Gator Sells

A one-stop e-shop where San Francisco State University
Students can buy and sell used and new items.

Milestone 1

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Team 09

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Revision history

Date	Description
February 28, 2017	Rough draft for in-class feedback
February 29, 2017	Final draft submission

Executive summary

Gator Sells is an e-shop that allows students to buy or sell products to each other within the same campus. This e-shop allows students to post, view and buy items without difficulty. While other college campus e-shop sites such as Student Listings and UOW Students Buy and Sell exist, Gator Sells features a filter system that allows a user to quickly browse through items that a student is interested in. Gator Sells also features a private messaging system that allows a buyer and seller to quickly and reliably communicate. While Gator Sells does not have all the features that bigger e-shops such as Amazon or E-bay has, Gator Sells is currently specifically catered towards students currently attending San Francisco State University. By requiring students to register with a San Francisco State University e-mail address, the system can ensure that users are from the university, as well as a way to verify a user's identity. Furthermore, it is possible to expand the use of Gator Sells in the future for use in other campuses by changing the e-mail filter when registering for an account with Gator Sells.

Gator Sells is currently being developed by a seven student start-up team in San Francisco State University. The students have a deep understanding about San Francisco State University, and can tailor the site to be attractive towards San Francisco State University. The students can also advertise the website to their peers, which may increase the user base of the e-shop for the campus. Any feedback that the group receives is received directly from the students that are using the site, allowing the student group to quickly and efficiently fix and change the e-shop as needed.

User Cases

Buyer:

1. **Unregistered user**: Maria and her roommate Jill decided they needed a new TV for the living room. One day Maria finds a flyer on campus about a new website exclusive to students where they can **sell** their **new** and **used** to other students, upon getting home Maria informed her roommate about the website which they are both interested in searching for potential TV's. They started out using the **search** to narrow down the **items** listed to just the desired TV, and using the **filters** to find the right size and color. After the girls found the TV they wanted they decided to **message** the **seller** for more information, but upon doing so the girl were prompted to **register**. After registering the girls were able to message the **seller**.

2. **Registered user:** Jen is an international student who just moved to San Francisco. She goes onto the Gator Sells website to find available living room sets. After scrolling through some options using the available **filters** (price, , color), she finds a few bed room sets that she likes and messaged **seller** to express her interest in the set, which will **send** an **message** through the website to the **seller**.

Seller:

3. Kimberly is a senior in her last term at SFSU and wants to **sell** her **items** before moving back home. She likes the security of website whereas only student with a valid @mail.sfsu can **buy** or **sell items** on the site. After registering she'll able to log in with her student email and password so create a new posting by upload her **items** listing, along with pictures and contact information.

Administration:

4. John is the website administrator, he is able to look through listing posted by **users** and delete or moderate the listings on the site if the content is inappropriate or doesn't meet the guidelines of the site. He can also look through reports submitted and review the relevant posts to decide if the posts should be modified or taken down.

Data Definition

Primary terms:

1. **Gator Sells**: The name of our e-store.

2. **Registration**: Process in which the user creates a User Profile. The User Profile will consist of First name, Last name, Email, and Password, Photo for the User Profile will be optional.

3. **Items**: Type of items that are posted on the website. Which can be Books, TVs, Computers, Cell phones, Furniture, or Video Games 'items' will be searchable through attributes such as:

   1. Price
   2. Items (Electronics, Books, Room)
   3. Location (Address, Street, City, State, Zip code)
   4. Electronics (TVs , Computers, Cell phones, Video Games)
   5. Clothing (Male/Female/Shirts/Pants/ Accessories)
   6. Books (Used/New)
   7. Computers (Desktop, Laptop)
   8. Cell phones (Android, IPhone)
   9. Furniture (Beds, Mattress, Table, Couch)
   10. Video Games(Used/New)
   11. Distance from campus (Default, can be changed)
   12. Date item posted

4. **Favorites**: Your personal list of items you want to revisit.

5. **Media**: Photo of items uploaded by seller.

6. **Shopping Cart:** All the buyer's items will be temporarily stored here before the checkout process.

7. **One-Click Checkout:** This process will short circuit the conventional purchasing process, the buyer may go straight to paying process and complete the procedure in a shorter amount of time. [buyer shall only purchase one product at a time with this process flow]

Users:

Types of users in relation to the project include:
- **Seller**: **User** who **posts** one or more **items** on the website.
- **Buyer**: **User** that **buy** posted **items** from the **sellers**.
- **Admin**: **User** with administrative privileges that Moderates the website and is able to remove false postings.
- **Unregistered user**: Users who just want to browse the website. They are not required to go through **registration**.

Functional Specifications

Buyer:

1. **Browsing:** The buyer shall browse our website's to view item listing without the need to register for an account.

2. **Registering and/or logging in:** The buyer shall use an SFSU email address to create an account to access the site the buy and sell feathers, or to contact a seller. Users shall have the ability to log in to or log out from the website from any page on the website.

3. **Sorting:** The buyer shall be able to filter postings by clicking buttons related to the search metadata listed in the data definition.

4. **Comparison:** The buyer shall be able to compare one or more items.

5. **Private messaging:** The buyer shell have the ability to contact potential buyers and sellers.

6. **Item Location:** The users shall see the item's distance from SFSU or any desired set location.

Seller:

1. **Post Items:** The seller shall post items on site in which they want to sell.

2. **Media posting:** The seller shell have the ability to post photo of items uploaded.

3. **Private messaging:** The seller shell have the ability to reply to potential buyers and.

4. **Sharing on social media**: The seller shall share their items postings on a social media such as Facebook or Google.

Administration:

1. **Administrative privileges**: The admin shall have administrative privileges in which to moderates the website and shall be able to remove fake postings, or items that don't meet the sites guideline.

Non-functional Specifications

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, and 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).

Competitive Analysis

Name of Site	Filters	Search	Price Comparison	Communication With seller	*One-Click Checkout	*Domain Specific Email Registration
Gator Sells	✓✓	✗	✓	✓	✓	✓✓
Student listings	✗	✓	✓	✗	✗	✗
UOW Students Buy and Sell	✗	✓	✗	✓	✗	✗
The Book Exchange Network	✗	✓	✓	✗	✗	✗
Amazon	✓✓	✓✓	✓	✓	✓	✗
Ebay	✓	✓✓	✓	✓✓	✗	✗
Sell Student Stuff	✓	✓	✓	✓	✗	✗

✓: Feature included ✓✓: Feature included excel ✗ : Feature not included *: Special Features

Gator Sells is an e-shop that is used exclusively by San Francisco State University students looking to buy or sell items used and new. Gator Sells features a registration system that requires users to use a @mail.sfsu email address to register. This system is in place to ensure that all posts and bids by buyers and sellers are by San Francisco State University students or staff. With the option to buy an item with one-click makes the process of buy much faster for the user. Gator Sells features a filter system that allows users to quickly and efficiently search for an item in a filtered category. This filter system gives Gator Sells an edge above the current competition such as Student Listings, UOW Students Buy and Sell, and The Book Exchange Network. While Gator Sells is not as efficient as bigger e-shops such as Ebay or Amazon, Gator Sells is catered specifically towards the needs and wants of San Francisco State University students. The team that is developing Gator Sells is able to receive feedback directly from its users, and is able to quickly and effectively cater to the needs of its user base.

Development technologies:

- The application shall be developed using the LAMP stack as suggested by the stakeholders, which includes: Linux, Apache, MySQL and PHP.

- The main framework that shall be used in the development of this application is the PHP CakePhp framework.

- Technologies that shall be used in the development of this application are JQuery, Bootstrap and HTML/CSS.

Third party APIs:

- The application shall make use of certain APIs which include: Google Maps, Google Plus, and Google chat (if available).

Browser support:

- This application shall support the current and last two versions of popular browsers at the time of testing – namely Chrome, Firefox and Safari.

Admin interface:

- The admin interface for the application shall be managed through MySQL Workbench.

Tools and IDEs:

- The tools and systems that shall be used towards the production of this system are the terminal/command line. Code editors or IDEs are based on the developer's discretion.

Version control:

- The code for this application shall be stored on our private project (repository) on Gitlab.
- Team members shall collaborate together on Gitlab.

- Team decided on basic means of communications:
  DONE, Slack

- Team found a time slot to meet outside of the class
  DONE, Thursdays at 4pm

- CTO chosen and working out well so far
  DONE, CTO is Great

- 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

Name	Role
Charles Williams	(**Team lead**) QA
Jason Huang	(**Tech lead**) Backend
Krishnan Ramakrishnan	**Backend**
Leopoldo Rodriguez	**Backend**
Myat Min Maung	**Frontend**
Grant Gaviglio	**Frontend**
Wilson Le	**Frontend**