SW Engineering CSC648/848 Fall 2018

Gator Saver

Team 9

Jake Carter
Gordon Su
Alvin Lee
Wagner Ayllon
Tina Nguyen
Martin Lee
Gary Deng

Team lead email: jcarter4@mail.sfsu.edu

Milestone 4

12-2-18

Initial Submission: 12-2-18

1) Product Summary

Our product, the Gator Saver, will provide a platform for San Francisco State University students to buy and sell to each other. This will allow students to save money when buying textbooks or other school related materials. Additionally, students will be able to recuperate the costs of old school materials by selling them to other students. When released, our product will have the following features:

- Login/Registration:
    - Users shall be able to create accounts and log into them, and remain logged in during the duration of their session
    - Stored passwords will be hashed, and registration page will have a captcha
- Search with Results:
    - Users shall be able to search by text or by category, and be brought to a results page
- Post details:
    - Each post shall have a details page with a title, image, price, and details about item posted
- Messaging:
    - Users shall be able to send messages to other users about posts and respond to them
- Seller Dashboard:
    - Users shall have a dashboard to see the status of their posted items
- Admin:
    - Administrators shall be able to approve/deny posts before they are viewable on the website

Link to website: http://35.235.67.248

2) Search Function Usability Test Plan

Test Objectives:

1. The Unregistered user will go to our website and use the search box on top of the homepage.
2. They shall type nothing first and then press Enter to show all recent posts.
3. They shall type a name of a category while “All categories” is selected to show results of that category.
4. They shall type part of a title of an item while “All categories” is selected to show results.
5. They shall type nothing in the search bar and switch the category to any category except “All categories” to show all recent results of that category only.
6. They shall type part of a title while a category other than “All categories” is selected to browse that only category with the requested input.
7. On the search results page, they shall click the drop-down button to sort by price or date and then click the “Go” button.
8. On the search results page, they shall click the drop-down button where it says “Show” to display more search results for that current search.
    a. If they click show more items when there’s very few items to be shown, the page shouldn’t enlarge but rather do nothing.

9. On the search results page, they shall click on page 2, 3, etc.

   a. If the search results doesn't overflow past page 1, then the buttons to go to page 2 and onward should not show.

Test Plan:

Website URL: http://35.235.67.248/

Intended user: Registered and Unregistered users (The SFSU students who wants to buy)

- Test if the search function is usable.

○ Does the search work? ○ Do the search results work with any input? ○ Does the search result show anything with no input?

○ Is it possible to sort the results by category, price, date, or by alphabetical order?

- Test if the search function is effective.

○ Is it easy to locate the search bar?

○ How many clicks did it take to find the result you were searching for?

○ How many screens did you see to get to the result?

- Test if the search function is efficient.

○ Is it easy to locate the search bar?

○ Were you able to use the search function on any web page?

○ Is it easy to search another item after finding the previous item?

○ Does it have a long wait time after clicking search?

Questionnaire:

1) How fast did the search function respond?

   (a) Very fast
   (b) Fast
   (c) Appropriate speed
   (d) Slow
   (e) Very slow

2) Would you rather use advanced search?

   (a) No
   (b) Yes

3) What kind of advanced search would you like?
   - (a) Boolean
   - (b) Relevance

4) Were you able to find what you were looking for?
   - (a) Yes
   - (b) No

5) Approximately how many clicks did it take you to get to your searched item?
   - (a) Was not able to find my item.
   - (b) 1-2 clicks
   - (c) 2-3 clicks
   - (d) 4+ clicks

6) I found the search function easy to use
   - (a) Strongly disagree
   - (b) Disagree
   - (c) Neither agree or disagree
   - (d) Agree
   - (e) Strongly agree

3) Search Function QA Test Plan

Test Objectives: Test the search function of the website using specific test sequences to make sure there are no serious bugs. Unit and smoke tests are done to see how many bugs there are needed to be fixed in the program. Testers are told specific instructions what to do so that they know if the end result passes or fails.

HW and SW setup: Operating system version and database used to run the website: Ubuntu 14.0 and sqlite. Hardware for testing: a mobile device and desktop/laptop. The website will support the latest versions of Google Chrome and Mozilla Firefox, as well as mobile. To setup, go to either one of the browsers, and go to http://35.235.67.248/ . This will bring you to the homepage, where you can use the search bar for testing.

Feature to be tested: Search function

Test Plan:

Google Chrome Tests:

Number	**Description**	**Test Input**	**Expected Output**	**Pass/Fail**
1	Test % like in search for name field	“book”	Gets 5 results, all of them have “book” in the name field	
2	Make sure search results always return something	No input, press search button	Here are the latest featured items	
3	Make sure input is a valid input	“123???>[}/”	Please enter a valid input	

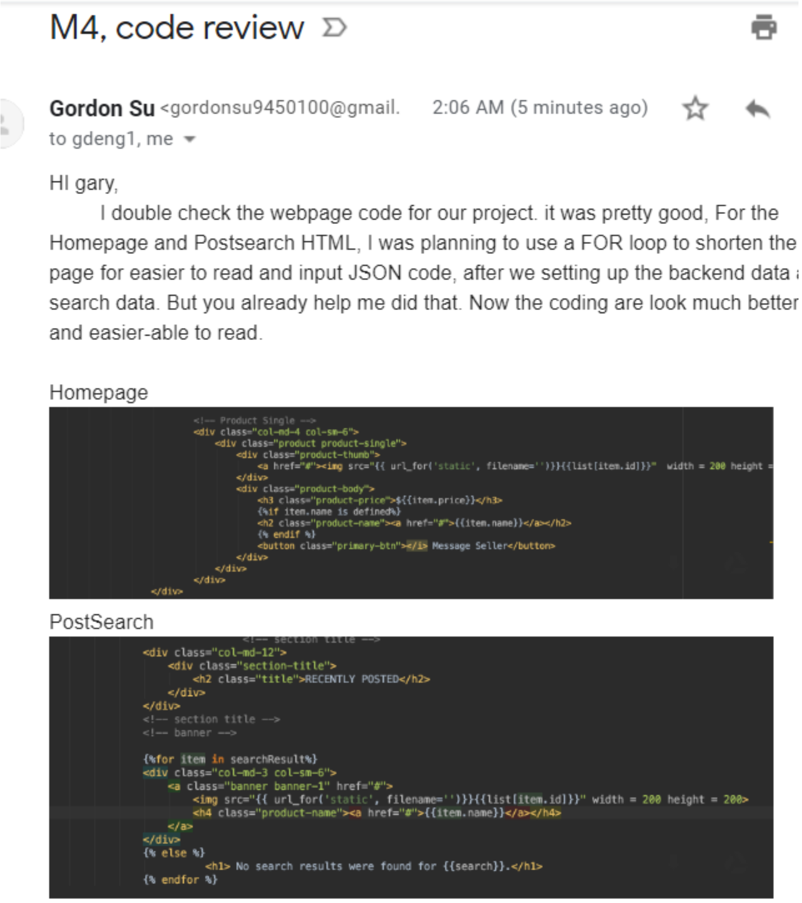
Mozilla Firefox Tests:

Number	**Description**	**Test Input**	**Expected Output**	**Pass/Fail**
1	Test % like in search for name field	“book”	Gets 5 results, all of them have “book” in the name field	
2	Make sure search results always return something	No input, press search button	Here are the latest featured items	
3	Make sure input is a valid input	“123???>[}/”	Please enter a valid input	

Mobile Tests:

Number	Description	Test Input	Expected Output	Pass/Fail
1	Test % like in search for name field	“book”	Gets 5 results, all of them have “book” in the name field	
2	Make sure search results always return something	No input, press search button	Here are the latest featured items	
3	Make sure input is a valid input	“123???>[}/”	Please enter a valid input	

4) Code Review



M4, code review

Gordon Su <gordonsu9450100@gmail. 2:06 AM (5 minutes ago)

to gdeng1, me

HI gary,

I double check the webpage code for our project. it was pretty good, For the Homepage and Postsearch HTML, I was planning to use a FOR loop to shorten the page for easier to read and input JSON code, after we setting up the backend data search data. But you already help me did that. Now the coding are look much better and easier-able to read.

Homepage

```
<!-- Product Single -->
<div class="col-md-4 col-sm-6">
    <div class="product product-single">
        <div class="product-thumb">
            <a href="#"><img src="{{ url_for('static', filename='')}}{{list[item.id]}}"  width = 200 height =
        </div>
        <div class="product-body">
            <h3 class="product-price">${{item.price}}</h3>
            {%if item.name is defined%}
            <h2 class="product-name"><a href="#">{{item.name}}</a></h2>
            {% endif %}
            <button class="primary-btn"></i> Message Seller</button>
        </div>
    </div>
</div>
</div>
```

PostSearch

```
        <!-- section title -->
<div class="col-md-12">
    <div class="section-title">
        <h2 class="title">RECENTLY POSTED</h2>
    </div>
</div>
<!-- section title -->
<!-- banner -->

{%for item in searchResult%}
<div class="col-md-3 col-sm-6">
    <a class="banner banner-1" href="#">
        <img src="{{ url_for('static', filename='')}}{{list[item.id]}}" width = 200 height = 200>
        <h4 class="product-name"><a href="#">{{item.name}}</a></h4>
    </a>
</div>
{% else %}
        <h1> No search results were found for {{search}}.</h1>
{% endfor %}
```

5) Best practices for security

Assets being protected:

- Username and password – Since many people use the same username and password for many websites, it is vital that the password is protected so it can't be accessed. Currently, the password is hashed before it is stored in the database and can not be reversed into the password.

Input Validation:

- We currently do not have input validation, however we are working to implement input validation for the search function.

6) Adherence to original Non-functional specs

1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0
   - DONE
2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome.
   - IN PROGRESS
3. Selected application functions must render well on mobile devices.
   - DONE
4. Data shall be stored in the team's chosen database technology on the team's deployment server. MySql 14.14 shall be the database that is used for storage. Apache 2.4.7 shall be the web server, hosted on Google Compute Engine 1vCPU 3.75 memory.
   - DONE – Switched from MySql to sqlite
5. No more than 50 concurrent users shall be accessing the application at any time.
   - DONE
6. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
   - IN PROGRESS
7. The language used shall be English.
   - DONE

8. Application shall be very easy to use and intuitive.

    - IN PROGRESS

9. Google analytics shall be added.

    - DONE

10. No e-mail clients shall be allowed.

    - DONE

11. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated.

    - DONE

12. Site security: basic best practices shall be applied (as covered in the class).

    - IN PROGRESS

13. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development.

    - DONE

14. The website shall prominently display the following exact text on all pages "SFSU-Fulda Software Engineering Project CSC 648-848, Fall 2018. For Demonstration Only” at the top of the WWW page. (Important so as to not confuse this with a real application).

    - DONE