CS 5200 PROJECT: IDP ELECTRONIC SHOPPING WEBSITE REPORT

TEAM: DCODERS

TEAM MEMBERS: ISHANI DOSHI, DHWANI SONI, PRANEETH PULLIGUNDLA

Problem statement

The goal was to create a shopping website where a user can buy electronic items like Laptops, Tablets, Mobile phones and Desktops.

Details:

We planned to fetch the items from an API and show it to the users of our website.

The items purchased by any registered user through our website will be stored in our database.

Comments added by users, products saved by the user will also be saved in our database.

Users profile which includes his/her address, credit card details along with the comments he/she made, products he/she saved, and his/her purchase history all will remain in our database which he/she can update/delete as required and as authorized.

There will be an admin of the website who only will have privileges to generate report based on users and products in our database.

Proposed solution

- Using eBay's Finding API and Shopping API, we are fetching items from eBay given a **keyword or list of keywords** to finding API and **item Id** to shopping API.
- There can be 3 types of users of this website:
 - 1. Guest User
 - 2. Registered Member
 - 3. Admin

Guest user can only search the products and can see particular product's details.

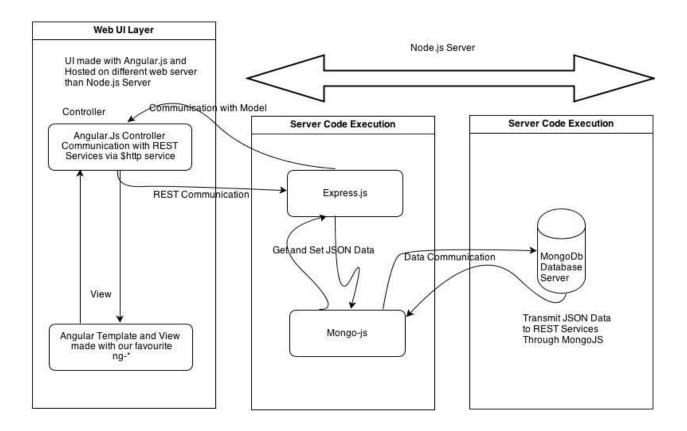
Registered members can do whatever guests can do and additionally they can make a purchase, save product for later, give comments to a product, view his/her purchase history, view his/her profile and other member's profile.

Admin can generate reports based on a given user, all users, given product, all products that are saved or purchased by a user.

• We are creating a MEAN stack application to implement this.

Architecture & Technology stack

- APIs used :
- 1. eBay's Finding API
- 2. eBay's Shopping API
- Technology stack used: (MEAN stack)
- 1. MongoDB
- 2. Express web service
- 3. Angular JS
- 4. NodeJS



APIs

We have used 2 APIs in this project

- 1. **EBay's Finding API**: Given a keyword or list of keywords, we can fetch list of products with its details from eBay.
- 2. **EBay's Shopping API**: Given an item id, a particular product can be fetched from eBay.

Use case analysis

1. **Use Case**: Create new user [SignUp]

Description: User wants to create his profile and use the website for uses other than just searching

products.
Actors: User
Steps:

Actor Actions System Responses

Enters Username/Password, Validates entered information

security question, answer, username, password

Submit Creates User Profile

Alternate path

Mandatory fields are not Error: Please fill all mandatory fields.

filled

2. **Use Case**: Forgot Password [forgotPassword] **Description**: User had forgotten his password

Actors: User

Preconditions: Username should prevail in System.

Steps:

Actor Actions System Responses

Answers security Question Provides reset password page if answers match

to the saved data.

Alternate path

If security answers don't Would not allow to reset password

match.

3. Use Case: View Comments

Description: User wants to view his/her existing comments.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click View Comments Shows all the comments a user has made till now.

on my profile page.

Done Redirects back to profile

4. **Use Case**: Add Comments

Description: User wants to add comment to any product.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Add new comment Adds comment of user in database

to any product in product

description page.

Submit

5. **Use Case**: Update Comments

Description: User wants to edit comments in his profile.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Select an comment and Update information about user in database

edit it and shows new updated information.

Done Redirects back to profile

6. Use Case: Delete Comments

Description: User wants to delete his/her existing comment.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Delete an existing comment Update information about user in database

and shows new updated information.

and shows new added information on the page.

Done Redirects back to profile

7. Use Case: View Payment Info

Description: User wants to view his/her existing Payment Info.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click Add/Edit Payment Info

Shows all the Credit card Info a user has added till now.

on my profile page.

Done Redirects back to profile

8. Use Case: Add Payment Info

Description: User wants to add new payment info in his profile.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Add new credit card Adds information about user in database

and shows new added information.

Done Redirects back to profile

9. **Use Case**: Delete Payment Info

Description: User wants to delete payment info in his profile.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Delete already added Update information about user in database credit card and shows new updated information.

Done Redirects back to profile

10. Use Case: View Addresses

Description: User wants to view his/her existing Addresses.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click Add/Edit Address Shows all the Addresses a user has added till now.

on my profile page.

Done Redirects back to profile

11. Use Case: Add Addresses

Description: User wants to add Addresses info in his profile.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Add new Address Adds information about user in database

and shows new added information.

Done Redirects back to profile

12. Use Case: Delete Addresses

Description: User wants to delete payment info in his profile.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Delete already added Update information about user in database

credit card and shows new updated information.

Done Redirects back to profile

13. **Use Case**: View Saved Products

Description: User wants to view his/her existing saved products.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click View Saved products Shows all the products saved by user till now.

on my profile page.

Done Redirects back to profile

14. **Use Case**: Delete Saved Products

Description: User wants to view his/her existing saved products.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click View Saved products Shows all the products saved by user till now.

on my profile page.

Done Redirects back to profile

15. **Use Case**: View Purchase History

Description: User wants to view his/her existing purchase history.

Actors: User

Preconditions: User should be authenticated

Steps:

Actor Actions System Responses

Click View purchase history

Shows all the purchase history of user till now.

on my profile page.

Done Redirects back to profile

16. **Use Case**: Search Product [searchProduct] **Description**: User wants to search for products

Actors: User

Steps:

Actor Actions System Responses
Enters keyword to search Displays all search results.

Alternate path

No products are found Displays error message showing zero results found.

17. **Use Case**: View Product Details [viewProduct] **Description**: User wants to view product details

Actors: User Preconditions:

Steps:

Actor Actions System Responses

Clicks on product Displays that particular product details and related comments.

from search results

Alternate path

Clicks on product Displays that particular product details and related comments.

from saved products

Clicks on product Displays that particular product details and related comments.

from shopping cart or purchase history

Clicks on product Displays that particular product details and related comments.

from my comments page

18. Use Case: Add to shopping cart

Description: Authorized user can add a product to the shopping cart which he would like to

purchase Actors: User **Preconditions**: User authenticated

Steps:

Actor Actions System Responses

User adds a product in shopping cart by clicking on add to cart button

on product description page.

19. **Use Case**: Remove from shopping cart

Description: Authorized user can remove existing product from his/her shopping.

Actors: User

Preconditions: User authenticated

Steps:

Actor Actions System Responses

User removes a product from

shopping cart by clicking on remove

button in the cart.

Shopping cart gets updated with the product removed.

20. **Use Case**: Add to saved products

Description: Authorized user can add a product to the saved products which he would like to

purchase later. Actors: User

Preconditions: User authenticated

Steps:

Actor Actions System Responses

User adds a product in saved products by clicking on save this button on product description page. Product gets added to the saved products of the user.

Product gets added to the shopping cart of the user.

21. Use Case: Pavout

Description: User wants to pay and make order.

Actors: User **Preconditions:**

1. User Authenticated

2. There should be items in shopping cart

Steps:

Actor Actions System Responses

Clicks payout Removes items from cart. Adds the products in purchase history of

that user. Redirects to Homepage.

22. **Use Case**: View another member's profile

Description: User wants to view another member's profile

Actors: User **Preconditions:**

1. User Authenticated

Steps:

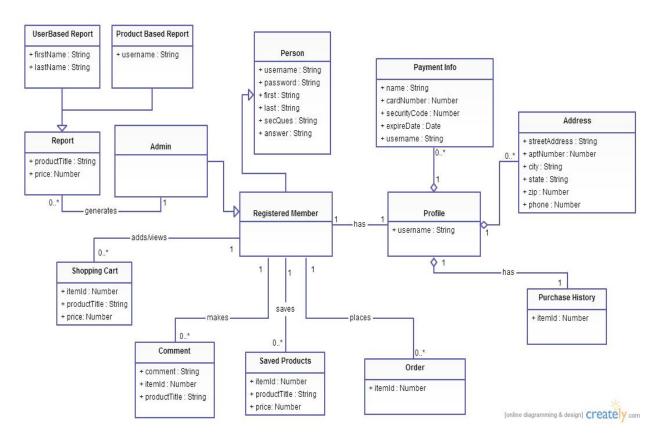
Actor Actions System Responses

Clicks on other person's Redirects to the profile page of clicked user showing his/her

username on reviews tab comments and saved products.

in product description page.

Data model



In a MEAN stack application, there is no need of class diagram.

But we made a class diagram to refer as a base to implement the MEAN stack application.

Information to run this website on local machine

• Please start the node server using following command on the terminal:

node ./server.js

• Visit following url to use the website:

http://localhost:3000/

It will land you to the sign in page. You can than start using our website.

Admin can login using following credentials:

username: **admin** password: **admin**

But first he needs to register if he is not already registered.