Milestone 1

SW Engineering CSC648/848 Fall 2018

Team15

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Revision History Table		
Version 0.1	Created	October 1, 2018
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CTO: Anthony Souza

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1 Executive Summary

The "GatorGoods" project is a project started by a student startup team from San Francisco State University and Fulda University in Germany. The "GatorGoods" project is a buy/sell website for students and faculties at San Francisco State University. The motivation behind this project is to build a website that is not only simple to use but also safe and secure for the users. We wanted a place for students and faculties to be able to post items they wish to sell with ease and potential buyers to be able to browse through those post and buy them safely and securely.

Unlike other buy/sell websites out there, ours allow buyers to engage with seller safely. Our website has a build in messaging features that will allow buyers to ask questions about the product directly with the seller. The "GatorGoods" project will also allow buyers and sellers to arrange a meet up spot that is around the campus for safer transactions. Another thing that separates us from other buy/sell websites is that we make the browsing easier for buyers who are looking to purchase books for a certain course. Our sellers can input the SFSU course number for their books they are selling so that buyers can easily find it. Our website will also have a moderator that has the ability to approve/deny posts and blacklist users as they seem fit from their moderator dashboard. This will keep our website safe and secure from spammers and inappropriate posts.

The "GatorGoods" project is started by a team of four students from SFSU and four students from Fulda University who will join in late October. Our team is diverse and everyone has their own unique skill sets. You can read more about our team at the "About Us" page on the website.

2 Personas and Use Cases

2.1 Personas

Sarah is a economics student at SFSU nearing the end of her freshman year. She is currently living in the dorms and won't be able to keep all of her furniture nor move it back home. She is looking for an easy way to sell her excess furniture while helping out other students and avoiding shipping costs. Sarah does most of her browsing on her phone and is familiar with mobile interfaces. She is uncomfortable with meeting up random people at random spots for transactions.

Diane is a nursing student at SFSU who is looking to buy her textbooks. She is frustrated by the costs of buying new books at the SFSU bookstore and would like to buy from other students rather than ordering from a competitor's website and having to have the books shipped to her. She is already busy with her schoolwork and wants an easy way to find out if anyone on campus would be willing to sell her the textbooks she needs at a fair price. She should be able to easily find if the book she needs is available.

Mark is a moderator for our company's website. He should be able to approve new posts and edits to exist posts in the moderator dashboard. He is very familiar with using and managing websites and can figure things out on his own. He likes to be efficient in his work and hates having to navigate between too many pages to accomplish his tasks.

Professor Montfermeil has been a professor of mathematics at SFSU for 25 years. He feels a great sense of pride towards their school. They want to be able to sell things cheaply and easily to support students in their studies and lives. Professor Montfermeil doesn't like computers and wishes to spend the least amount of time as possible on them, and wants an easy to use webapp. He wants to be able to limit the visibility of a posting to either other faculty members or to students. His vision isn't the best so he would like the website to have a have a large, legible font.

2.2 Use Cases

Seller (Student)
Sarah wants to sell her excess furniture. She goes to our site and chooses to create a post, fills out the form with a post title, description, price, category, image etc and upon submission is prompted to register or log in. Upon registration, she is allowed to submit her post and awaits moderator approval before her item listing shows up. Shortly afterwards receives a message from another user interested in buying the item she just posted. They agree on meeting at one of the designated buyer/seller locations on SFSU's campus and select a time

both parties feel comfortable with via messaging. Once the transaction is complete, Sarah uses her mobile device to close the listing on her GatorGoods seller dashboard.

Buyer

Diane wants to buy cheaper books for her nursing classes. She goes to our site and browses the current items for sale. She notices there are hundreds of listings and wants to narrow her search. Upon choosing the correct category, only books appear on the filtered page. Diane finds a book she needs and before she can contact the seller, is prompted to register or log in. Upon logging in she messages the seller, who agrees to meet with her later that day in front of J. Paul Leonard Library to complete the transaction.

Seller (Faculty)

Professor Montfermeil wants to sell his teacher's pointer stick to a fellow faculty member after being gifted an easy-to-use laser pointer. Already logged in, he goes to our site with his preference of large, legible font and chooses to create a post, fills out the form, selects post visibility to only SFSU faculty members, and awaits approval from the moderator. He goes to his dashboard and checks if his item is approved. Once his item post is approved, he checks his dashboard for a new message. He receives an easily readable message that he can see on the dashboard from another professor and they both approve a time and place on campus that is convenient to both schedules. Upon transaction completion, Professor Montfermeil returns to his computer and closes the listing on his GatorGoods seller dashboard.

Moderator

Marc moderates the content on the GatorGoods website. Upon approving proper posts, he notices an inappropriate post from a user. He is aware that this user has had a handful of denied posts due to unsuitable content and has received warning messages for it. Marc decides to blacklist this user and without leaving the moderator dashboard page, manages to send a notice to the user of their blacklist status via messenger and disable their accounts as well as all of their postings.

3 Data Definitions

- Item: Thing that will be sold consisting of title, picture, price, description, category and owner.

- Status of an item: An item has the status "pending" if it has not yet been checked by the moderator. If it is approved, it has status "live".

- Category: A user applied categorization of their posted item. Each item has exactly one category.

- Unregistered User: User who has the right to browse and view posted items.

- Registered User: User who has the rights of an unregistered user and is eligible to post, message other users and view the dashboard.

- Moderator: User who has the rights of an registered user and is eligible to approve and decline item postings and to block users.

- Registered User Dashboard: Provides information about items of the registered user as well as messages.

- Moderator Dashboard: It's the moderators place for approving and denies items a registered user wants to post, warn registered users who try to post inappropriate content. Provides information about registered user posting history.

- Message: Non-public textual communication between seller and buyer.

4 Initial List of Functional Requirements

1. Unregistered users shall be allowed to browse posted items

2. Unregistered users shall be allowed to go through with the posting process

3. Unregistered users shall not be able to complete the posting process until they sign up.

4. Unregistered users shall have access to use the categories

5. Unregistered users shall be able to search.

6. Registered users shall have all the rights as unregistered users.

7. Registered users shall have access to complete the posting process.

8. Registered users shall have access to sellers dashboard where they can see the status of their posted items and messages.

9. Registered users shall have access to contact seller.

10. Moderator shall have all the rights as registered users.

11. Moderator shall have access to moderator dashboard where they can approve/deny items being posted.

12. Moderator shall have access to blacklisting users.

5 List of Non-functional Requirement

1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0 (some may be provided in the class, some may be chosen by the student team but all tools and servers have to be approved by class CTO).

2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome.

3. Selected application functions must render well on mobile devices

4. Data shall be stored in the team's chosen database technology on the team's deployment server.

5. No more than 50 concurrent users shall be accessing the application at any time.

6. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.

7. The language used shall be English.

8. Application shall be very easy to use and intuitive.

9. Google analytics shall be added.

10. No e-mail clients shall be allowed.

11. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated.

12. Site security: Basic best practices shall be applied (as covered in the class).

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

14. The website shall prominently display the following exact text on all pages "SFSU-Fulda Software Engineering Project CSC 648-848, Fall 2018. For Demonstration Only" at the top of the WWW page. (Important so as to not confuse this with a real application).

6 Competitive Analysis

Feature	Amazon	Ebay	Craigslist	Gator Goods
Search	++	++	+	+
Browse	++	++	+	+
Catering to local users	-	-	+	++
Shipping	++	+	-	-
Save items for later / wishlist	++	+	-	+
Listing items for sale	-	++	+	++

+ supports feature, ++ strong point of application, - does not support feature

Although sites like Amazon have cut down on shipping time dramatically, we aim to make our site even more convenient for SFSU students. We want students to be able to easily buy and sell items on campus without having to go out of their way to package and ship items. Additionally, our site should create a sense of community in that students are helping other students instead of merely buying from giant, multinational corporations. In order to effectively browse our site, students will be able to filter and sort items to quickly find what they need.

7 High-Level System Architecture

Server Host: Amazon AWS 1vCPU 1 GB RAM
 Operating System: Ubuntu 16.04 Server
 Database: MySQL 8.0.12
 Web Server: IIS Express 10.0
 Server-Side Language: Elixir/Phoenix
Additional Technologies:
 Web Technologies: React.js, Redux, Bootstrap
 Web Analytics: Google Analytics
 IDE: IntelliJ Idea

8 Team

- Jonas Kühle (Team Lead)

- Eric Groom (Frontend Lead)

- Mariko Sampaga (Backend Lead)

- Naylin Min (Frontend)

9 Checklist

Team found a time slot to meet outside of the class	DONE
Github master chosen	DONE
Team decided and agreed together on using the listed SW tools and deployment server	DONE
Team ready and able to use the chosen back and front end frameworks and those who need to learn and working on it	ON TRACK
Team lead ensured that all team members read the final M1 and agree/understand it before submission	DONE