SW Engineering CSC648/848 Section-01 Spring 2017

Milestone #1

GatorTraders

Team 7

Javier Kirksey, Team Lead |Javier.kirksey21@gmail.com

Evan Terry, Tech Lead | eterry@mail.sfsu.edu

Chohee Kim | ckim4@mail.sfsu.edu

Kendrick Kwok | kkwok@mail.sfsu.edu

Brandon Chiong| bchiong@mail.sfsu.edu

Marc Panlilio| mpanlili@mail.sfsu.edu

Ramsay Wong| ramsayw@mail.sfsu.edu

Last Modified : 03/10/2017

1. Executive Summary

Located in San Francisco CA, San Francisco State University has a rich history of students who have made major impacts on the world and has shown its ability to produce well rounded individuals. Amongst the local community at SF State there are many students who seek to buy and sell products with one another but there isn't yet an efficient way to do so. That being said, Gatortraders.com is currently being developed to allow students of San Francisco State to buy and sell products with one another, as well as post the products in which they would like to sell so that other students can view them. Along with posting products, the online platform will also allow students to search for products based on the products name and description.

In terms of funding the project, Gatortraders.com has many features which investors should be interested in. The online platform is connecting students with one another to buy and sell from one another, which allows Gatortraders.com to have customers that will spend much time on the platform. This can be monetized through multiple different ways such as advertisements. Another valuable attribute of GatorTraders.com is the collection of information on what people are interested in buying at the time which is valuable information for many businesses.

The team developing this platform consists of six students who attend San Francisco State University. Not only do the students know how the local community operates, but they also have a great understanding of what college students are interested in, which is key in the development of this product. With six students on the development team, there is a lot of communication and productiveness that will lead to a great product for the students of SF State.

2. Use Cases

Use Case: Seller

Steve is a fourth year San Francisco State University student who will be graduating once this current spring semester ends. He has stored up all of his textbooks from all four years but since he will be graduating soon, he figured there is not a need for all these textbooks anymore. During one of his classes, he overheard one of his classmate talk about a website that is similar to websites like Craigslist but only for SFSU students. This website allows SFSU students to browse for whatever items they desire and if something catches their eyes, they can buy it then and there. On the other hand, if a student wants to sell an item(s) the website provides that function as well. The website is only provided for students who are SFSU students so to buy or sell anything, one must need their SFSU ID number to create an account to use all the functions of the website. Steve wants to help others by selling his textbooks for a cheaper price since he experienced firsthand how pricey buying textbooks can get. He goes onto the site and decides to post, but is prompted to register or log in. Steve goes through the account creation and verification process, and is approved. He ends up posting up his textbooks and they were all sold by the time next school semester starts when he has officially become a SFSU alumni.

Use Case: Buyer

Max is an incoming first year student who will be attending San Francisco State University when fall comes. Since Max is a first year student, he decides to live close to campus by living in one of the dorms provided by the University so that he would not have to commute back to his hometown and so that he would not have to be late to his classes and extracurricular activities by using public transportation. Max needed to buy some items because the housing department did not provide enough of the items he has been using at home. His brother, who is now a San Francisco State Alumni, mentioned that he used this website provided only to SFSU students to sell his textbooks to other SFSU students. Max went onto the website and started browsing what it had to offer. Max wanted to narrow down his search so he searched up specific keywords to reduce the number of results of items in the list. He ended up searching for a lamp, a coffee table, a coffee maker machine, a bed comfortable, a few textbooks, and a calculator. Once his search has been completed, he proceeded to press the buy button. Since he does not have a verified account, he will be prompted to log in, but because it is his first time

he will press the create account button. From there he will have to verify his SFSU email, and once finished he will be able to buy the items.

Use Case: Administrator

Allan is an *administrator* of the website. As he is browsing the listings placed on the site, he stumbles upon a vulgar listing. Allan decides that it is inappropriate and decides to take down the listing from the website. He first informs the student seller that his listing is inappropriate then removes it from the site.

3. Data Definitions

1. **Administrator (Admin)** – Overlooks the website and changes the content that is appropriate. Makes note of bugs and brings forth the issue to fix.

2. **Guests** - Can access posted items, but can't see contact information.

3. **Items** – Products sold from sellers that are usable for users to browse and purchase. Item contains pictures and descriptions of what is to be sold by other users.

    a. **Item Name**

    b. **Description**

    c. **Price**

    d. **Picture (Optional)**

4. **Students** - Can access all information of posted items and can post items.

    a. **Buyer**

    b. **Seller**

4. Initial list of functional specs

Functions:

1. All guests shall be able to visit, browse, and search the site.
2. All guests shall not have access to contact information.
3. All guests shall not be able to post items to sell.
4. All guests shall be able to create an account and login.
5. All guests shall provide email address and password to create an account.
6. Guests transitioning to students impose email restriction based on SFSU email address.
7. Students shall be able to visit, browse, and search the site.
8. Students shall be able to list their products for sale.
9. Students shall be able to reply to a posted item for sale.
10. Students shall be able to message other students.
11. Students shall be able to manage their accounts.
12. Admin shall be able to visit, browse, and search the site.
13. Admin shall be able to remove posts.
14. Admin shall be able to delete accounts.
15. Registration form: required for users to register. Contains name and SFSU email, and optionally address, phone, and birth of day. Stored in the database.
16. Items for sale form: required for users to post an item for sale: Contains title, price, and optionally picture, contact information. Stored in the database.

5. List of non-functional specs

1. Application shall be developed using class provided LAMP stack
2. Application shall be developed using pre-approved set of SW development and collaborative tools provided in the class. Any other tools or frameworks must be explicitly approved by Anthony Souza on a case by case basis.
3. Application shall be hosted and deployed on Amazon Web Services as specified in the class
4. Application shall be optimized for standard desktop/laptop browsers, and must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome.
5. Application shall have responsive UI code so it can be adequately rendered on mobile devices but no mobile native app is to be developed
6. Data shall be stored in the MySQL database on the class server in the team's account
7. Application shall be served from the team's account
8. No more than 50 concurrent users shall be accessing the application at any time
9. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
10. The language used shall be English.
11. Application shall be very easy to use and intuitive. No prior training shall be required to use the website.
12. Google analytics shall be added
13. Messaging between users shall be done only by class approved methods to avoid issues of security with e-mail services.
14. Pay functionality (how to pay for goods and services) shall not be implemented.
15. Site security: basic best practices shall be applied (as covered in the class)
16. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development
17. The website shall prominently display the following text on all pages *"SFSU Software Engineering Project, Spring 2017. For Demonstration Only"*. (Important so as to not confuse this with a real application).

6. Competitive Analysis

	GatorTraders	Amazon	Ebay	Craigslist	SFSU Bookstore
Local	+	-	-	+	+
User Friendly	+	+	+	-	-
Dynamic Pricing	+	+	+	+	-
No Sales Tax	+	-	-	+	-
Custom SFSU Textbooks	+	-	-	-	+

GatorTraders.com has clear and valuable advantages over its competitors in the market. Its location at the San Francisco State University campus provides students with convenience. The ease of use will attract students looking to buy or sell items. The dynamic and competitive pricing of GatorTraders.com makes it a clear favorite over the SFSU Bookstore for custom SFSU books and supplies. Using GatorTraders.com on campus avoids the hassle of shipping and handling, while also avoiding sales tax.

7. High-level system architecture

The development team is building its product with Amazon Web Service using a Linux, Apache, MySQL, and PHP server, otherwise known as a LAMP Stack. This will provide for optimal uptime, scalability and a greater level of consistency for user's experience. We have chosen to use the Symfony PHP framework with the deployment of this web application as the framework is widely used which has cultivated abundant resources. For design purposes, we have decided that the Bootstrap Stack will allow for the best browsing experience on the four most relevant browsers used, Google Chrome, Firefox, Safari, and Microsoft Edge. To help with design elements other languages in the Bootstrap Stack such as JQuery, JavaScript, and Less will be used sparingly to implement effects.

8. Team

Javier Kirksey (Team Lead) – Front End & Backend

Evan Terry (Tech Lead) - Front End & Backend

Chohee Kim – Backend & Database

Kendrick Kwok - Front End & Backend

Brandon Chiong – Backend

Marc Panilio - Front End & Backend

Ramsey - Front End & Backend

9. Checklist

- Team decided on basic means of communications

  DONE

- Team found a time slot to meet outside of the class

  DONE

- CTO chosen and working out well so far

  DONE

- Github master chosen

  DONE

- Team ready and able to use the chosen framework

  DONE

- Skills of each team member defined and known to all

  ON TRACK

- Team lead ensured that all team members read the final M1 and agree/understand it before submission

  DONE