

AMAZON KINDLE ANALYSER

IIHT

Time To Complete: 3 hrs

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1 PROBLEM STATEMENT

The Amazon Kindle Analyzer Application allows users to perform not only CRUD (Create, Read, Update, Delete) operations and search functionalities in different criterias on books, shelves, user profiles, and user ratings but also provides the analytical operations like getting suggested shelves as per user's genre, get list of all trending books, get list of all purchased books and many more for analysis and viewing.

2 BUSINESS REQUIREMENTS:

| Screen Name | Console input screen |
|-------------------|---|
| Problem Statement | <ol style="list-style-type: none">1. User needs to enter into the application.2. The user should be able to do the particular operations3. The console should display the menu<ol style="list-style-type: none">1) create a new user2) update a user3) get details of a user4) create a new book5) update a book6) get details of a book7) create a new shelf8) update a shelf9) get details of a shelf10) create user rating11) search for a book12) get books suggestions by genre13) get insights of most read books by age14) get book suggestions by rating15) show trending books16) get list of purchased books17) get percentage of books purchased after reading their sample18) 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

A. PACKAGE: COM.AMAZONKINDLEANALYSERAPPLICATION

Resources

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

B. PACKAGE: COM.AMAZONKINDLEANALYSERAPPLICATION.MODEL

Resources

| Class/Interface | Description | Status |
|------------------------|---|-----------------------|
| Book.java(class) | This represents entity class for Book | Partially Implemented |
| Shelf.java(class) | This represents entity class for Shelf | Partially Implemented |
| User.java(class) | This represents entity class for User | Partially Implemented |
| UserRating.java(class) | This represents entity class for UserRating | Partially Implemented |

C. PACKAGE: COM.AMAZONKINDLEANALYSERAPPLICATION.REPOSITORY

Resources

| Class/Interface | Description | Status |
|--------------------------|--|-----------------------|
| BookDAO.java(interface) | This is an interface containing declaration of DAO method | Already Implemented |
| BookDAOImpl.java(class) | This is an implementation class for DAO methods. Contains empty method bodies, where logic needs to be written by test taker | Partially Implemented |
| ShelfDAO.java(interface) | This is an interface containing declaration of DAO method | Already Implemented |
| ShelfDAOImpl.java(class) | This is an implementation class for DAO methods. Contains empty method bodies, where logic needs to be 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 be written by test taker | |
| UserRatingDAO.java(interface) | This is an interface containing declaration of DAO method | Already Implemented |
| UserRatingDAOImpl.java(class) | This is an implementation class for DAO methods. Contains empty method bodies, where logic needs to be written by test taker | Partially Implemented |

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.

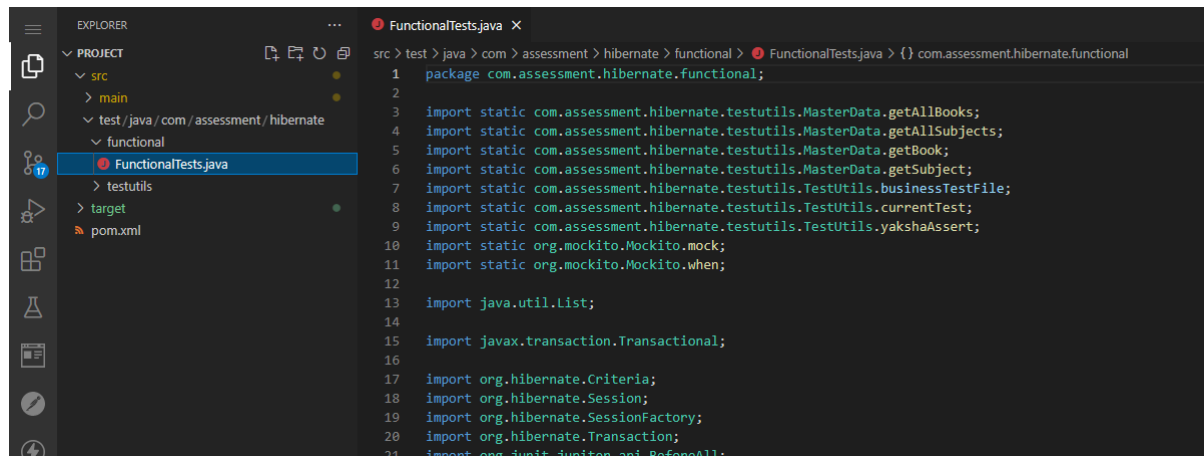
10. To run your project use command:

`mvn clean install exec:java`

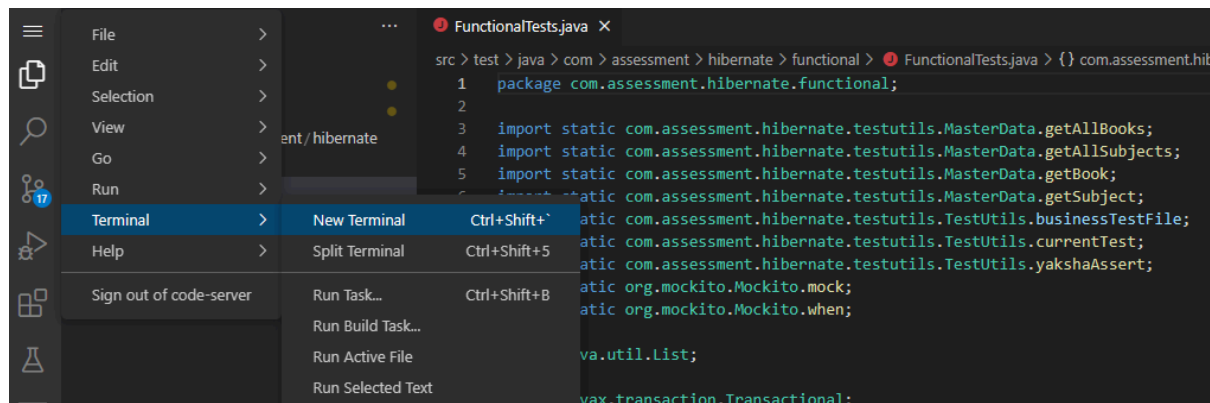
`-Dexec.mainClass="com.amazonkindleanalyserapplication.AmazonKindleAnalyserApplication"`

11. To test your project, use the command

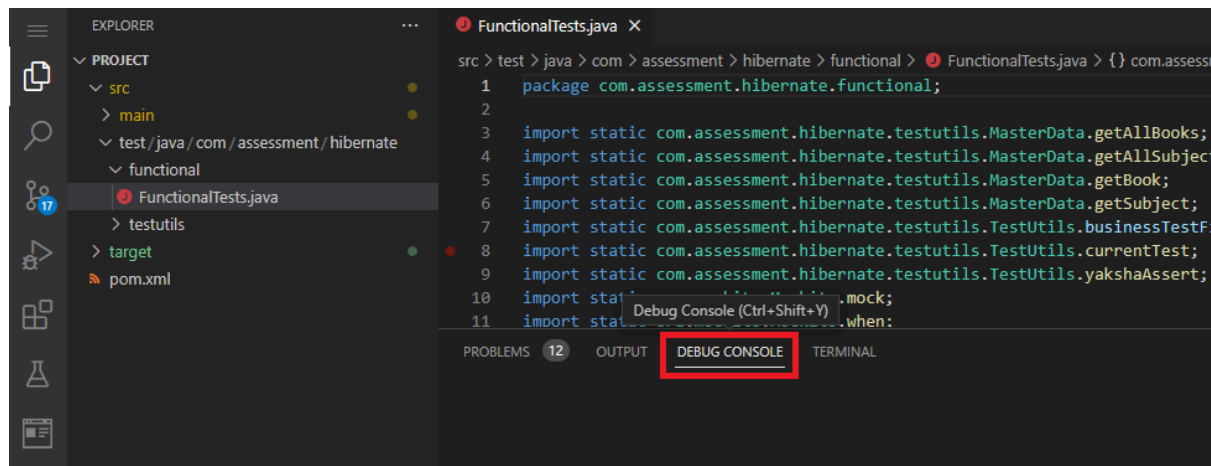
a. Open FunctionalTests.java file in editor



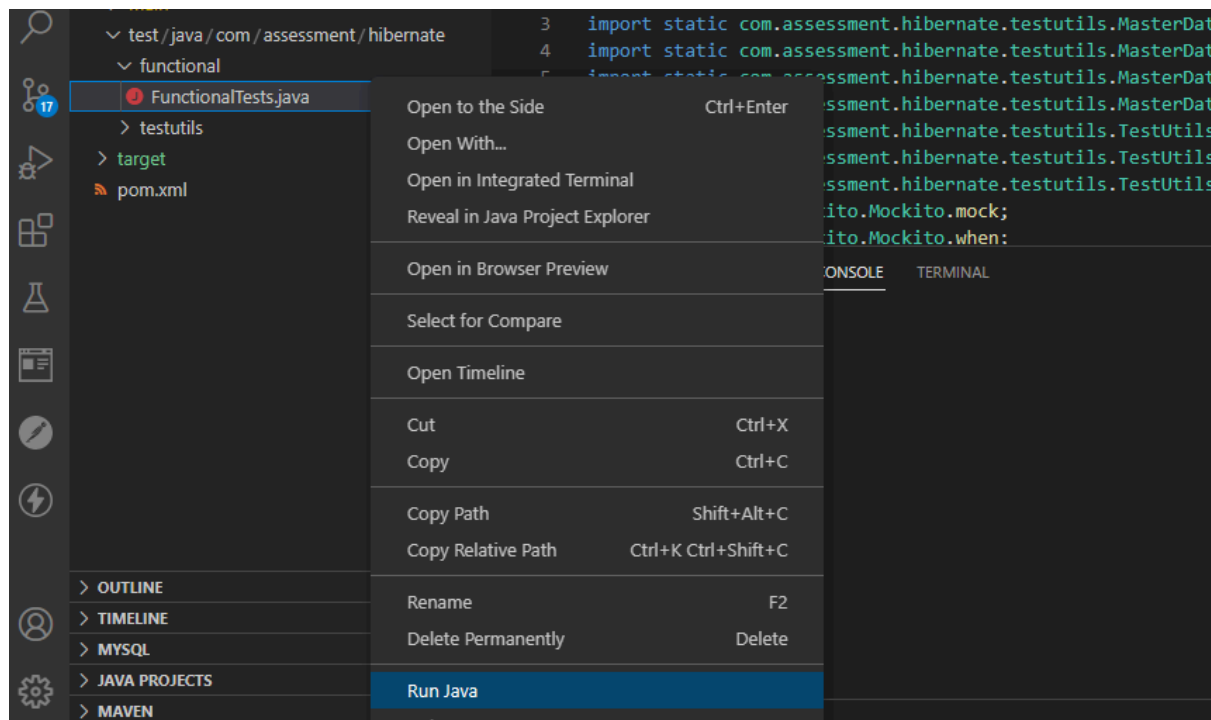
b. Open a new Terminal



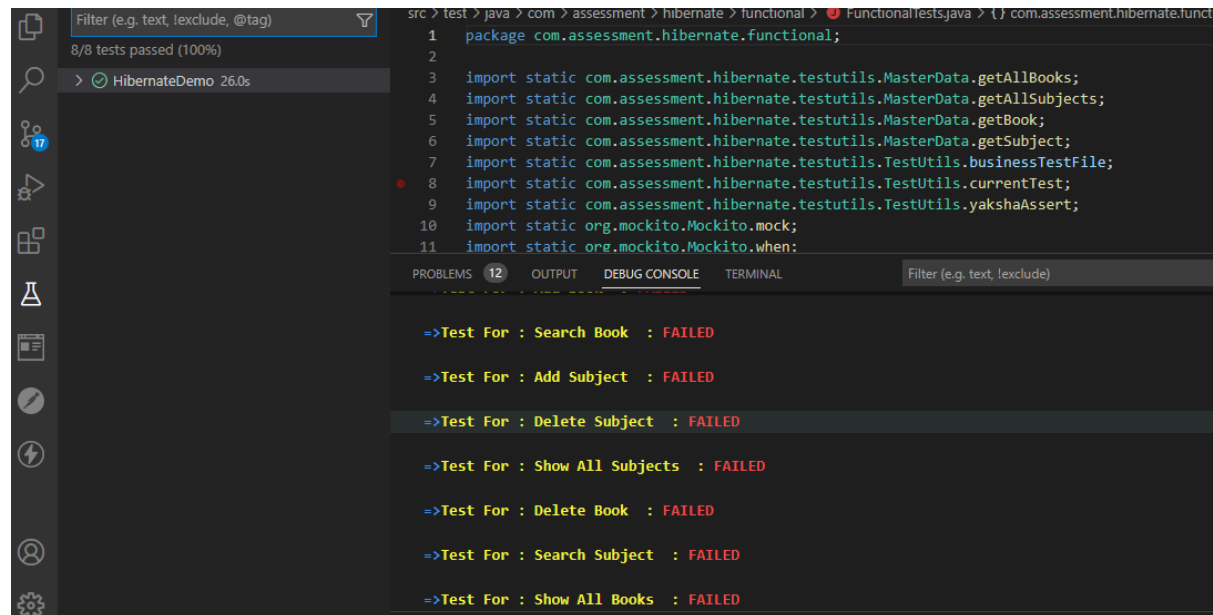
c. Go to Debug Console Tab



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.