

Walmart Api Homework

This project lets user search any product and based on the first product searched gives some recommended products and also ranks those products in the order of customer reviews.

Implementation:

This project has been implemented with the help of various walmart Api like Search_Api, Product_Recomendation Api, Reviews_Api.

The Behavioral design pattern like Strategy design pattern has been used in order to solve the problem.

The algorithm package that has been created separately and can be implemented and updated as per the client requirement.

The MVC design pattern also has been kept in mind while developing but some how it needs to be enhanced more.

First of all user searched for any product. Then the search_Api call is made to return the response in json format.

On the basis of first product searched, second api call i.e Product_recommendation Api call is made to get the JSON response of recommended products.

The item list contains 10 items and it is needed to get the review for each item.

Then the get the reviews for each recommended products using the third api call i.e with the help of Reviews_Api.

Then the ranking algorithm is used to rank the products on the basis of review sentiments.

Steps:

Step1: get products

Step 2: for first item, get all recommendations for this product id.

itemList contains 10 items. We need to get reviews for each item and rank them.

Step 3: for each recommended product, get all reviews.

Step 4: Rank response Items on the basis of some defined Ranking algorithm

Development tools:

IDE: Eclipse Mars.2 Release 4.5.2

Java Version : Jdk 1.7

Jars : Jackson

OS: Windows 10

Instruction for Execution:

Java_Home should be set in execution environment.

Java compiler should be 7 or above.

The jar should be added in the build path.

The Main.java file should be run.

The input should be made from command line.

List of artifacts in the zip file :

1. Walmart_Homework :- It contains source files and jars.
2. README.pdf : It contains all the required project specific details .

Testing:

The different test cases have been performed using different keywords.

The testing has been done in windows 10.

The screens shots of the test cases are as below:

```
Problems @ Javadoc Declaration Console
<terminated> Main (4) [Java Application] E:\Program Files\Java\jdk1.7.0_79\bin\javaw.exe (Jun 28, 2016, 11:15:48 PM)
Enter product to search
Microwave
searching for query string Microwave ...
length :: 10
product found
item id: 20563927
getting recommendation ...
11 recommendations found
+++++
sorting recommendation
+++++
item id: 28862163 rating : 4.35
item id: 16481103 rating : 4.32
item id: 22910669 rating : 4.32
item id: 23080027 rating : 3.96
item id: 29559140 rating : 3.93
item id: 19895933 rating : 3.93
item id: 19581131 rating : 3.89
item id: 35241853 rating : 3.83
item id: 8054251 rating : 3.8
item id: 15908489 rating : 3.47
```

 Problems @ Javadoc Declaration Console

<terminated> Main (4) [Java Application] E:\Program Files\Java\jdk1.7.0_79\bin\javaw.exe (Jun 28, 2016, 11:10:35 PM)

Enter product to search**ipod**

searching for query string ipod ...

length :: 10

product found

item id: 42608121

getting recommendation ...

10 recommendations found

+++++

sorting recommendation

+++++

item id: 25857866 rating : 5.0

item id: 30146246 rating : 4.78

item id: 25033121 rating : 4.55

item id: 42608125 rating : 4.54

item id: 31232984 rating : 4.54



item id: 39218745 rating : 4.5

item id: 39875894 rating : 4.14

item id: 46532014 rating : 3.4

item id: 44460683 rating : 3.37

item id: 46088056 rating : 1.0

Problems @ Javadoc Declaration Console  

<terminated> Main (4) [Java Application] E:\Program Files\Java\jdk1.7.0_79\bin\javaw.exe (Jun 28, 2016, 11:16:47 PM)

Enter product to search

laptop

searching for query string laptop ...

length :: 10



product found

item id: 46429969

getting recommendation ...

21 recommendatations found

No proper data

Problems @ Javadoc Declaration Console  

<terminated> Main (4) [Java Application] E:\Program Files\Java\jdk1.7.0_79\bin\javaw.exe (Jun 28, 2016, 11:17:41 PM)

Enter product to search

chair

searching for query string chair ...

length :: 10

product found

item id: 25395687

getting recommendation ...

24 recommendatations found

+++++

sorting recommendation

+++++

item id: 16421442 rating : 4.24

item id: 15734260 rating : 4.0

item id: 44465537 rating : 4.0

item id: 16401708 rating : 3.98

item id: 13345701 rating : 3.93

item id: 17164049 rating : 3.82

item id: 24216266 rating : 3.76

item id: 35722727 rating : 3.54

item id: 21743258 rating : 3.31

item id: 22946499 rating : 3.11

Problems @ Javadoc Declaration Console

<terminated> Main (4) [Java Application] E:\Program Files\Java\jdk1.7.0_75\bin\java.exe

Enter product to search

matress

searching for query string matress ..

length :: 10

product found

item id: 14225185

getting recommendation ...

20 recommendatations found

+++++

sorting recommendation

+++++

item id: 24628979 rating : 4.74

item id: 26603157 rating : 4.66

item id: 15739163 rating : 4.62

item id: 12082083 rating : 4.62

item id: 7811155 rating : 4.51

item id: 14225193 rating : 4.48

item id: 14123148 rating : 4.09

item id: 11080079 rating : 4.04

item id: 15734260 rating : 4.0

item id: 8054251 rating : 3.8