SAN FRANCISCO STATE UNIVERSITY

SW ENGINEERING CSC648/848 SECTION 02 SPRING 2017

GATORLIST – TEAM 11

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MILESTONE 1
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1. Executive Summary

As technology advances, people start to become lazy shoppers behind their computers rather than spending their valuable time to commute for shopping center in a traditional way. Every single day, there is a new website built to reach the vast majority of society to supply this demand. Students are one of the most active users of web based sale stores due to the nature of their standards.

Considering their limited financial freedom as well as their needs for items like books, clothes, furniture and electronics, every semester they have the grueling task of trying to find the best product for the lowest prices. This is where our product GatorList steps in and tries to alleviate some of stress that students of San Francisco State University feel. Our main goal is to connect students with each other throughout their college career to satisfy the needs of both parties. GatorList has lots of advantages like being a two-way market that is both cheap and safe.

Unlike many other online retail shops, GatorList will not only provide buying features, but also selling opportunities to students who would like to sell their items once they are done with them. With this website, students will be able to set up deals and exchange items with ease never before seen amongst the community. This will create a circulation in campus where students can maximize their marginal profit by exchanging items for the nominal value of items according to their needs.

Another great advantage of GatorList is that it provides a cheaper platform due to its easy use without any additional cost for website use, shipping and handling. Students will save time and money by setting up on-campus meetups where they can chat and bargain for certain items.

GatorList is for the use of SFSU students to buy and sell Items in a safe community environment. Using our messaging system, the students of San Francisco State University will be able to organize on-campus meetups. This method of buying and selling items on campus provides a greater sense of safety that other websites, such as Craigslist, could never offer.

We, here at GatorList, set out to conquer this task with exclusivity. Students can rest safe knowing that the person that they've made this deal with online is another student such as themselves and as such it actually helps to build on the already powerful sense of community on campus. This sense of community is also the edge that our website has over all the others, no other community can claim to be as strong as ours here at SFSU which is what will draw students of all ages and majors to our website.

This website is created by six entrepreneur students of Computer Science department of SFSU. Having wandered the same path for several years and knowing all ins and outs of this community, our team is ready and willing to build the ultimate product that can serve students for many years. There is no better team for this job.

2. Use Cases

2.1 Guest User

Jeremy is a student at SFSU with very limited technological skills who is browsing the website for the first time looking to buy an Item. Jeremy starts browsing the available items, he can also choose to specify a category. To keep his purchase within his price limit Jeremy could sorts the items by price or category. As a ***Guest User*** Jeremy is able to access the descriptions and pictures of items. Jeremy sees a book that he likes, he wants to buy it but at this point he can only browse ***Items***. When he attempts to proceed with his purchase he must either log in to his account or register a new one. As a guest user with no ***Verified User*** account Jeremy must enter SFSU email along with a password to create his account, as well as opt in to our terms and services agreement. His e-mail submission must have a sfsu suffix. After the account has been created Jeremy is redirected to the Item page he was previously viewing, where he may use the messaging system to contact the seller, or use any of the sellers selected contact information where they can discuss price, meeting times, or deliver options.

2.2 Admin

Sally is a skilled ***Admin*** of GatorList who has opened the website login page and logged into her ***Admin*** console, where she sees a message in the support messages from a ***Verified User*** about a dispute that has occurred involving the website. As an admin Sally is able to access all messages between the disputing parties. She is able to determine by reading through the chat logs that the seller was being misleading about the quality of the ***Item***. Seeing a breach in the terms and services agreement, Sally now has the option to block the seller's account from making sales, as well as remove the page of the related item. After resolving this issue, Sally choose to go over posts from couple days ago, and check the content of those newly posted ***Items*** and their media for violation of terms and services agreement. If she finds an irrelevant picture/post for an ***Item***, she is able to hide the post and notify ***Verified User*** per agreement of contract.

2.3 Verified User

Alexander is a student at SFSU who has previously used the website to make a purchase and now would like to post his own calculator for sale. Upon opening the website, he proceeds to post his calculator for sale, but he is prompted to log in or register for an account. Since Alexander is a previously ***Verified User*** he enters his email and password to be logged in. Alexander enters the name of his ***Item*** for sale, selects a category and must upload at least one image of his ***Item*** (He has the option to upload additional images if he wishes to). Here he is also able to leave contact information for those interested in this ***Item***. After he is done Alexander can add his new ***Item*** for sale to the list of available items to purchase. When a **Verified User** wishes to communicate with Alexander about his post he will receive a notification via our messaging system.

If Alexander would like to buy something instead of selling it, all he needs to do is browse the item he is interested in, log-in using his SFSU credentials, interact with the seller via our messaging system and after both parties are satisfied with the transaction he will be prompted to rate the seller. If there is a problem with the site or if the seller does something reportable he can contact support and the message will reach a site Admin. The records of the messages between Alexander and the seller are recorded and saved for admin mediation purposes, as stated in the terms and services agreement.

3. Data Definition

3.1 Guest User : Person who can only browse and do nothing else on the website

3.2 Verified User: Person who can browse. They can post new items and even edit their own items if they wanted to. They are able to communicate with other verified users about their item for sale. And if there is a privacy violation they can report it to the system administrator.

3.3 Admin : Has the power to edit, delete and block a user's account if that person violated the terms and services agreement. Admin can monitor and filter any unusual activity. If an Admin detects any posting violations they enforce preventive precautions, accordingly.

3.4 Item:

- Books or class notes.
- Service related to education.
- Electronic gadgets.
- Accessories or clothing.
- Furniture.
- Mobility / Commuting device.

3.5 Username:

- Non case-sensitive.
- at least 6 characters long.

3.6 Password:

- Case sensitive
- at least 6 characters long.

4. Functional Specs

Application Functions:

4.1 create an account using an sfsu email.
4.2 browse items without having to register.
4.3 sort items by categories.
4.4 post items specifying price, category, and their contact information.
4.5 contact sellers.
4.6 leave reviews on sellers.
4.7 contact support.
4.8 upload up to 5 images of their items.
4.9 login/logout of accounts.
4.10 remove items.
4.11 block accounts.
4.12 view message logs.
4.13 login/logout.
4.14 provide registration with sfsu email and a user-generated password.
4.15 sort items by category.
4.16 sort similarly categorized items by price, alphabetically, or by date.
4.17 provide messaging services between sellers and buyers.
4.18 provide a terms of agreement during user registration.
4.19 log conversations between users.
4.20 differentiate between users and admins.
4.21 show images of products.
4.22 notify users of new messages.

5. Non-functional Specs

5.1 Application shall be developed using class provided LAMP stack
5.2 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.
5.3 Application shall be hosted and deployed on Amazon Web Services as specified in the class
5.4 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.
5.5 Application shall have responsive UI code so it can be adequately rendered on mobile devices but no mobile native app is to be developed
5.6 Data shall be stored in the MySQL database on the class server in the team's account
5.7 Application shall be served from the team's account
5.8 No more than 50 concurrent users shall be accessing the application at any time
5.9 Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
5.10 The language used shall be English.

5.11 Application shall be very easy to use and intuitive. No prior training shall be required to use the website.

5.12 Google analytics shall be added

5.13 Messaging between users shall be done only by class approved methods to avoid issues of security with e-mail services.

5.14 Pay functionality (how to pay for goods and services) shall not be implemented.

5.15 Site security: basic best practices shall be applied (as covered in the class)

5.16 Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development

5.17 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).

5.18 Application shall provide user with adequate information on its functionality.

5.19 Application shall not crash, and if it does, not constantly.

5.20 Application, in the event of a crash, shall be back up within 24 hours.

5.21 Application shall be available during all hours except in the following cases: the website is taken down after the semester, the website has crashed, contract with web-server was expired, web server access right was violated by third parties, or there is a serious problem/bug that needs immediate addressing.

5.22 Application shall load all pages fast enough to satisfy the average user.

5.23 Application shall not confuse the user with unnecessary information.

5.24 Application shall provide users with all information necessary to acquire their product.

5.25 All username and password shall be adequately protected.

5.26 All data shall be adequately stored.

5.27 User account and information shall not be compromised in any way.

5.28 Application shall provide elegant, simplistic design that looks appealing and fully functional.

5.29 All data and access permissions can only be changed by system administrator.

5.30 All data should be backed up and secured at least 1 time(s) a week.

5.31 General coding standards will be maintained; modular, readable, all brackets and semicolons in proper positions.

5.32 Documentation of code will be easy and clear to understand.

6. Competitive analysis

Features	GatorList	Etsy	Amazon Custom	Craigslist
Browse listings	+	+	+	+
Images Available	+	+	++	+
University Student Exclusivity	++	-	-	-
Post listing exclusive to registered users	++	+	+	+
Account Security	+	+	+	+

+ Available, - Unavailable, ++ Exceptional

Our service makes it easy to buy or sell items to local students and staff. The main advantage over our competitors will be our guaranteed exclusivity of registered users being students or staff of San Francisco State University. Our core features are on par with our competitors, making our service reliable and effective. Our simple and easy to use design will make buying and selling products an effortless task. Buyers can rest assured that the products they view come from local members of the university.

7. High-level system architecture

1. CakePHP framework.
2. PHP framework chosen to supplement the development of the application.
3. Git version control using GitHub utilization of a private repository to maintain our ongoing development.
4. Amazon web server.
5. used for hosting and deployment of code.
6. Google Analytics.
7. used to track website traffic.
8. Markdown used for documentation.
9. LAMP stack utilizing:
   OS: Ubuntu Server, Version: 16.04
   MySQL Version: 5.7
   PHP Version: 7.0.13
   OpenSSH Version: 7.2
   Git Version: 2.7.4
   Python: 2.7

Ruby: 2.3.1
nodejs: 4.2.6
npm: 3.5.2
Less: 481
Sass: 3.4.23

10. Supports Mozilla Firefox 50+, Google Chrome 55+, Internet Explorer 10+, Microsoft Edge 39.14971+
11. Application supports the second to most recent web browser versions.

8. Team

Hasan Niftiyev (Leader) , Jordan Scandlyn (CTO), Daryl Robbin (Design), Andre Simpelo (Performance), Anthony Searless (Front End), Hin Vong (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 - ON TRACK

· 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