

SW Engineering CSC648/848 Section 01 Spring 2017
Website name: TheGatorBay

Team # 02

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Milestone 1

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History Table:

Date	March 5th, 2017
1st Draft	February 27th, 2017
Revision 1	February 28th, 2017
Revision 2	March 5th, 2017

1. Executive Summary

TheGatorBay will be a unique website, designed and developed for San Francisco State University Students to cater their needs for buying and selling items. The website will provide a single interface for students to reach out to the student community for selling and buying items. The SFSU student-centric design will make TheGatorBay stand apart from rest of the websites currently available on the internet for this purpose.

The primary purpose of the website will be to act as a platform to connect San Francisco State University's students who are interested in buying and selling items. Since only students will be allowed to get involved in the transactions there will be a good degree of safety. The website will be featuring special customizations for listing books and other school related items which will help buyers to find these items with ease. The website will also allow buyers to post requests. This will in turn help sellers to understand the demand of the items. The website will also provide the school's address as the default pickup address which will allow sellers to list items within a couple of mins. The intention is to make this website easier to use and find items that are desired.

Such customized features along with the surety of trading with students only will enable the quick popularity of TheGatorBay among the San Francisco State University students.

Our startup consists of six members who are all students at San Francisco State. We envision a website that is more user-friendly than the ones that are currently available. We are enthusiastic to provide a service that is necessary among school systems that will attempt to satisfy the needs of a large group of students and ease their journey through school life.

2. Use Cases

List an Item for selling:

Ron is an SFSU student who wants to sell one of his last semester's textbook. With no experience in selling products online, he decides to use TheGatorBay website to advertise this textbook. He visits the website and explores it. Because of the easy to use interface, he instantly finds the option to list an item for selling. He then selects this option where he is prompted to register and does so in order to sell. He is able to easily upload photos of the textbook and list it in very little time. In extremely short time, Ron is now able to reach the entire SFSU student community for selling the textbook.

Purchase an item:

John is a transfer student in SFSU. This is his first semester at SFSU and he is not very well aware of all the stationary he should be purchasing for a particular class. He finds out about TheGatorBay and there he is able to search for his class. Now he can see all the items on sale which are used for this class. He then tries to connect with one of the students who is selling textbooks for this class. Before being able to message to the seller, he is prompted to register/sign-in for security purpose. Because of TheGatorBay, John is now not only able to purchase the textbook at a lower price but also receives valuable guidance from this student.

Edit a listing:

June is an SFSU student and has a hobby of knitting. She decides to sell her hand knit sweater on TheGatorBay. But she is not getting enough response for this listing. One day she finds out that the SFSU bookstore is selling a similar quality sweater at a similar cost. Figuring that this might be a reason, she then edits the listing on TheGatorBay to reduce the price of her sweater. Within a couple of days, she receives a ton of responses and is able to sell her sweater. Looking at the demand, she decides to convert her hobby into a part-time business.

Browsing:

Josiah is a junior at SFSU and has always bought his books from the bookstore. Currently, he is not earning enough money from his job to pay full

price, so he decides to go on a TheGatorBay. He heard about this website from fellow students who are in the same financial situation. He does not want to create an account just to browse items and compare prices. Josiah is able to go on the website and look through items that are posted by other students without having to register until he decides to purchase.

Pick-up Location:

Johnny is an SFSU student. He is fascinated about this new backpack which has just arrived at the SFSU bookstore. But this backpack is slightly out of his budget. He decides to sell his current backpack on TheGatorBay website for some extra cash. He is a registered user of TheGatorBay. With intentions of earning some instant money, he quickly opens TheGatorBay signs-in, uploads pictures and description of the bag. Now he is prompted to fill in the pick-up location where he has the option to simply select SFSU address or enter a custom address. Simply selecting SFSU address saves time which is why Johnny selected this option and thus is able to quickly list his backpack for selling.

Admin:

Mary is an administrator of TheGatorBay. The website shows all listings that have been recently listed. While browsing this list, she finds a post containing offensive and inappropriate material. She then deletes the post and it no longer visible to the users. Later in the day a user who has posted inappropriate content in the past and has also been notified of his actions posts another inappropriate listing. Mary chooses to ban the user for repeated offense.

3. Data Definitions

- Listing: Information about an item. This includes information such as description, price, category, etc.
- Category: A classification for an item. Items to be sold define the category they are in so that they will be displayed in the appropriate category.
- Registered User: A user of the website who has an account and special privileges.
- Private Message: Text that is sent among registered users that only the sender and recipient can see.
- Watching List: A collection of listings that a registered user is interested in.
- Notification: Text that alerts a registered user of a change of st
- Selling List: A collection of listings that a registered user has created.
- Purchased List: A collection of listings whose items a registered user has purchased.
- Sold List: A collection of items that a registered user has sold.
- Wish List: A collection of items that a registered user wants to purchase.
- Admin/Moderators: Users with privileged access who can delete listings, block and unblock users.
- Location security: Saved location of “meet up” position to refer to again if accessed by a mobile device.
- Price: The price of the item being sold.
- Sellers: Information of registered users who are selling and who have sold items.
- Buyers: Information of registered users who have bought items.
- Non-registered User: User who does not an account on the website or has not yet signed into the account on the website.

4. Functional Specs

All Users: -

1. Both registered and non-registered users shall be able to sort listings by price and date.
2. Both registered and non-registered users shall be able to search for items.
3. Both registered and non-registered users shall be able to use the QuickView functionality, which enables the user to view a summary of a chosen item displayed on a modal on the same page.

Sellers: -

4. Sellers shall be shown a list of items related to the item being listed as a reference for deciding the price. (If time permits)
5. Sellers shall be able to edit their listings. If the price is being edited, sellers shall have the option to either display the old price with a strikethrough or don't display it at all.
6. Sellers shall have the option to specify the location to pick-up the item. This can be either at SFSU or any other address which shall be shown using Google Maps.
7. Sellers shall be prompted to enter the Course Details if they are listing the product under the category of Books. If the book is not under any course then they shall be able to list it as Others.
8. Sellers shall have the ability to add tags/keywords to their product to facilitate ease of search.
9. Sellers shall see the listings of those posted by buyers for all listings that are relevant to the item being sold.(If time permits)

Buyers: -

10. Buyers and sellers shall be able to private message to one another.
11. Buyers shall register before they are eligible for buying.
12. Buyers shall be able to post products which they want to buy.
13. Buyers and sellers shall be able to set a location for a meetup and review the location at any other time after confirmation.

Registered Users: -

14. Registered users shall have a user account page of their own which will be used to display their transaction history.
15. The website shall provide a list of recommended listings to the registered user, based on the user's account information.
16. The website shall send warnings of inappropriate or offensive listings.

Admin: -

17. Administrators shall be able to delete inappropriate listings at their discretion.
18. Administrators shall be able to see all the new listings recently posted.
19. Administrators shall be able to ban, disable, and enable any user accounts.

5. Nonfunctional Specs

1. Application shall be developed using class provided LAMP stack.
2. Application shall be developed using the 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 is 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

FEATURES	Craigslist	sellstudent stuff	eBay	student listings	TheGatorBay
User account	—	+	++	—	++
Search bar	++	+	++	+	++
Quick view	—	—	—	—	+
Location security	—	—	—	—	+
Contact user	+	+	++	—	++
Recommendation and search of items based on class	—	—	—	—	+

+ feature exists

++ superior

— does not exist

After comparing TheGatorBay website with some other leading websites working in this business, it is shown that TheGatorBay shall not only have the basic required functionalities, but also provide features, which shall give it a competitive edge over other websites, such as: QuickView, Location Security (optional feature

for users), the ability to view a list of recommended items, and the ability to search listings based on class courses.

7. High Level System Architecture

- Stack: LAMP
 - Operating system: Ubuntu
 - Web server: Apache
 - Database: MySQL
 - Scripting language: PHP using the CakePHP framework.
- Source code revision: Github.
- Supported Browsers: Safari, Firefox, Chrome.
- Frameworks: jQuery, Bootstrap, CakePHP, Materialize, MySql, HandleBars.js.
- Software Tools: Atom text-editor, Sublime, Netbeans, Workbench.

8. Team

- Ajinkya Chalke. - Team Lead
- Ivan Yu. - Technical Lead
- Bradley Ng. - Backend/Database
- David Rodriguez. - Quality Control
- Thao Luu. -Frontend/Design
- Jerry Auyeung -Backend/Frontend

9. Checklist

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|---|------|
| ● 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 |