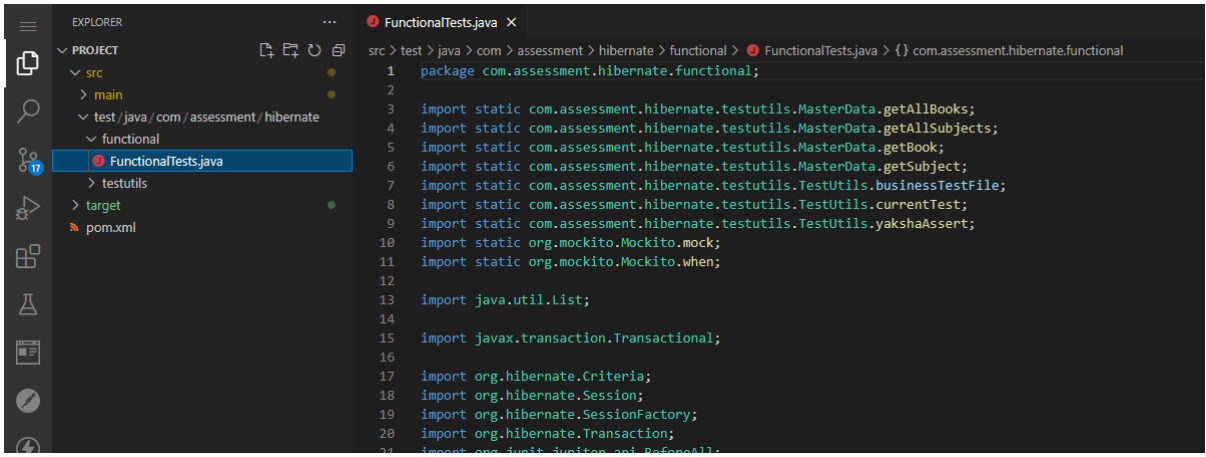
c. mysql -u root -p

The last command will ask for password which is 'pass@word1'

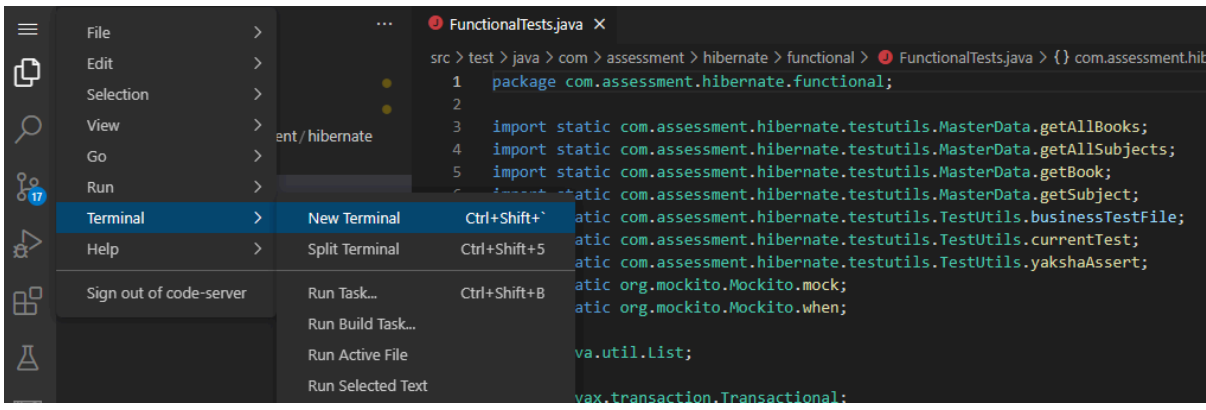
9. These are time bound assessments. The timer would stop if you logout (Save & Exit) and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
10. To run your project use command:

    mvn clean install exec:java

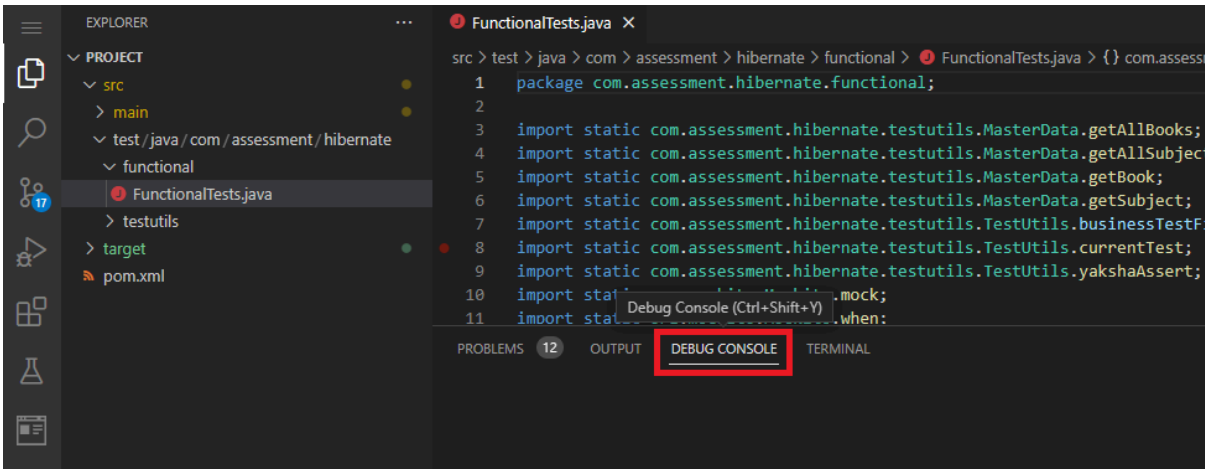
    -Dexec.mainClass="com.amazonegiftcardapplication.EGiftCardApplication"
11. To test your project, use the command
    a. Open FunctionalTests.java file in editor



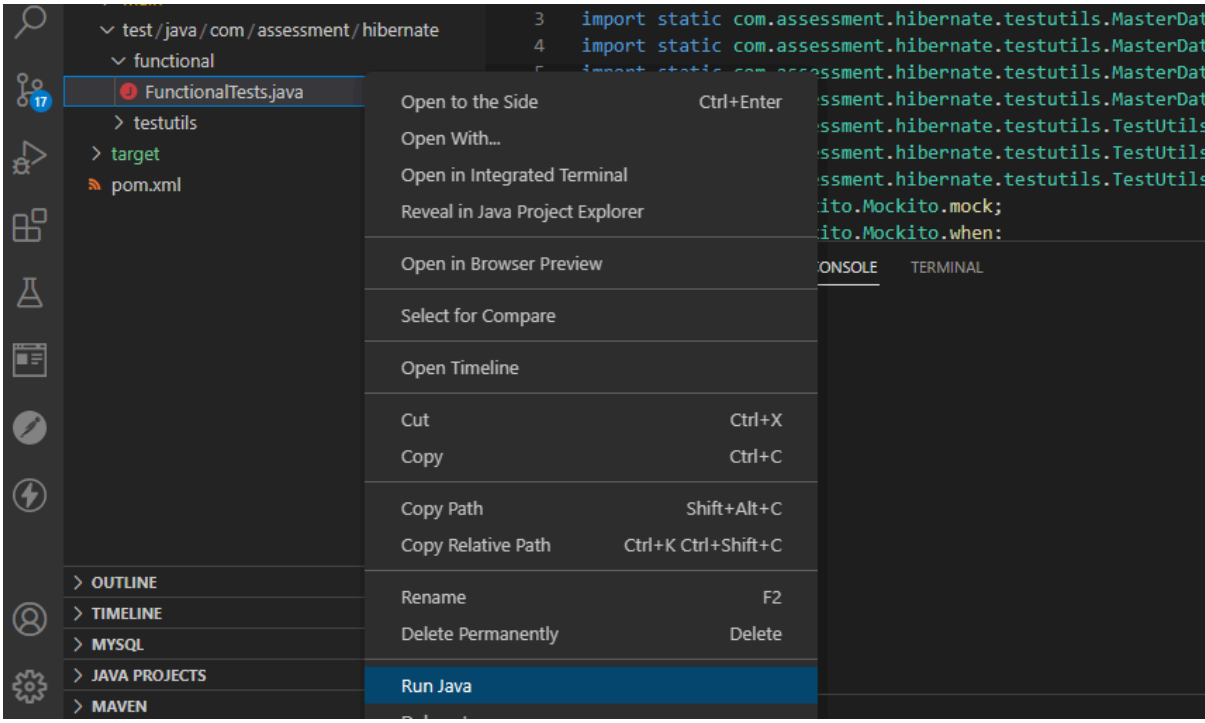
    b. Open a new Terminal



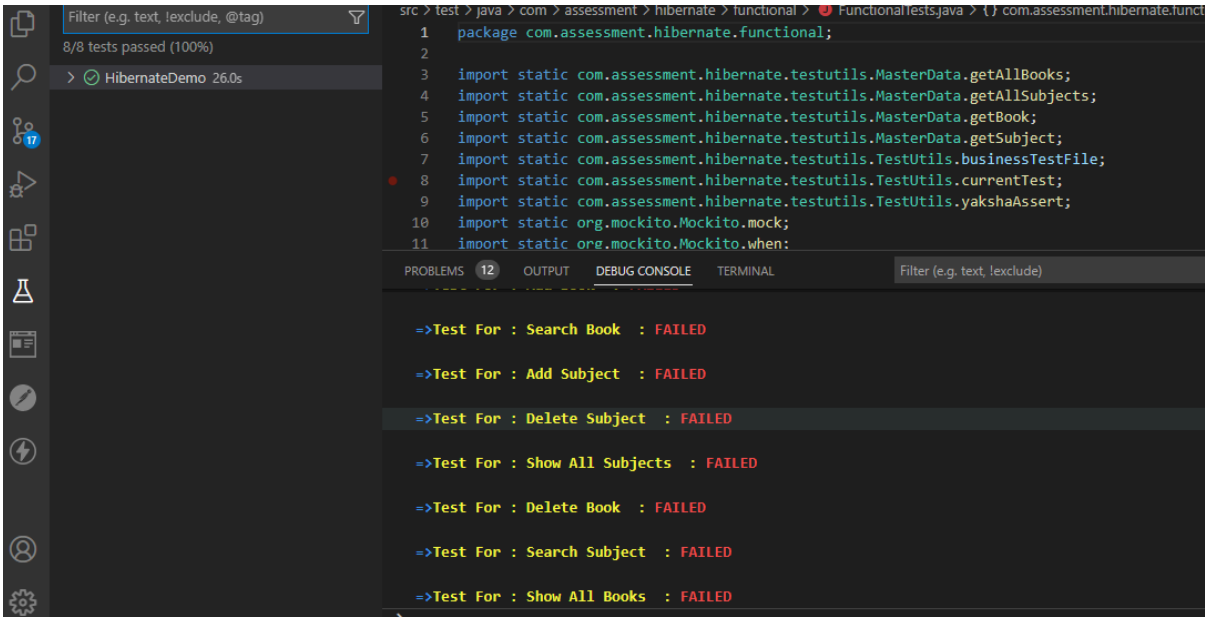
c. Go to Debug Console Tab



d. Right click on FunctionalTests.java file and select option Run Java



e. **This will launch the test cases and status of the same can be viewed in Debug Console**



12. **You need to use CTRL+Shift+B - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.**