

CS-5200 Project

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Problem Statement

The problem we are trying to solve is the lack of a community for shoppers that frequent the Ebay website. There is currently no way to view what other users have purchased, what items they prefer, nor what they recommend. Currently, there are only reviews with no way of seeing further details about the person reviewing the product. We believe this is an impersonal way of determining whether an item is right for you or not.

Our Solution

Our solution is on the lines of creating a web portal which would be personalized for the user. It will allow the user to browse through the Ebay products and keep a track of the ones a user likes. He can also take a look at the most popular products which other users are looking at.

Our solution involves creating a basic UI that will allow users to login to their profiles, and have shopping preferences, favorites and recommendations. Primarily when dealing with shoes. We want to implement this using the Ebay API, which is the data source, and then store the specifics such as a user's likes, recommendations etc. in the local database.

We have used the local database by exposing it through a web service using Java Rest API.

APIs

We have used the Ebay API, in two different ways in our project. They are as follows:

Url: <http://developer.ebay.com/Devzone/finding/Concepts/FindingAPIGuide.html>

This end point allows us to query the Ebay database using keywords and the API returns a list of products with some of their details in either JSON or XML. We are using JSON for our project.

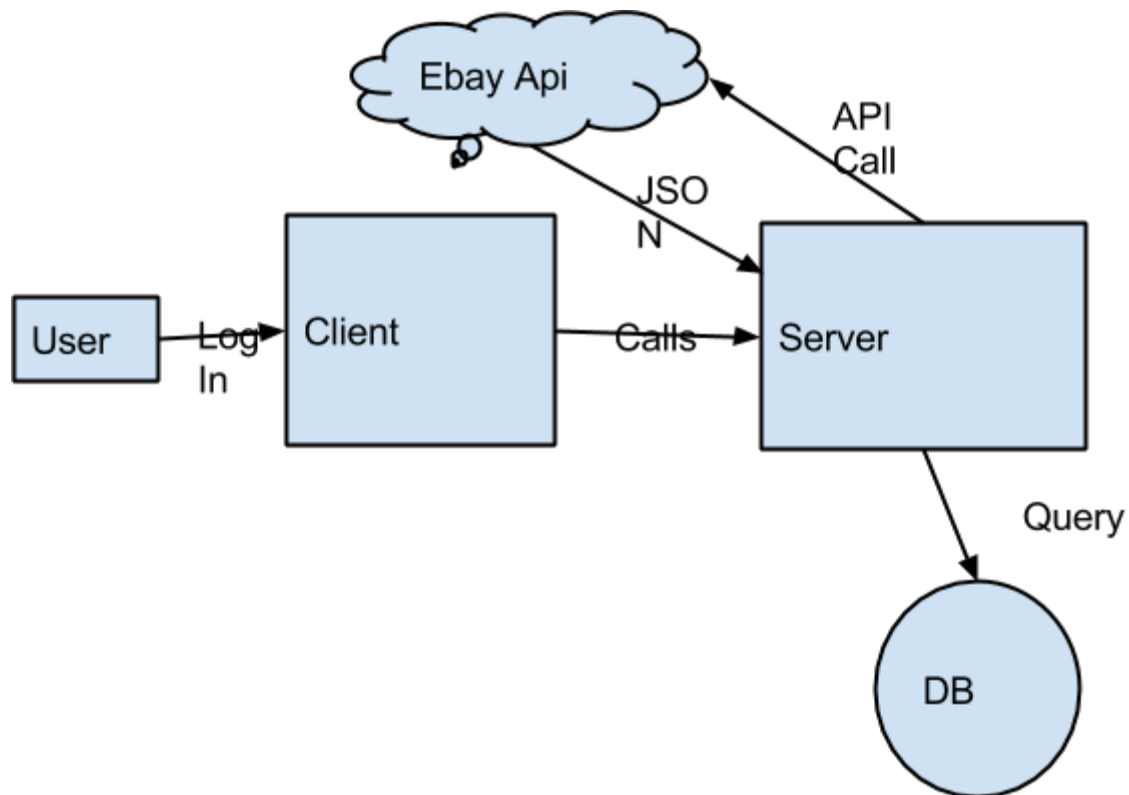
We have used this API on the homepage of our project where the users can search for a particular product.

Url: <http://developer.ebay.com/DevZone/shopping/docs/CallRef/GetSingleItem.html>

This end point allows us to get details of a single product. So when user lands on the homepage, he can search for products. If he clicks on a particular product, he can view the details of that particular product. This API is used for the landing page of the individual product.

Both APIs use the Ebay database in a different way.

Architecture



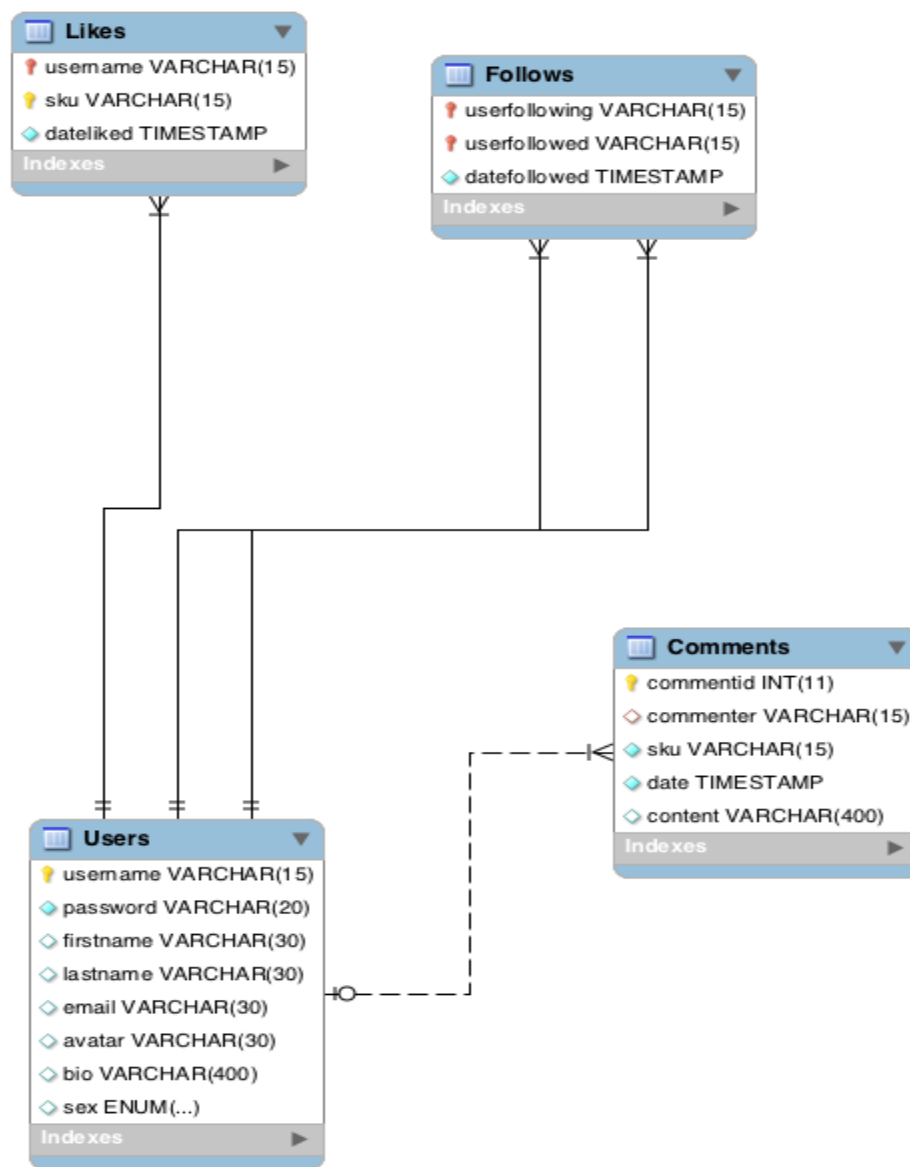
Technology Stack

Database: MySql

Back End: Java and Java Rest Services

Front End: HTML and Javascript.

UML Class Diagram



Use Cases:

1. Log in.
A user needs to log in to the portal. So only registered users can log in.
2. Search
A logged in user can search products using a keyword. The user lands on a results page where all the products matching to the given keyword are displayed
4. Individual Product
From the list of products displayed, a user can click on any of the products to view specific details of that product.
5. SearchUser
A user can search for any other user using his username.
6. Like
A user can like a particular product.
7. Follow
A user can follow any other user so that he can view the other user's activity
8. Comment
A user can comment on any product.
9. HomePage
A user logs in and lands on the home page. Home page lists the users recent activity.