SW Engineering CSC 648/848 Section 02 Spring 2017

Professor D. Petkovic and Anthony Souza, San Francisco State University

GatorSell

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Team 10

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History of Revisions				
Version 1.2	03/01/2017	Added on-campus Safe Meeting feature		
Version 1.1	02/28/2017	Updated in response to professor's feedback		
Version 1.0	02/25/2017	Initial draft		

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 or new items and ensure the safety of the students by handling transactions through a Safe Meeting. 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.

2. Use Cases

1. 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**. 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.

2. 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 attempts to sell her **item**. In order to proceed, Mei is given the opportunity to login. After logging in, Mei uploads a few **photos** of her couch, lists the **price**, the corresponding **category**, and a brief **description** of her couch. Once Mei fills out these components, she posts the **item** to the **website**.

3. Registered User (Buyer)

Rhiannon is moving into an apartment close to her campus, SFSU, and wants to purchase a reasonably-priced laptop in her area. Safety is of paramount importance to Rhiannon and knows that she can utilize **GatorSell's Safe Meeting** feature in which she can pick up her **item** at a safe location on-campus. She makes her way to **GatorSell** and browses the list of posted **items**. Rhiannon subsequently finds a laptop 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 laptop.

4. 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

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.**

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.

Banned account: A **Registered user account** that has demonstrated an unwillingness to comply with our terms of service as determined by the **admin.**

Buyers: Registered users who want to buy items on the website.

Category: A way for buyers to relate their items with other items of similar traits. A way to help buyers find a particular item.

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.**

GatorSell: The name of this web application.

Guest User: A **user** of unknown origins who may wish to buy or sell an **item**. Does not need to register.

Items: What **students** will buy or sell to other **students**.

- 1 Price
- 2. **Description**
- 3. Category
- 4 Photos

Photos: Photographs depicting an **item** that is for sale. They are uploaded by the **seller** and viewable by all **users**.

Registered User: a **student** who is registered on the **website** and has buying/selling privileges. Needs to login. Must have an **activated account** that is not a **banned account**.

Registered User Account: An account that is stored in the database server that contains pertinent information about **students** who are, or who have applied to be, **registered users**.

1. Name

- 2. email: a valid sfsu.edu email address
- 3. (optional) Address: used for recommending **Safe Meeting** locations
- 4. Phone
- 5. Activated? : Has the **user** validated with the (simulated) emailed link?
- 6. Banned? : Has the student email address been banned?

Safe Meeting: A safe, designated place on campus where **buyers** and **sellers** can meet in person and complete transactions.

1. Address

Sellers: Registered users who want to sell items on the website.

Student: A person who is currently enrolled at SFSU.

User: The set of all guest users and registered users.

Website: GatorSell.com, the best place for SFSU students to buy and sell items to each other.

4. Initial List of Functional Specs

- 1. Users shall be able to visit the website.
- 2. Users shall be able to browse items.
- 3. Guest users shall be able to create a registered user's account.
- 4. **Guest users** shall be elevated to **registered users** after logging in to an **activated** account.
- 5. **Guest users** shall be required to log into an **activated account** prior to listing **items** for sale.
- 6. **Guest users** shall be required to log into an **activated account** prior to contacting **sellers** using the **messaging system.**
- 7. **Registered user's accounts** shall include legal contact information.
- 8. **Registered user's accounts** shall include a valid San Francisco State University email address
- 9. **Registered user's accounts** shall initially be not **activated accounts.**
- 10. **Registered user's accounts** shall become **activated accounts** when they are verified with a (simulated) emailed weblink response.
- 11. **Registered users** shall be logged in with **activated accounts** that are not **banned accounts**.
- 12. **Registered users** shall have the option to post **items** for sale.
- 13. Registered users shall have the option to contact sellers using the messaging system.
- 14. **Registered users** shall have the option to respond to messages sent to them via the messaging system.
- 15. Sellers shall include a title for their items.
- 16. Sellers shall choose appropriate categories for their items.
- 17. Sellers shall have the option to add up to five photos to their items.
- 18. Sellers shall have the option to add a description to their items.
- 19. **Sellers** shall have the option to remove their **items**.
- 20. Sellers shall have the option to require the use of Safe Meeting locations.
- 21. **Buyers** shall have the option to require the use of **Safe Meeting** locations.
- 22. **Photos** shall be of the **items** being sold.
- 23. **Photos** shall not contain any human likeness in them.
- 24. **Descriptions** shall be limited to text that describes the **item**.
- 25. **Descriptions** shall be devoid of any personal information.

- 26. **Descriptions** shall be devoid of any contact information.
- 27. **Admin** shall be able to ban **registered users**.
- 28. Admin shall be able to contact registered users.
- 29. **Admin** shall be able to delete **items**.
- 30. **Admin** shall be able to delete **photos.**

5. Initial 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 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

	GatorSell	Craigslist	Ebay	Amazon
Benefits for SFSU Students	++	1	-	1
Search Query	+	+	+	+
User Interface	++	1	+	+
Product Variety	+	+	++	++
Admin Control	++	-	+	+
Safe Meeting	++	-	-	-

Legend:

- : lacks in feature

+ : contains feature

++: superior with feature

With our product, your need to buy and sell will be very satisfying during your enrollment at SFSU. Unlike other websites, our services will be **user** friendly for every **student** on campus. Alongside our various superior features, **GatorSell** provides the unique feature of **Safe Meeting** transactions which not only makes buying and selling **items** easier, safer, and more efficient, but is a good opportunity for **students** to make friends and build a better community at SFSU. The problems with other shopping sites that lack the **Safe Meeting** feature include extended periods of waiting for their **item** to be delivered and that the delivery itself is generally an added expense. With **GatorSell**, **students** will get what they want sooner with no additional fee required.

7. High-level system architecture

- 1. Able to support 50 concurrent users
- 2. Netbeans
- 3. Supported Browsers: The two most recent versions
 - a) Chrome
 - b) Safari
 - c) Mozilla
- 4. **Registered user** database
- 5. **Item** database sort by **categories** / prices
- 6. Payment (simulated)
- 7. Google analytics
- 8. Remote LAMP server provided by Amazon.com
 - a) Linux
 - b) Apache
 - c) MySQL
 - d) PHP
- 9. Bootstrap
- 10. CodeIgniter

8. Team

Team member Role

Amanda Robinson Team Lead

Ronald Rieger Chief Technical Officer

Priya Krishnakumar Front End

Tony Filippo Front End

Rainier Hui Back End

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