SW Engineering CSC 648/848 Section 02 Spring 2017 GatorSell

Team 10:

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Milestone 1 February 29, 2017 History Table

1. Executive Summary

GatorSell, a website exclusively produced for the advantages of SFSU students, have user perks of selling as well as buying items. For easy access, any user will be able to browse the website without registering or logging in. Compared to other competitive sites, GatorSell is a reliable source that is focused on faster transactions and is tailored more towards students' needs. The website is customized to be more affordable and reasonable for SFSU students. GatorSell will be acted upon as the mediator for students to sell/buy used and new items. In order to make sure there are no abusive users or misuse of products, there will be an admin behind monitoring the website.

As SFSU students, we have a strong belief that we can create a community that satisfies our classmates' needs, and not let other competitors interfere, making products unreasonably expensive. We all share the common interest to give back to the student community and help them not worry about financial issues. Our team focuses on building a website that is easy to be worked with, and makes our users happy.

- a) This is a website in which SFSU **students** can buy and sell **items** to each other, exclusively
- b) Project name: GatorSell
- c) Advantages
 - Only for SFSU students
 - Can sell and buy
 - Guest users are able to browse without logging/registering in
 - Admin will make sure there are no abusive users
 - Faster transactions than competitor sites
 - More tailored towards students needs than competitor sites
- d) Novelty
 - used/ new items
- e) Value
 - Affordable and reasonable for all sfsu students

2. Use Cases

a) Guest Users

Frederico is a first-year student attending SFSU. He is looking for the best deal on math textbooks and has been advised to check out GatorSell. Upon arrival to the website, Frederico browses the list of posted **items**. To aid in his search for a well-priced textbook, he filters the **item** list by category. Frederico finally finds a textbook that suits his needs and attempts to purchase the **item**. In order to continue with his purchase, Frederico is prompted to register. After becoming a **registered user**, Frederico successfully purchases his textbook.

b) Registered User (Seller)

Mei is a soon-to-be graduate from SFSU and wants to sell her couch to a fellow SFSU student. Mei goes to GatorSell and clicks on the sell button. In order to proceed, Mei is given the opportunity to login. After logging in, Mei uploads a few pictures of her couch, lists the price, the corresponding category, and a brief

description of her couch. Once Mei is fills out these components, she posts the **item** to the website.

c) Registered User (Buyer)

Rhiannon is moving into an apartment close to her campus, SFSU, and wants to purchase a reasonably-priced desk in her area. She makes her way to GatorSell and browses the list of posted **items**. After scrolling for a bit, Rhiannon filters the list by the category that is most well-suited to her interest. Rhiannon subsequently finds a desk properly suited to her needs and attempts to purchase the **item**. Rhiannon is then told to login so that she can continue with the purchase. After logging in, Rhiannon purchases her desk.

d) Admin

Chad is the **system administrator** for GatorSell; in order to execute his duties, he logs into the website upon arrival. Chad is responsible for ensuring that explicit content does not appear throughout the website and reviews the posts of sellers. A new post contains indecent language and Chad removes the post from the website; the seller has attempted to post such content previously and by not following website guidelines, Chad bans the user from GatorSell.

3. Data Definition

- a) User: The set of all guest users and registered users.
- b) **Registered User**: a student who is registered on the website and has buying/selling privileges. Needs to login/register.
- c) Registered user account
 - i) Name
 - ii) Student email: a valid sfsu.edu email address
 - iii) Address
 - iv) City
 - v) State
 - vi) Zip
 - vii) Phone
 - viii) Activated?
 - ix) Banned?
- d) Activated account: A Registered user account that has been validated to have been created by an active San Francisco State University student. All registered users are logged in on activated accounts.
- e) **Banned account:** A **Registered user account** that has demonstrated an unwillingness to comply with our terms of service as determined by the **admin.**
- f) **Guest User**: A user of unknown origins who may wish to buy or sell an **item**. Does not need to register.
- g) **Admin**: Student in charge of managing the **website** and the appropriateness of the content **sellers** post. Can access all data and content on the **website**. Needs access to administration tools like mysql workbench.
- h) Items: What students will buy or sell to other students.
 - i) price

- ii) description
- iii) category
- iv) photos
- i) **Buyers**: **Registered users** who want to buy items on the **website**.
- j) Sellers: Registered users who want to sell items on the website.
- k) **Student**: A person who is currently enrolled at SFSU.
- l) Category: A way for buyers to relate their items with other items of similar traits. A way to help buyers find a particular item.
- m) **Photos**: Photographs depicting an **item** that is for sale. They are uploaded by the **seller** and viewable by all **users.**
- n) **Description:** The text used to describe an **item** that is for sale. It is written by the **seller** and can be viewed by all **users.**
- o) **Website**: GatorSell.com, the best place for sfsu **students** to buy and sell **items** to each other.

4. <u>Initial list of functional specs</u>

- a) All users shall be able to visit the website
- b) All **users** shall be able to browse **items**
- c) All guest users shall be able to create a registered user's account
- d) All **guest users** shall be elevated to **registered users** after logging in to an **activated account**
- e) All **guest users** shall be required to log into an **activated account** prior to contacting **sellers** using the **messaging system**
- f) All **registered user's accounts** shall include legal contact information
- g) All **registered user's accounts** shall include a valid San Francisco State University email address
- h) All registered user's accounts shall initially be not activated accounts
- i) All **registered user's accounts** shall become **activated accounts** when they are verified with a (simulated) emailed weblink response
- j) All **registered users** shall be logged in with **activated accounts** that are not **banned accounts**
- k) All **registered users** shall be able to post **items** for sale.
- 1) All registered users shall be able to contact sellers using the messaging system
- m) All **registered users** shall be able to respond to messages sent to them via the **messaging system**
- n) All sellers shall include a title for their items
- o) All sellers shall choose appropriate categories for their items
- p) All sellers shall be able to optionally add up to five photos to their items
- q) All sellers shall be able to optionally add a description to their items
- r) All **sellers** shall be able to remove their **items**

- s) All **photos** shall be of the **items** being sold
- t) No **photos** shall contain any human likeness in them
- u) All **descriptions** shall be limited to text that describes the **item**
- v) All **descriptions** shall be devoid of any personal information
- w) All **descriptions** shall be devoid of any contact information
- x) Admin users shall be able to ban registered users.
- y) Admin users shall be able to contact registered users.
- z) Admin users shall be able to delete items
- aa) Admin users shall be able to delete photos

5. <u>Initial list of non-functional specs</u>

- 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 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. <u>Competitive Analysis</u>

a)

	Gator Sell	Craigslist	Ebay	Amazon
Benefits for SFSU Students	++	1	-	1
Search Query	+	+	+	+
User Interface	++	-	+	+
Product Variety	+	+	++	++
Admin Control	++	-	+	+

b) Legend:

- i) -: lacks in feature
- ii) +: contains feature
- iii) ++: superior with feature
- c) With our product, your need to buy and sell will be very satisfying during your enrollment at SFSU. Unlike the other websites, our services will be user friendly with every student on campus.

7. <u>High-level system architecture</u>

- a) Able to support 50 concurrent users
- b) Netbeans
- c) Supported Browsers: Chrome & Safari
- d) Registered user database
- e) Item database sort by categories / prices
- f) Payment
- g) Google analytics
- h) LAMP
 - i) Linux
 - ii) Apache
 - iii) MySQL
 - iv) PHP Bootstrap / CodeIgniter

8. Team

- a) Ron -- CTO
- b) Amanda -- Team Lead
- c) Priya -- Front end
- d) Tony -- Front end
- e) Rainier -- Back end
- f) Jason -- Back end

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: ON TRACK