

SW Engineering CSC 648/848 Section 02 Spring 2017

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

GatorSell

Milestone 1

March 1, 2017

Team 10

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History of Revisions		
Version 1.3	3/04/21017	Added messaging to use cases, refined specs
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**, has **user** perks of selling and 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. Frederico utilizes **GatorSell's Safe Meet** and chooses a place on campus to pick up his textbook. Frederico uses the **messaging system** to confirm the time and location of their meeting and easily picks his textbook up the following day.

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 asked 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 she 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. In combination with **GatorSell's Safe Meet**, Rhiannon uses the **messaging system** to confirm their meeting time and picks up the laptop from the **seller** at a cafe on campus.

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. Locations
2. Map

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**.

4. Initial List of Functional Specs

1. **Guest users** shall have the option to browse **items**.
2. **Guest users** shall have the option to create a **registered user's account**.
3. **Guest users** shall be elevated to **registered users** after logging in to an **activated account**.
4. **Guest users** shall be required to log into an **activated account** prior to listing **items** for sale.
5. **Guest users** shall be required to log into an **activated account** prior to contacting **sellers** using the **messaging system**.
6. **Registered user's accounts** shall include legal contact information.
7. **Registered user's accounts** shall include a valid San Francisco State University email address.
8. **Registered user's accounts** shall initially be not **activated accounts**.
9. **Registered user's accounts** shall become **activated accounts** when they are verified with a (simulated) emailed weblink response.
10. **Registered users** shall be logged in with **activated accounts** that are not **banned accounts**.
11. **Registered users** shall have the option to browse **items**.
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 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	++	-	-	-
Search Query	+	+	+	+
User Interface	++	-	+	+
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. Netbeans - Software development platform in Java and PHP
2. Supported Browsers: The two most recent versions
 - a) Chrome
 - b) Safari
 - c) Mozilla
3. **Registered user** database
4. **Item** database
5. Payment (simulated)
6. Google analytics
7. Remote LAMP server provided by Amazon.com
 - a) Linux
 - b) Apache
 - c) MySQL
 - d) PHP
8. Bootstrap
9. 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