# SW Engineering CSC648/848 Fall 2018

GatorTrader

Team 1

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Front-End Lead - Michael Phan Athena Javier Alex Ha

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> Milestone 1 October 3, 2018

Revision Date	Notes			

## 1. Executive Summary

One of the top 10 reasons why people use the internet: Making money and marketing. In the past decade, the number of users online has been skyrocketing. This has bolstered the exchange of information as well as the exchange of goods. Based on e-commerce, such as, eBay, craigslist, and Amazon, in the top most visited website. With the amount of different types of users each online marketing website get, they have variety of selection to choose on their website. But if we focus on one main target group, such as San Francisco State University students, we will develop one target focus, which is marketing to students who are known as "college broke students". This website will not only help them to sell/buy items *easily*, but it will help them *securely* with every process. With *effortless* and *security*, students will need this to connect with other students faster. The Buy and Sell website will contain every student needs to make their life easier as a student:

- This Buy and Sell website is intended for use by students attending San Francisco State University.
- 2. All information will be secured.
- 3. Students will be providing contact information when they sell items and will be able to contact the seller.
- 4. Students can browse through the website without creating an account.
- 5. Great Policy! Will help you make a smooth transaction.

We here at Gator Trader have put together an amazing team of developers to help build a platform where students can post their items for sale with ease.

#### 2. Persona and Use Cases

#### Personas

- 1. A San Francisco State University (SFSU) student called John who is not good with computers but likes to shop. He prefers websites that are easy to navigate without getting lost on them. He mostly uses online shopping to buy what he finds interesting but doesn't look for anything specific. He prefers to see recommendations or what is popular at the moment. Issues he has is that he would leave a website if it's too hard to use or if he couldn't easily find what he was looking for. Another issue is that his computer is old and slow and wouldn't be able to run a website that uses a lot of ram and CPU usage.
- 2. Student 2 prefers when things go fast. He is skilled at working in computers so if everything works well then, he could navigate it easily. He is impatient and doesn't like when things slow down or stop especially a website. He also likes looking at the ratings of an object or item to know when something is good. In a website he wants to be able to find the item he wants quickly without clicking on too many links.
- 3. Student 3 likes to sell things online. He would buy things outside to sell at a later time for a higher price. He wants to be able to sell things easily and wants options to help manage the items that he has posted and see the messages from people who are interested. He also like shopping for cheap items. He wants to be able to see the cheaper items first in any category.
- 4. Student 4 is the admin of the website. He wants to stay out of trouble, so he regularly checks the website when he can to see if everything is okay. He also uses the website for personal use to buy things like the users who uses it. His issue would be when there are too many postings and he doesn't have the time to check on all of them.

#### **Use Cases**

- 1. John wants to look to look online for things to buy and decides to go to our website. He browses through the different **categories**. He would **sort** by most sold or best sellers to see the things that have been purchased. Once decided on an item he would log in to message the buyer.
- 2. Student 1 is looking to check their sales online. They goes to the website, log in, and then click their username, which redirects to the seller dashboard. Here it will show the **posting status** as well as the option to add more and **messages** from potential buyers. There they add the info to their item as well as what category it would belong to.
- 3. Student 2 is the admin of the website. He checks the items posted to make sure they legal. Also gets rid of untrusted sellers by checking reports from that seller. If he sees an item that's illegal or abnormal like weapons, then he would delete that item and contact seller as per site policy.

## 3. Data Definition

- 1. **Guest User-** User without an account, can still browse the web.
- 2. Registered User- User with an account.
  - 1. Members of a Registered User
    - a. **Email-** an .edu email address.
    - b. **Image-** Items on sell.
- 3. **Admin** User with administrative privileges
  - 1. Employee of Gator Trader
    - a. **Admin Dashboard** Flag to trigger admin status and show dashboard.
- 4. **Item** Posted by a seller
  - 1. Members of Item
    - a. Title
    - b. Price
    - c. Description
    - d. Date

## 4. Initial List of Functional Specifications

- 1. Guest users shall be able to browse through the website.
- 2. Guest users shall be able to browse by categories.
- 3. Guest users shall be able to search on the search engine.
- 4. All users who wants to purchase an item shall create an account or login.
- 5. Registered users shall be able to contact any sellers.
- 6. All users shall be presented the Policy while they're creating their account.
- 7. Registered users shall include contact information.
- 8. Registered users shall be able to look at the lists of the items they posted for sell and messages on their dashboard.
- 9. Registered users shall able to manage their account. Shall able to remove or edit postings.
- 10. Guest users shall be able to use sorted feature: Low to high prices, High to low prices, Alphabetical, etc.

### 5. List of Non-Functional Specifications

- 1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0 (some may be provided in the class, some may be chosen by the student team but all tools and servers have to be approved by class CTO).
- 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.
- 3. Selected application functions must render well on mobile devices
- 4. Data shall be stored in the team's chosen database technology on the team's deployment server.
- 5. No more than 50 concurrent users shall be accessing the application at any time
- 6. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
- 7. The language used shall be English.
- 8. Application shall be very easy to use and intuitive.
- 9. Google analytics shall be added
- 10. No e-mail clients shall be allowed
- 11. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated.
- 12. Site security: basic best practices shall be applied (as covered in the class)
- 13. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development
- 14. The website shall <u>prominently</u> display the following <u>exact</u> 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).

## 6. Competitive Analysis

Features	Amazon	eBay	Craigslist	Gator Trader
Search	++	+	+	+
Selling	+	+	+	++
Delivery	++	+	+	++
Browse	+	+	+	+

<sup>+</sup> feature exists; ++ superior; - does not exist

Our product will offer some of the features other sites already have like Search, Browse, Sell, etc. However, our product has an advantage when it comes to Selling and Delivery because the communication is directly between seller and customer which will give customers the advantage of asking for a price reduction, or other accommodations that our competitors will not have. In addition, our Delivery system is faster than our competitors because the product will be delivered directly to the customer by the seller which means that the product can be delivered within ours and even minutes and the customer will not have to wait the usual two days or five days shipping time like in other companies.

### 7. High-level System Architecture

- Bootstrap
- React
- Express
- MySQL
- Google Chrome
- Safari
- Netlify
- Heroku
- AWS (Amazon Web Services)

#### 8. Team

- 1. Marcus Mertilien -Team lead
- 2. Albert Shevchuk- Back end lead
- 3. Michael Phan Front end lead
- 4. Alex Ha
- 5. Raul Serrano
- 6. Daniel Martinez
- 7. Athena Javier

### 9. Checklist

Team found a time slot to meet outside of class

-On Track

GitHub master chosen.

-Done

Team decided and agreed together on listed SW tools and deployment server

-Done

Team ready and able to use the chosen back and front-end frameworks and those who need to learn are working on it

-Done

Team lead ensure that all team members read the final M1 and agreed/understand it before submission

-Done