

Final Project for SW Engineering

Class CSC 648-848 Spring 2022

GatorBay

Team 6

Team Lead: Bobby Roots broots@mail.sfsu.edu
Backend Lead: Michael Davichick
Backend Member: William Rattan
Frontend Lead: Michael Wang
GitHub Master: Michael Almeda

<https://inlaid-crane-341607.uc.r.appspot.com/>

Date of submission: 05/20/2022

2) Product summary

a) Name:

- i) GatorBay

b) Describe your Product:

- i) All of us from Team 06 acknowledge that Students, Faculty, and Staff could use a website that curtails more to them. That is why Team 6 has decided to build GatorBay. GatorBay will offer the exchange of goods such as Furniture, Clothes, Books, and electronics. What makes GatorBay so unique is that it is exclusively for SFSU Students, Faculty, and Staff. That along with our 24/7 operating hours at safe locations throughout SFSU we help to assist in the ease of making transactions in a non-harmful environment. Team 06 is dedicated to making this dream a reality.

c) Itemized list of ALL major committed functions:

- i) System allows unregistered users to browse posts
- ii) System allows unregistered users create an account
- iii) System allows unregistered users to log in
- iv) System allows registered users to have all the rights of unregistered users
- v) Registered users are able to buy displayed products
- vi) Registered users are able to post products
- vii) Registered users are able to sell products
- viii) Registered users are able to see available messages
- ix) Admin users have all the abilities as registered users.
- x) Admin users can approve a post request
- xi) Admin users can disapprove a post request.
- xii) Admin users can remove a post.

d) Unique:

- i) Search has the ability to filter results from four main categories.

e) URL to your product accessible to instructors:

- i) <https://inlaid-crane-341607.uc.r.appspot.com/>

3)Milestone documents M1-M4

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GatorBay

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Milestone 1

Date of submission: 03/04/2022

Revised: 03/08/2022

1. Executive Summary

San Francisco State University is located in the most ideal place with very comfortable weather year round. SFSU is famous for being located in the Bay which is one of the most visited spots in the country by tourists. It is also famous for being only a stone's throw away from the world's tech hub Silicon Valley and fostering an environment in which a student can feel comfortable and therefore more able to learn. One of the greatest unfortunate downsides of attending a University surrounded by some of the best minds this world has to offer is the cost of Attendance. The average college student attending has student loans and credit card bills. Students are looking for any way to help reduce their financial burden while attending SFSU in any way they can. The leading cause of student financial debt at SFSU are the required books and electronics needed for attendance and furniture for new students.

Thanks to the enginuative thinking from team 6 those debt ridden individuals will have a way to save more money. GatorBay is a web app that would allow students, staff, and faculty to purchase and sell books, electronics, furniture and clothing from other students, staff and faculty. In many cases the student will have to pay nothing due to Gator Bay's exchange option. The ability to receive these items any time day or night is an added bonus for people in a rush.

All of us from Team 06 acknowledge that Students, Faculty, and Staff could use a website that curtails more to them. That is why Team 6 has decided to build GatorBay. GatorBay will offer the exchange of goods such as Furniture, Clothes, Books, and electronics. What makes GatorBay so unique is that it is exclusively for SFSU Students, Faculty, and Staff. That along with our 24/7 operating hours at safe locations throughout SFSU we help to assist in the ease of making transactions in a non-harmful environment. Team 06 is dedicated to making this dream a reality.

2. Personae and Main Use Cases

a. Lisa - Student at SFSU



- About Lisa:
 - Full time student
 - Limited budget
 - Lives at home
- Goals and scenarios:
 - Lisa is on a limited budget and needs new books for her classes
 - She has an excess of books from previous classes and is looking for other students to exchange books with.

b. Alex - Student at SFSU



- About Alex:
 - Lives on campus
 - Part time student
 - Works two jobs
- Goals and scenario:
 - Be able to balance work and school to graduate with a Bachelor's Degree on time.
 - First year at SFSU

c. Samantha - Professor at SFSU



- About Samantha:
 - Is a senior professor at SFSU
 - Has written own book for class
 - Chair of her department
- Goals and scenario:
 - She is considered a residential expert in her field of work and has often written books for the class she teaches. To help out her students he offers a 10% discount.

d. John - Admin of application



- About John:
 - Graduated from SFSU with a computer science degree
 - Created a social media app for his senior project
 - Very attentive to detail
- Goals and scenario:
 - From his past project experiences, John understands the importance of moderating content of social media.
 - As not only an admin but an employee of the application, it's very important to John that nothing offensive gets posted that may drive away investors.

3. Main Use Cases:

- Selling a product

As a senior Professor, Samantha has written many books for her students. She noticed that when she sells through the bookstore, the price would be greatly increased, leaving some students not having the ability to purchase a new book. Samantha wants to be able to sell her books at an affordable price for students.

- Buying a product

Being a new student living at SFSU, Alex is already on a tight budget. Upon arrival, Alex notices he requires furniture for his dorm room and electronics. Alex wants to be able to find local furniture online to furnish his new dorm room while being on a tight budget.

Alex works two jobs and isn't available to pick up new furniture and electronics at reasonable times. With GatorBay's 24/7 Pickup option for SFSU Community, Alex is able to pick up items whenever it is convenient for him.

- Exchanging a product

Lisa has just started her junior year at SFSU. She is in need of new textbooks for her classes this semester but is on a tight budget and only has her old textbooks that are no longer of any use to her to barter with.

Lisa logs into her registered *GatorBay* account and sees that another student has posted the exact textbook she needs listed for an exchange.

Since Lisa has registered her account, she is able to check the details of the exchange and sees that she owns one of the books that the poster is looking for along with her contact information. Lisa then contacts the other student for an exchange of books; of which they are then instructed to meet at one of the designated safe local meet up areas, the SFSU Library. Lisa was able to obtain a new book for her class and get rid of an old one without spending a dime.

- Approving a post

A newly graduated student, John has just landed the first job of his career as an admin of the newly created *GatorBay*. From his past experiences of creating a social media app, John understands the importance of monitoring posts prior to them being in the public eye, therefore he is required to approve all posts before they go live. Excited

and eager to start his day, John logs into his employee admin account and sorts through the list of posts awaiting approval. He soon discovers one post that was redirecting users to a fraudulent site and immediately rejects the post, ensuring the site is safe for all users to enjoy.

4. List of Main data items and entities -data glossary/description:

- a. Product - A product serves as a placeholder for all items sold on the site. There are as follows:
 - i. Books
 - 1. Textbooks
 - 2. Magazines
 - 3. Novels
 - ii. Electronics
 - 1. Laptops
 - 2. Cell Phones
 - 3. TVs
 - iii. Furniture
 - 1. Tables
 - 2. Chairs
 - 3. Couches
 - iv. Clothing
 - 1. Shirts
 - 2. Pants
 - 3. Jackets
- b. Unregistered User - Unregistered users are able to browse posts but are required to log in / register when attempting to purchase, exchange or sell.
- c. Registered User - Registered users can not only browse but post sell orders, purchase and exchange. Contact information regarding the poster is only visible to registered users as a safety precaution.
- d. Admin - can do everything a Registered User can do and can approve or delete posts from other Registered Users.
- e. Buy - Purchase products that Registered Users post.
- f. Sale - A transaction between two Registered Users.
- g. Exchange - Exchange products that Registered Users post.

5. Initial list of functional requirements

- 1. Unregistered: Unregistered users shall be able to browse posted items and can create an account. The Unregistered shall also be able to search for specific posts.

2. Registered: Registered users shall inherit everything unregistered users have in addition to other features such as:
 - i. Buy, sell, exchange, post, delete your own account.
 - ii. Select drop off location:
 1. From the library, Cesar Chavez Student Center, or SFSU Police Headquarters.
 - iii. Select time of exchange.
3. Admin: An admin shall have access to everything a Registered user has access to. Additionally an Admin shall be able to approve or disapprove posts requests, and shall be able to remove posts or ban registered users.

6. List of non-functional requirements

- **System requirements:** describe the system requirements (architecture, system services, networks, platforms etc.)
 - Server Host: Google
 - Operating System: Linux
 - Server Database: MySQL
 - Web Server Node JS
 - Server-Side Language: JavaScript
 - Additional Technologies:
 - Web Framework: Bootstrap
 - IDE: Visual Studio, VS code
- **Usability requirements:** describe specific usability and UI issues, users who will use the system, delivery clients
 - Anyone on the website can search for posts without logging in.
 - Registered users can create posts and see the user's contact information from already approved posts.
 - Admins are required to approve posts prior to being visible to the public.
- **Performance requirements:**
 - Average latency will be 150 ms for refreshing pages and after posting or creating a new account.
 - Accuracy will be 97 percent so every one hundred requests sent to the server, a maximum of 3 errors shall be thrown.
 - Bandwidth is a maximum of 7 gigabytes of flow from up to 50 external IP addresses and a maximum of 3 gigabytes of flow from one IP address.

- **Storage, security, environmental requirements:**
 - MySQL database provides secure connections, authentication services, fine-grained authorization and controls as well as data encryption.
 - All passwords will have a separate encryption process prior to being stored on the back end for verification.
- **Marketing, legal requirements (logos, branding, licensing):**
 - No logos currently exist or are present for GatorBay
 - No branding currently exists for GatorBay
 - No licensing currently exists for GatorBay
- **Content (size, formats...):**
 - Design for desktop displays from 1024x768 through 1920x1080
 - Design for mobile displays from 360x640 through 414x896
 - Design for tablet displays from 601x962 through 1280x800
- **Privacy (what data is collected, how is it used...):**
 - Username and passwords are collected for logging in.
 - Post history for admin moderation

7. Competitive Analysis:

Product	Safe Transaction	Saves Money - No Shipping fee	24/7 Pickup	Explicitly for the SFSU Community
Ebay	✗	✓	✗	✗
Amazon	✓	✓	✗	✗
Craigslist	✗	✓✓	✗	✗
GatorBay	✓✓	✓✓	✓✓	✓✓

✓ Feature exists; ✓✓ Superior, ✗ does not exists

Ebay, Amazon, and Craigslist offer ways to purchase and sell the items mentioned. GatorBay offers the safest transaction because the individuals using the site are verified students, faculty, or staff at SFSU. Only GatorBay and Craigslist offer no shipping fees due to the face-to-face exchange and in doing so, lowering the cost. The one thing that sets GatorBay apart is the ability for 24/7 pickup at SFSU. Ebay, Amazon, and Craigslist do not have this capability.

8. High-level system architecture and technologies used:

- Server Host: Google Compute Engine
- Operating System: Linux
- Server Database: MySQL
- Web Server: Node JS
- Server-Side Language: JavaScript
- Web Framework: Bootstrap and React
- IDE: Visual Studio, VS code

9. Team and roles:

- Team lead: Bobby Roots
- Backend Lead: Michael Davichick
- Backend Member: William Rattan
- Frontend Lead: Michael Wang
- GitHub Master: Michael Almeda

10. Checklist:

- So far all team members are engaged and attending ZOOM sessions when required
 - ON TRACK
- Team found a time slot to meet outside of the class
 - DONE/OK
- Back end, Front end leads and Github master chosen
 - DONE/OK
- Team ready and able to use the chosen back and front end frameworks and those who need to learn are working on learning and practicing
 - ON TRACK
- Team lead ensured that all team members read the final M1 and agree/understand it before submission
 - DONE/OK
- Github is organized as discussed in class (e.g. master branch, development branch, folder for milestone documents etc.)
 - DONE/OK

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Milestone 2

Date of submission: 03/19/2022

1. Executive Summary

San Francisco State University is located in the most ideal place with very comfortable weather year round. SFSU is famous for being located in the Bay which is one of the most visited spots in the country by tourists. It is also famous for being only a stone's throw away from the world's tech hub Silicon Valley and fostering an environment in which a student can feel comfortable and therefore more able to learn. One of the greatest unfortunate downsides of attending a University surrounded by some of the best minds this world has to offer is the cost of Attendance. The average college student attending has student loans and credit card bills. Students are looking for any way to help reduce their financial burden while attending SFSU in any way they can. The leading cause of student financial debt at SFSU are the required books and electronics needed for attendance and furniture for new students.

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All of us from Team 06 acknowledge that Students, Faculty, and Staff could use a website that curtails more to them. That is why Team 6 has decided to build GatorBay. GatorBay will offer the exchange of goods such as Furniture, Clothes, Books, and electronics. What makes GatorBay so unique is that it is exclusively for SFSU Students, Faculty, and Staff. That along with our 24/7 operating hours at safe locations throughout SFSU we help to assist in the ease of making transactions in a non-harmful environment. Team 06 is dedicated to making this dream a reality.

2. List of main data items and entities (expand as necessary)

- a. product - A product serves as a placeholder for all items sold on the site.

There are as follows:

- i. books
 - 1. Textbooks
 - 2. Magazines
 - 3. Novels
- ii. electronics
 - 1. Laptops
 - 2. Cell Phones
 - 3. TVs
- iii. furniture
 - 1. Tables
 - 2. Chairs
 - 3. Couches
- iv. clothing
 - 1. Shirts
 - 2. Pants
 - 3. Jackets

- b. unregistered_user - Unregistered users are able to browse posts but are required to log in / register when attempting to purchase, exchange or sell.
- c. registered_user - Registered users can not only browse but post sell orders, purchase and exchange. Contact information regarding the poster is only visible to registered users as a safety precaution.
- d. admin - can do everything a Registered User can do and can approve or delete posts from other Registered Users.
- e. buy - Purchase products that Registered Users post.
- f. sell - Sale products that registered users post.
- g. exchange - Exchange products that registered users post.
- h. time - time the product is to be exchanged
- i. location - Location the product is to be exchanged
- j. u_name - name of registered user.
- k. p_name - name of product
- l. password - password of registered users
- m. phone_number - phone number of registered user
- n. r_id - unique registered user id
- o. a_id - unique admin id
- p. description - details about the product being displayed

- q. transaction_id - unique id of product transaction
- r. awaiting - waiting for registered user who posted product to accept or decline transaction
- s. accepted - registered user who posted product has accepted proposal to transfer product to another registered user
- t. pending - transaction has an interested reg
- u. decline - transaction has been declined by registered user posting product

3. Functional Requirements - prioritized

a. Priority 1

- i. Unregistered:
 - 1. Unregistered users shall be able to browse posted items.
 - 2. Unregistered users shall be able to create an account.
 - 3. Unregistered users shall be able to log in.
- ii. Registered:
 - 1. Registered users shall inherit everything unregistered users have
 - 2. Registered users shall be able to buy displayed products.
 - 3. Registered users shall be able to post products
 - 4. Registered users shall be able to sell products
 - 5. Registered users shall be able to see available messages on a personalized dashboard.
- iii. Admin:
 - 1. Admin users shall inherit everything registered users
 - 2. Admin users shall be able to approve post request
 - 3. Admin users shall be able to disapprove post request
 - 4. Admin users shall be able to remove posts

b. Priority 2

- i. Unregistered:
 - 1. Unregistered users shall also be able to search for specific posts.
- ii. Registered:
 - 1. Registered users shall be able to delete their account.

2. Registered users shall be able to select the time of exchange.
 3. Registered users shall be able to select drop off locations:
 - a. Library
 - b. Cesar Chavez Student Center
 - c. SFSU Police Headquarters
- iii. Admin:
1. Admin users shall be able to ban registered users
- c. Priority 3
- i. Unregistered:
 1. Unregistered users shall be able to select dark mode.
 - ii. Registered:
 1. Registered users shall be able to view history.
 - iii. Admin:
 1. Admin shall be able to message registered users.
 2. Website shall display recent posts.

4. UI Storyboards for each main use case (low-fidelity B&W wire diagrams only)

Use Cases:

- 1. Lisa is looking to exchange a book for another book**
- 2. Alex is looking to purchase furniture.**
- 3. Samatha wants to sell a book**
- 4. John is the system admin.**

Use Case One

Homepage: Lisa navigates to the homepage of Gatorbay to find the books she needs for class. Lisa easily finds the filter because it's next to the search bar where she expects the filter option to be because of her experience with other websites. She selects the books filter to filter the products to only books.



Recent Posts



ADVERTISEMENT



Filter: Lisa looks through the posts on books and finds the books she is looking for. She clicks on the book thumbnail to see the post in detail.



Recent Posts



ADVERTISEMENT

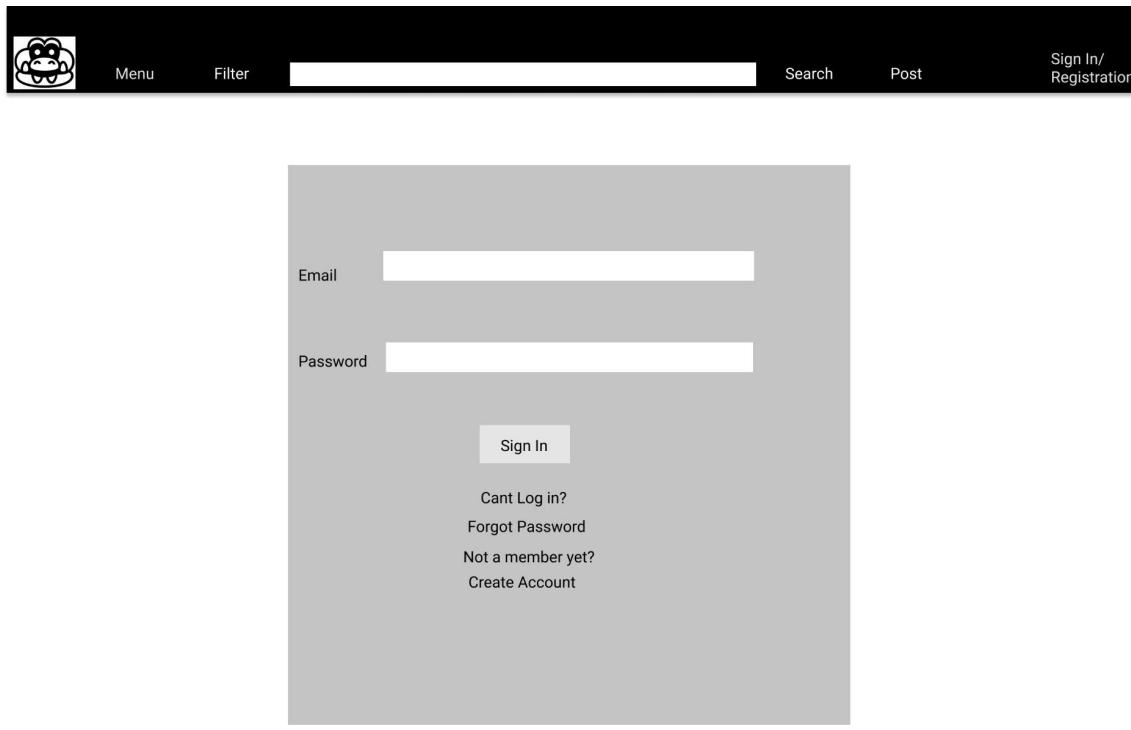


Product Page: Lisa sees the book's pictures and description, and decides she wants to purchase the book. Lisa clicks on the purchase button.

The screenshot shows a product page layout. At the top is a dark header bar with a logo icon, 'Menu', 'Filter', a search bar, 'Search', 'Post', and 'Sign In/Registration' links. Below the header are two large gray rectangular boxes: 'Post Picture' on the left containing the word 'Pictures' and 'Post Title' on the right containing the word 'Description'. At the bottom are two buttons: 'Purchase' and 'Exchange'. A large gray rectangular area below these buttons is labeled 'ADVERTISEMENT'.



Login: Lisa is prompted to login. After filling out the necessary information Lisa selects Sign In.



The image shows a login form interface. At the top, there is a dark header bar with a logo icon, "Menu", "Filter", a search bar, "Search", "Post", and "Sign In/Registration". Below the header is a light gray rectangular input area. Inside this area, there are two text input fields: one labeled "Email" and another labeled "Password", both with redacted content. Below these fields is a "Sign In" button. To the right of the "Sign In" button are four links: "Can't Log in?", "Forgot Password", "Not a member yet?", and "Create Account".



Confirmation: Lisa sees the Exchange Confirmation button. After selecting it Lisa sees that her exchange has been processed successfully. The exchange details list out everything that transpired.

The screenshot shows a user interface with a dark header bar. On the left is a logo of a cartoon character wearing a crown. To its right are buttons for "Menu", "Filter", and a search bar. Further right are "Search" and "Post" buttons, and a profile picture placeholder. Below the header is a grey rectangular area containing the text "POP UP! Exchange Sucess". Underneath this is a larger grey rectangular area with the heading "Exchange Details" centered. At the bottom of the main content area is a small grey button labeled "Exchange Confirmation". Below the main content is a large grey rectangular area labeled "ADVERTISEMENT".

The screenshot shows a dark footer bar with a logo of a cartoon character wearing a crown on the left. To its right is a horizontal list of links: "About Us", "Careers", "Terms and Conditions", "Email Sign-up", "Privacy Policy", "Contact Information", "Instagram", "Twitter", "Facebook", and "LinkedIn".

Use Case Two

Homepage: Alex navigates to the homepage of Gatorbay to find furniture he needs for his room. Alex easily finds the filter button because it's next to the search bar where he expects the filter option. He selects the furniture filter to filter the products to only furniture and selects the search button.



Recent Posts



ADVERTISEMENT



Filter: Alex sees the selection of furniture and decides to select the chair that he wants.



Recent Posts



Post 1



Post 2



Post 3

ADVERTISEMENT



Product Page: Alex sees the chair's pictures and description, and decides he wants to buy the chair that he sees. Alex clicks on the purchase button.

The screenshot shows a product page for a chair. At the top, there is a navigation bar with a logo, 'Menu', 'Filter', a search bar, 'Post', and 'Sign In/Registration'. Below the navigation bar, there are two large gray boxes: 'Post Picture' on the left containing the text 'Pictures' and 'Post Title' on the right containing the text 'Description'. At the bottom, there are two buttons: 'Purchase' and 'Exchange'. Below these buttons is a large gray rectangular area labeled 'ADVERTISEMENT'.



Login: Alex is prompted to login. After filling out the necessary information Alex selects Sign In.



A screenshot of a login interface. At the top, there is a dark header bar with a logo icon, "Menu", "Filter", a search bar, "Search", "Post", and "Sign In/Registration". Below the header is a light gray rectangular area containing a form. The form has two input fields: "Email" and "Password", each with a white input box. Below the password field is a "Sign In" button with a dark background and white text. To the right of the "Sign In" button are four links: "Can't Log in?", "Forgot Password", "Not a member yet?", and "Create Account".



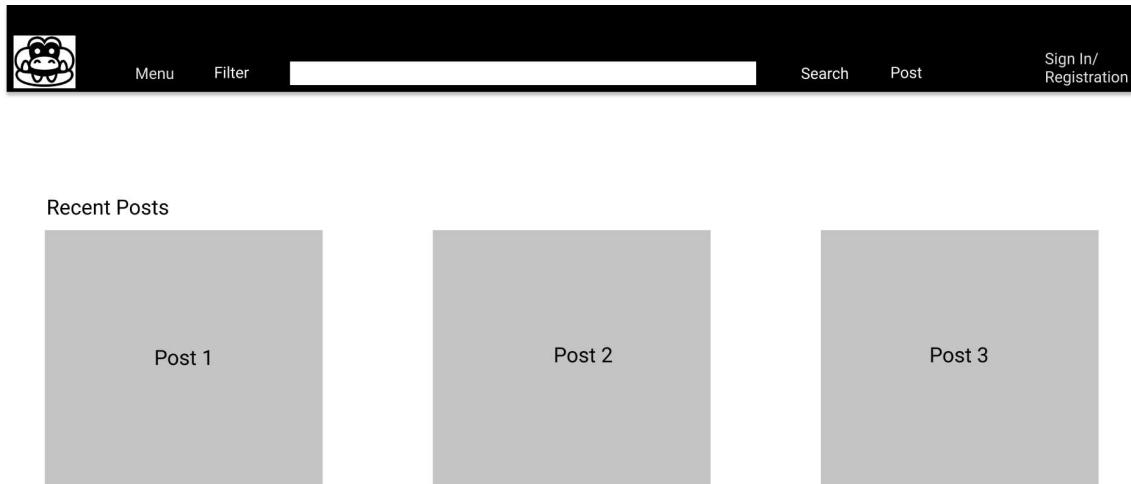
Confirmation: Alex sees the Order Confirmation button. After selecting it Alex sees that his exchange has been processed successfully. The exchange details list out everything that transpired.

The screenshot shows a user interface with a dark header bar. In the top left is a logo of a cartoon character wearing a crown. To its right are links for "Menu", "Filter", and a search bar with the placeholder "Search". To the right of the search bar are "Post" and a user profile icon. Below the header is a light gray rectangular area containing the text "POP UP! Order Sucess". Underneath this is a larger gray rectangular area with the heading "Order Details" in bold. At the bottom of this section is a button labeled "Order Confirmation". Below these sections is a large gray rectangular area with the text "ADVERTISEMENT".

The screenshot shows a dark footer bar with a logo of a cartoon character wearing a crown on the left. To its right are ten links: "About Us", "Careers", "Terms and Conditions", "Email Sign-up", "Privacy Policy", "Contact Information", "Instagram", "Twitter", "Facebook", and "LinkedIn".

Use Case Three

Homepage: Samantha navigates to the homepage of Gatorbay to prepare to create a post to sell her textbook. Samantha sees the Post button on the homepage and clicks on that button.



Posting: Samantha sees the different categories she needs to fill out to create a post, so she links some pictures of her book, then fills out the form and clicks submit.

Photos

Title

Description

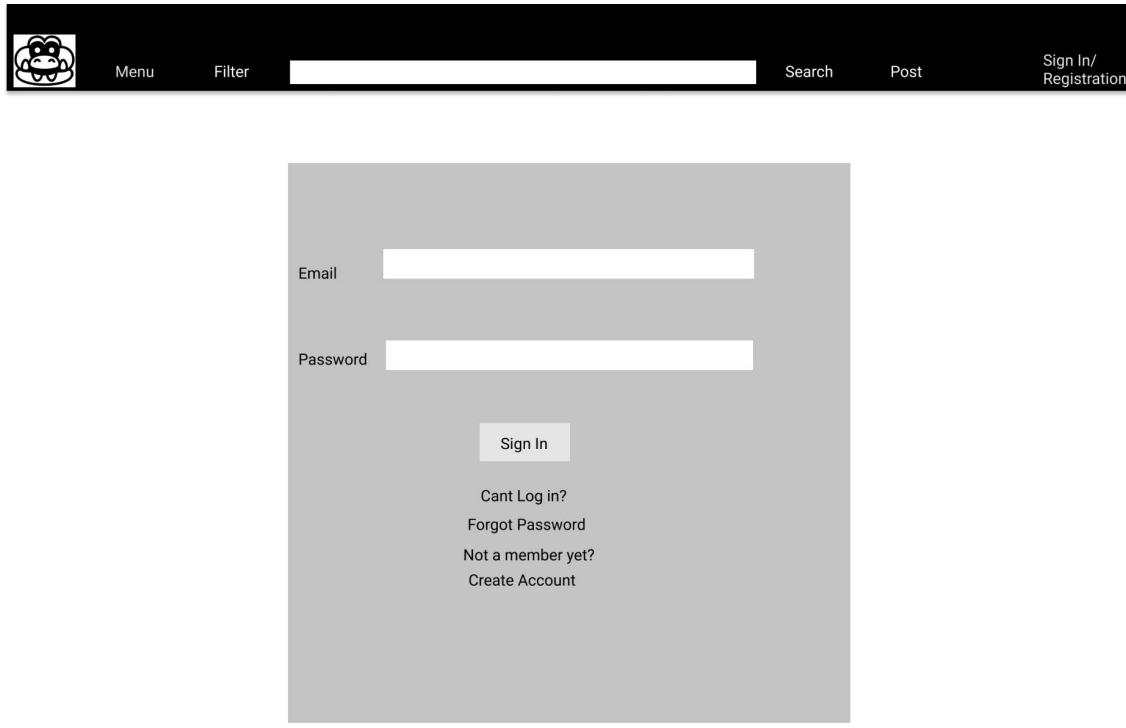
Category

Submit

ADVERTISEMENT



Login: Since Samantha does not have an account, she selects the Create Account button.



Registration: Samantha registers for a Gatorbay account by filling out all the fields that are required to be filled in. After filling out the form she clicks the Join Us button. A pop up appears with the words, “Registration Success”. After a few seconds Samantha is redirected to the Post Confirmation page.

The screenshot shows a web application interface. At the top, there is a dark header bar with a logo icon, 'Menu', 'Filter', a search bar, 'Post', and 'Sign In/Registration' buttons. Below the header, a modal window titled 'POP UP! Registration Success' is displayed. The modal contains fields for 'First name', 'Last name', 'Student ID', 'Email', 'Phone #', and 'Password'. Below these fields is a checkbox labeled 'By clicking, you are confirming that you agree to this sites Terms and Conditions.' At the bottom of the modal is a 'Join Us' button. The background of the page is white, and the overall layout is clean and modern.

Confirmation: Samatha sees the Confirm Post button. After selecting it Samatha sees that her post has been processed successfully. The post details list out everything that transpired.

The screenshot shows a user interface for a social media platform. At the top, there is a black header bar with a logo icon, 'Menu', 'Filter', a search bar, 'Search', 'Post', and a profile picture. Below the header, a gray rectangular area contains the text 'POP UP! Post Sucess'. In the center of the page is a larger gray box labeled 'Post Preview' with the message 'This Post will take up to 24 for an Admin to accept'. At the bottom of this box is a dark gray button labeled 'Confirm Post'. Below this box is another gray rectangular area labeled 'ADVERTISEMENT'.

The screenshot shows a black footer bar with a logo icon on the left. To its right are links to various sections: 'About Us', 'Careers', 'Terms and Conditions', 'Email Sign-up', 'Privacy Policy', 'Contact Information', 'Instagram', 'Twitter', 'Facebook', and 'LinkedIn'.

Use Case Four

Homepage: John is the system admin. He navigates to the homepage and decides to sign in as the admin.



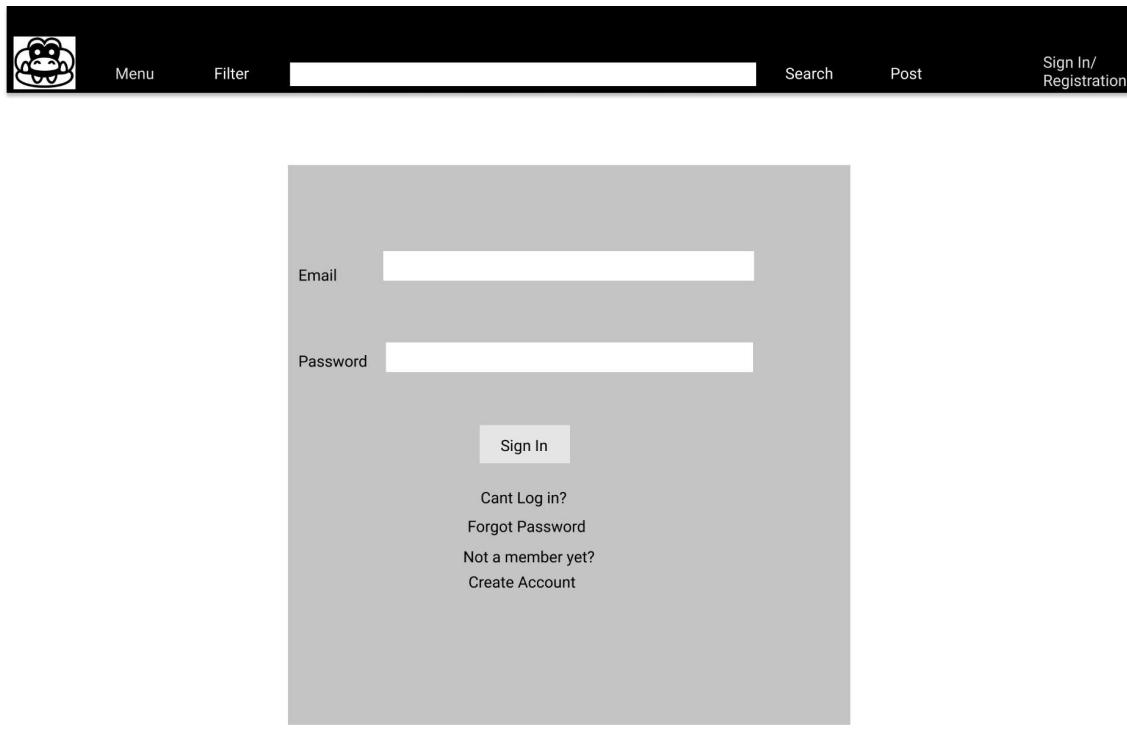
Recent Posts



ADVERTISEMENT



Login: John is prompted to login. After filling out the necessary information John selects Sign In.



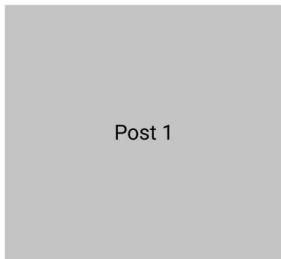
The image shows a login form interface. At the top, there is a dark header bar with a logo icon, "Menu", "Filter", a search bar, "Post", and "Sign In/Registration". Below the header is a light gray rectangular area containing a form. The form has two input fields: "Email" and "Password", each with a white input box. Below these fields is a "Sign In" button with a dark background and white text. To the right of the "Sign In" button are four links: "Can't Log in?", "Forgot Password", "Not a member yet?", and "Create Account".



Pending Post: John sees the display of the current pending posts. He then selects one of them.



Current Pending Posts



ADVERTISEMENT



Post Confirmation: John reviews the post and decides to confirm it using workbench.

The screenshot shows a dark-themed user interface for an admin workbench. At the top, there is a navigation bar with a logo, 'Menu', 'Filter', a search bar, 'Search', 'Post', and a profile picture. Below the navigation bar, a grey header bar displays the text 'Admin Workbench'. The main content area is a large grey box containing the text 'Post Preview' and 'This Post will take up to 24 for an Admin to accept'. At the bottom of this box are two buttons: 'Confirm Post' on the left and 'Deny Post' on the right. Below this content area is a large grey box labeled 'ADVERTISEMENT'.

The screenshot shows a dark-themed footer section. It features a logo on the left and a row of social media links on the right. The links include 'About Us', 'Careers', 'Terms and Conditions', 'Email Sign-up', 'Privacy Policy', 'Contact Information', 'Instagram', 'Twitter', 'Facebook', and 'LinkedIn'.

5. High level Architecture, Database Organization summary only

Libraries:

- React (Framework for app)
- Axios (Used for API calls from front end / back end)
- Bootstrap (Templates used for front end)
- React-Router (Used to route our pages)

Front end runs on React

Back end runs on Node, Express

Database Organization Summary

Users Table

INT uid (uq, ai, nn)	VARCHAR(225) uname (nn)	VARCHAR(225) password (nn)	INT phone_number (nn)	VARCHAR(225) email (nn)
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- **uid**: user ID; unique to distinguish one user from another.
- **uname**: user name; each user has their own user name.
- **password**: each user creates a password so only they can log into their account.
- **phone_number**: every user provides their phone number for contact information.

Products Table

INT pid (uq, ai, nn)	VARCHAR(225) pname (nn)	VARCHAR(225) description (nn)	VARCHAR(255) ptag (nn)
--------------------------------	-----------------------------------	---	----------------------------------

- **pid**: Products ID: unique to identify different products from one another.
- **pname**: The name of a product.
- **description**: The description of the product.
- **ptag**: Product tag; determines if the product is a book, furniture, or electronic.

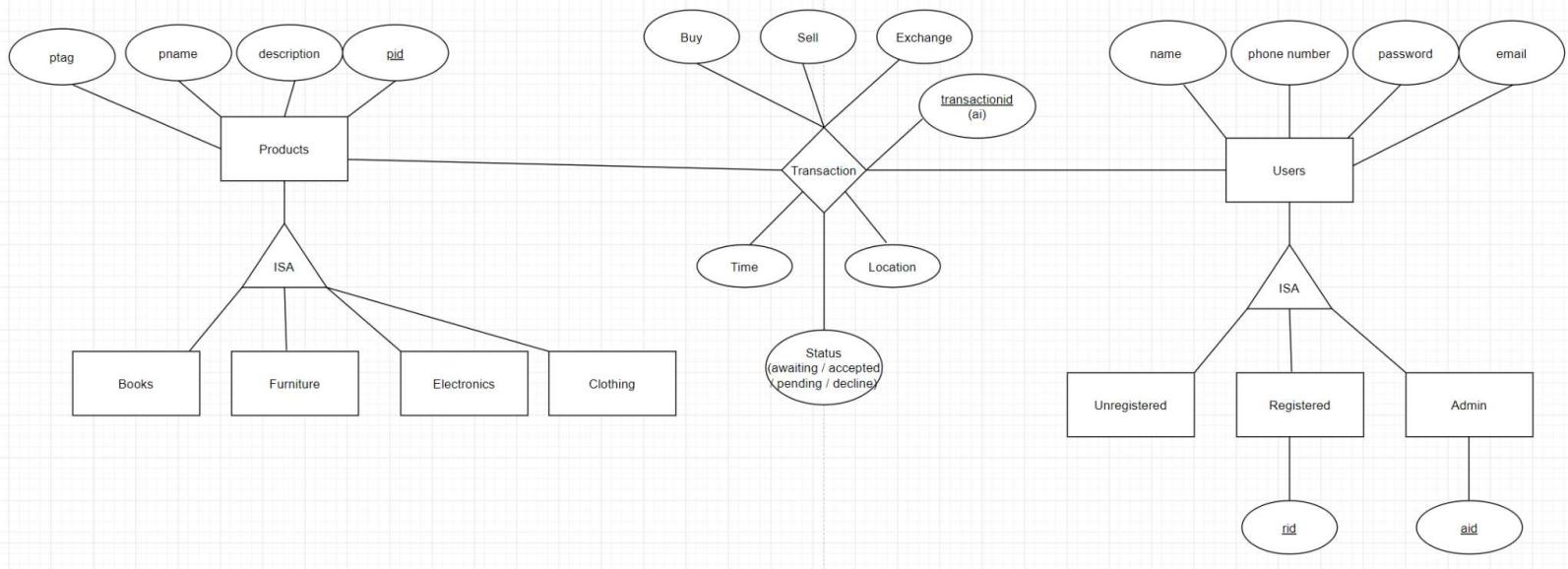
Transaction Table

INT tid (uq,ai,nn)	VARCHAR(225) ttag (nn)	DATETIME time (nn)	VARCHAR(225) location (nn)	VARCHAR(225) status (nn)
------------------------------	----------------------------------	------------------------------	--------------------------------------	------------------------------------

Foreign keys of Transaction Table

INT pid (fk)	INT uid (fk)
------------------------	------------------------

- **tid:** transaction ID; unique to identify differing transactions from one another.
- **ttag:** transaction tag; determines if the transaction is a buy / sell / or exchange.
- **time:** stores the time for any pending / completed transaction.
- **location:** location of various approved safe zones for transactions.
- **status:** keeps track of a post's status; if a buyer moves forward with a transaction and the exchange is pending, the status will reflect that.



Media Storage

- The only media being used in our application are JPG files for product images and our group's profile pictures. All of this media will be stored in DB BLOBs.

Search / Filter Architecture and Implementation

- The search consists of two attributes; Product Tag (ptag) and Product Description (description) that are saved and updated in the React State. The Product Tag (ptag) exists in the form of a drop down on the side of the search bar and contains all of the product types stored within the database (Books, Furniture, Electronics, Clothing). The Product Description is stored via an onChange function that auto updates every time the user enters a character into the search bar. When the user hits search, both the drop down value (ptag) and the search value (description) are sent within an API function to the back end.
- When filtering, the back end grabs these two values (ptag, description) and sends a query to the database using SELECT. The ptag attribute uses the WHERE operator to grab the exact match, while the description attribute uses

the LIKE operator followed by “%” to return any product that matches the regular expression value of description.

- If the user selects “none” from the drop down, requesting that no specific category is selected, the SQL statement will instead pull all categories from the database. The LIKE operator is still implemented in this functionality, allowing the user to search and filter requested parameters as intended.

6. Identify actual key risks for your project at this time

- skills risks:
 - Team lead shall learn more about Bootstrap and React.
- schedule risks:
 - Due to only having five people in the team the schedule will always be a pressing matter.
- technical risks
 - None
- teamwork risks
 - None
- legal/content risks:
 - None

7. Project management

I Believe it would be wise to use the resources that you have given us. I will research Trello and learn how to utilize it. I am sure that it could only help us as the project moves forward and the tasks become more difficult. It would be good to ensure that all of the tasks are properly assigned with due dates to check for completion in a timely manner. Up to this time I have been doing relativity the same thing but with pen and paper.

SW Engineering CSC648/848 Spring 2022

GatorBay

Team 6

Team Lead: Bobby Roots broots@mail.sfsu.edu

Backend Lead: Michael Davichick

Backend Member: William Rattan

Frontend Lead: Michael Wang

GitHub Master: Michael Almeda

Milestone 3

Date of submission: 04/20/2022

Summary of Milestone 3 ZOOM meeting review with Prof. Petkovic
and plans for further development

Team number: 06

Meeting date: 4/20/2022

Summary of feedback on UI (list if items, note that details are available in ZOOM recording)

Summary of feedback on code and architecture

Need to make better commit comments. Good title on code pages. Could have different architecture but what we have is good.

Summary of feedback on github usage

Percentages of who used github are not correct.

Summary of feedback on DB

Need to change some of the names of database to match what we have committed to using in previous milestone.

Summary of feedback on teamwork

Even though we only have 5 people the teamwork is going very well.

Any other comments and issues

Just concentrate on P1's due to the size of our group.

Check Point (CP) if given, DUE:

-Make some logo on the left, not just class umber, better that way. Even just a product/app name would do

-Do not hide POST under dashboard, have it as a tab always visible (we spoke about this a lot, check Yelp for example)

-I see some item in the left, blue button saying, "Show Alert". It was not in specs, remove it

-Must have SAME CSS in all pages, including search group.

-Pull down menu: default should be ALL and not NONE

-POST: Have CANCEL button as well. Below POST button say "It might take up to 24 hours for your post to be approved by admin"

Due date: 4/25/2022

List below agreed upon P1 list of features for final delivery which constitute product plan.

a. Priority 1

i. Unregistered:

1. Unregistered users shall be able to browse posted items.
2. Unregistered users shall be able to create an account.
3. Unregistered users shall be able to log in.

ii. Registered:

1. Registered users shall inherit everything unregistered users

have

2. Registered users shall be able to buy displayed products.
3. Registered users shall be able to post products
4. Registered users shall be able to sell products

5. Registered users shall be able to see available messages on a personalized dashboard.

iii. Admin:

1. Admin users shall inherit everything registered users
2. Admin users shall be able to approve post request
3. Admin users shall be able to disapprove post request
4. Admin users shall be able to remove posts

SW Engineering CSC648/848 Spring 2022

GatorBay

Team 6

Team Lead: Bobby Roots broots@mail.sfsu.edu

Backend Lead: Michael Davichick

Backend Member: William Rattan

Frontend Lead: Michael Wang

GitHub Master: Michael Almeda

Milestone 4

Date of submission: 05/14/2022

1) Product summary

a) Name:

i) GatorBay

b) Describe your Product:

i) All of us from Team 06 acknowledge that Students, Faculty, and Staff could use a website that caters more to them. That is why Team 6 has decided to build GatorBay. GatorBay will offer the exchange of goods such as Furniture, Clothes, Books, and electronics. What makes GatorBay so unique is that it is exclusively for SFSU Students, Faculty, and Staff. That along with our 24/7 operating hours at safe locations throughout SFSU we help to assist in the ease of making transactions in a non-harmful environment. Team 06 is dedicated to making this dream a reality.

c) Itemized list of ALL major committed functions:

- i) System allows unregistered users to browse posts
- ii) System allows unregistered users to create an account
- iii) System allows unregistered users to log in
- iv) System allows registered users to have all the rights of unregistered users
- v) Registered users are able to buy displayed products
- vi) Registered users are able to post products
- vii) Registered users are able to sell products
- viii) Registered users are able to see available messages
- ix) Admin users have all the abilities as registered users.
- x) Admin users can approve a post request
- xi) Admin users can disapprove a post request.
- xii) Admin users can remove a post.

d) Unique:

i) Search has the ability to filter results from four main categories.

e) URL to your product accessible to instructors:

i) <https://inlaid-crane-341607.uc.r.appspot.com/>

2) Usability test plan

- a) Major function to be tested: Search
- b) Test objectives: Testing usability of search is to obtain the website's search abilities.
When the intended user inputs data via search the correct results will be displayed within the results.
- c) Test background and setup:
 - i) Start system desktop
 - ii) Go to this URL : <https://inlaid-crane-341607.uc.r.appspot.com/>
 - iii) Load application
 - iv) Intended users are SFSU Faculty, Staff, and Students with low level (basic) knowledge of computer technology
- d) Usability Task description:
 - i) Task display only books from the URL
 - ii) Computer state search bar is blank
 - iii) Successful compilation When book results are only displayed
 - iv) Benchmark Completed within 1 minute
- e) Evaluation of Effectiveness:
 - i) Percentage of people who could find the search bar
 - ii) Percentage of people who could find the search button
 - iii) Percentage of people who found the correct results
- f) Evaluation of Efficiency
 - i) Average number of clicks user did to complete task
 - ii) Average total time it took to complete task
 - iii) Average number of screens user saw before task was complete
- g) Evaluation of user satisfaction:

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Easy to locate the search bar.					
Results were correct.					

Overall experience was pleasant.					
----------------------------------	--	--	--	--	--

3) QA test plan

- a) Test objectives:
 - i) Testing that the search is working as per specs
- b) HW and SW setup (include URL):
 - i) Go to your laptop
 - ii) Open your firefox, edge, or safari browser
 - iii) Go to URL <https://inlaid-crane-341607.uc.r.appspot.com/>
- c) Feature to be tested
 - i) Searching for an item
- d) QA Test plan in table format:

Test #	Test title	Test description	Test input	Expected correct output	Test result Pass/Fail
1	Search Test	Testing for correction of search function	Input book into the field of text search	Results should show two separate books stored in the DB.	Pass
2	Search Test	Testing for correction of search function	Input chair into the field of text search	Results should show no chairs because there are none stored in the DB.	Pass
3	Search Test	Testing for correction of search function	Input jeans into the field of text search	Results should show one pair of jeans stored in the DB.	Pass

4) Code Review

Screenshots of email messages:

Michael Andrew Davichick

To: Michael Anthony Almeda

Cc: Bobby Roots

Hi Michael Almeda,

When you have a minute, please do a QA review / usability test for the following features as per Milestone 4, section 4:

- Register User
- Sign In

You can find the following code segments as follows:

- Register User - application/my-app/client/src/CreateUser.js
 - Password Validation: line 48
 - CheckBox Validation: line 60
 - Form Field Validation: line 99 +
- Sign In - application/my-app/client/src/SignIn.js
 - Verify User: line 53
 - Form Field Validation: line 93+

Please submit your findings as per protocol of Milestone 4.

Thank you in advance for your assistance.

Regards,

Michael Davichick

Michael Anthony Almeda

To: Michael Andrew Davichick

Cc: Bobby Roots

Hi Michael Davichick,



Sat 5/14/2022 8:30 PM

Thank you for providing a thorough outline to perform a QA review/usability test.

Below is a summary of my review on the code segments you provided:

- Register User
 - Password Validation:
 - The field validation function used for password validation contains good use of in-line comments.
 - CheckBox Validation:
 - No in-line comments are used in the implementation of the checkFunction().
 - Contains consistent naming conventions among variables.
 - Form Field Validation:
 - Great use of in-line comments.
 - The formatting of every onChange event stays consistent with every field the user needs to enter.
- Sign In
 - Verify User:
 - Spacing for the setTimeout function is inconsistent and should be properly formatted.
 - Good use of in-line comments and consistent variable naming.
 - Form Field Validation:
 - Clean formatted code.
 - In-line comments well placed.
 - setEmail, setPassword, etc... all were consistent with one another.

Overall, the code segments I reviewed contained useful in-line comments, header comments, and consistent naming conventions. A few more comments could be used in some areas. The header comments provide sufficient information about the contents of the file. Class methods and variable naming conventions stay true to previous naming conventions stated in Milestone 2.

In addition to the reviewed code segments, Github commits did provide detail on what was being committed to the repository, however including the name of the file being committed should be included in the commit message.

Great work!

Best regards,
Michael Almeda

Screenshots of commented reviewed code:

```
/*
 * Project: SFSU Software Engineering Project CSC648-848, Spring 2022
 * Author(s): Michael Davichick
 * Team: 06
 *
 * File: CreateUser.js
 *
 * Description: This file allows the user to create an account with our
 * web app by having them provide their information such as name, phone
 * number, email, and password.
 *
 */
*****
```

```
/*
     --- CODE REVIEW ---
*
* @Header Comment
* Great use of a basic header comment. It provides enough information
* to get a good understanding of this file's purpose and it's author.
*
*/
*****
```

```
// import './App.css';
import './Forms.css';
import React from "react";
import { useState } from "react";
import Axios from "axios";
import { useNavigate, useLocation, Link } from "react-router-dom";
import Footer from "./Footer";
import Header from "./Header";
import { Form } from "react-bootstrap";
```

```
/*
     --- CODE REVIEW ---
*
* @function checkFunction()
* A comment to describe what this function's purpose is would be ideal
* for keeping the in-line comment consistency.
* Overall, good consistency with in-line comments.
*
*/
function checkFunction() {
  if ((document.getElementById("check")).checked) {
    alert("The checkbox is checked");
  }
  else {
    alert("The checkbox is not checked")
  }
}
```

```
✓ /*****
 * Project: SFSU Software Engineering Project CSC648-848, Spring 2022
 * Author(s): Michael Davichick
 * Team: 06
 *
 * File: SignIn.js
 *
 * Description: This file allows the user to sign into their account
 * by providing their email and password. If they don't have an account
 * they can choose the link to create an account.
 *
 *****/
✓ /*
     --- CODE REVIEW ---
 *
 * @Header Comment
 * Great use of a basic header comment. It provides enough information
 * to get a good understanding of this file's purpose and it's author.
 *
 */
✓ import './Forms.css';
import Axios from "axios";
import React from "react";
import { useState } from "react";
import { Link } from "react-router-dom";
import { useNavigate, useLocation } from "react-router-dom";
import Footer from "./Footer";
import Header from "./Header";
```

* --- CODE REVIEW ---

```
@function setTimeout()
Spacing among teh if statements is not consistent.
Consider reformatting.

const verifyUser = () => {
  // Send our User Parameters to the backend for retrieval
  SignIn();

  // If our user List is not null, then there was a successful match between user login and backend
  setTimeout(function(){
    if(userID>=0){
      console.log("success");
      console.log("User name: " + userName);
      console.log("User ID " + userID);
      // Once in this scope, our user has been logged in and we can add them to the session
      sessionStorage.setItem("id", userID); // User ID is a unique key in Users Table to identify individual users
      sessionStorage.setItem("fname", userName);
      sessionStorage.setItem("loggedIn","true"); // loggedIn is a boolean value used to change CSS properties when logged in

      if (location && location.state && location.state.referrer) {
        navigate(location.state.referrer);
      } else {
        navigate('/');
      }
    }
    if (userID < 0){ // Else invalid login, prompt user to try again
      // console.log("passwords do not match!");
      alert("Email or Password was invalid, Please try again.");
    }
  }, 1000);
};
```

5) Self-check on best practices for security

- a) Make a table

Asset to be protected	Types of possible/expected attacks	Strategy to mitigate/protect the asset
User information	Using non college email	Verify sfsu.edu during registration
Product information	Malicious code injected	Admin approves prior to going live
Search	SQL attack	Validation Process

6) Self-check of the adherence to original Non-functional specs:

- System requirements: describe the system requirements (architecture, system services, networks, platforms etc.)
 - Server Host: Google Done
 - Operating System: Linux Done
 - Server Database: MySQL Done
 - Web Server Node JS Done
 - Server-Side Language: JavaScript Done
 - Additional Technologies: Done
- Web Framework: Bootstrap Done
- IDE: Visual Studio, VS code Done
- Usability requirements: describe specific usability and UI issues, users who will use the system, delivery clients
 - Anyone on the website can search for posts without logging in. Done
 - Registered users can create posts and see the user's contact information from already approved posts. Done
 - Admins are required to approve posts prior to being visible to the Public. Done
- Performance requirements:
 - Average latency will be 150 ms for refreshing pages and after posting or creating a new account. Done
 - Accuracy will be 97 percent so every one hundred requests sent to the server, a maximum of 3 errors shall be thrown. Done

- Bandwidth is a maximum of 7 gigabytes of flow from up to 50 external IP addresses and a maximum of 3 gigabytes of flow from one IP address.
On track

- Storage, security, environmental requirements:

- MySQL database provides secure connections, authentication services, fine-grained authorization and controls as well as data Encryption.
On track
- All passwords will have a separate encryption process prior to being stored on the back end for verification.
On track

- Marketing, legal requirements (logos, branding, licensing):

- No logos currently exist or are present for GatorBay

4) Product Screenshots

Homepage

The screenshot shows the GatorBay homepage with a dark header bar containing the text "CSC 648 - 03" and "SFSU Software Engineering Project CSC 648-848, Spring 2022. For Demonstration Only". Below the header is a teal navigation bar with the text "GatorBay helps SFSU Students, Staff, and Faculty to obtain Books, Clothes, Electronics, and Furniture". A search bar with a dropdown menu set to "None" and a "Search" button is located above the results. The main content area displays three product cards:

- Bed Frame**: Price: \$25. Buttons: Product Page (blue), Message Seller (green).
- NVIDIA 3080**: Price: \$1000. Buttons: Product Page (blue), Message Seller (green).
- Used Couch**: Price: \$35. Buttons: Product Page (blue), Message Seller (green).

At the bottom of the page is a dark footer bar with links: GatorBay, About Us, Careers, Terms and Conditions, Privacy Policy, Contact Information, Instagram, Twitter, Facebook, and LinkedIn.

Filter Options

This screenshot is identical to the one above, but the dropdown menu in the search bar is now open, showing a list of filter categories: None, Books, Clothing, Electronics, and Furniture. The "None" option is currently selected.

Filtered Search of Furniture

Furniture

4 results



Lava Lamp
Price: \$15

[Product Page](#) [Message Seller](#)



Kitchen Table
Price: \$65

[Product Page](#) [Message Seller](#)



Used Couch
Price: \$35

[Product Page](#) [Message Seller](#)



Bed Frame
\$25

New bed frame for sale

[Message Seller](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Individual Product Page

CSC 648 - 03 SFASU Software Engineering Project CSC 648-848, Spring 2022. For Demonstration Only

Home Create Post Team Log In Sign Up



Bed Frame
\$25

New bed frame for sale

[Message Seller](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Message Seller from Individual Product

CSC 648 - 03

SFSU Software Engineering Project CSC 648-848, Spring
2022. For Demonstration Only

Home Create Post Team Log In Sign Up



Bed Frame

\$25

New bed frame for sale

[Message Seller](#)

Select Exchange Location ▾

Send additional information

[Send Message](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Message Sent

CSC 648 - 03

SFSU Software Engineering Project CSC 648-848, Spring
2022. For Demonstration Only

Home Create Post Team Profile Sign Out



Bed Frame

\$25

New bed frame for sale

[Message Seller](#)

Police Station ▾

I need a frame

[Send Message](#)

Message Was Sent! ×

Please do not spam similar messages.

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Log In

CSC 648 - 03 SFSU Software Engineering Project CSC 648-848, Spring 2022. For Demonstration Only

Home Create Post Team Log In Sign Up

Sign In

Email
BRoots@mail.sfsu.edu

Password

[Forgot Password?](#)

Not a member yet? [Create Account](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Create Post

CSC 648 - 03 SFSU Software Engineering Project CSC 648-848, Spring 2022. For Demonstration Only

Home Create Post Team Log In Sign Up

Create Posting

Title

Category

Description

Price

Photo
*Images must be under 300x300

615jKGU...79.jpg

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Registration

CSC 648 - 03

SFSU Software Engineering Project CSC 648-848, Spring
2022. For Demonstration Only

Home Create Post Team Log In Sign Up

Sign Up

*First Name

*Last Name

*Phone Number

 E.g. 3000-XXXX-XXXX

*Phone numbers are only used if an issue occurs

*Email

 gator@mail.sfsu.edu

*Password

*Confirm Password

By checking the box, you are agreeing

to this sites [Terms and Conditions](#).

[Cancel](#)

[Sign Up](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

Post Created

CSC 648 - 03

SFSU Software Engineering Project CSC 648-848, Spring
2022. For Demonstration Only

Home Create Post Team Log In Sign Up

Post Created Successfully

This post will take up to 24 hours for Admins
to approve before released onto our website.

Thank you for your patience!

[Confirm](#)

GatorBay About Us Careers Terms and Conditions Privacy Policy Contact Information Instagram Twitter Facebook LinkedIn

5) Database Organization

Category Table

Category

1 • **SELECT * FROM Team6.Category;**

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	CID	UniqueCategory
▶	1	Books
2	Clothing	
3	Electronics	
4	Furniture	
*	NULL	NULL

Items Table

Items

1 • **SELECT * FROM Team6.Items;**

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	pid	user	category	pname	pdescription	pprice	pimg	approved	time	pdata
▶	1	4	1	CSC 220 Book	Intro To Java Book	35	BLOB	1	2017-06-15 09:34:2...	data:i...
2	4	2	Blue Jeans	Applebottom Jeans	25	BLOB	1	2022-05-20 12:40:1...	data:i...	
3	4	4	Lava Lamp	Throwback to someones childho...	15	BLOB	1	2022-05-20 12:40:1...	data:i...	
4	4	1	Math 324 Book	Linear Algebra Textbook	30	BLOB	1	2022-05-20 12:40:1...	data:i...	
5	4	3	Record Player	Turn Table Record Player	40	BLOB	1	2022-05-20 12:40:1...	data:i...	
6	4	3	TV	30 inch flat screen tv	35	BLOB	1	2022-05-20 12:40:1...	data:i...	
7	4	4	Kitchen Table	Good condition, no chairs includ...	65	BLOB	1	2022-05-20 12:40:1...	data:i...	
8	4	2	Air Force 1s	Collectors edition	70	BLOB	1	2022-05-20 12:40:1...	data:i...	
9	4	3	Tamagotchi	Don't forget to feed it!	5	BLOB	1	2022-05-20 12:40:1...	data:i...	
10	4	1	Thrasher Magazine	Good read for skaters	2	BLOB	1	2022-05-20 12:40:1...	data:i...	
11	4	2	Tshirt	Beach shirt looking for new owner	7	BLOB	1	2022-05-20 12:40:1...	data:i...	
12	4	4	Used Couch	1 owner, good condition	35	BLOB	1	2022-05-20 12:40:1...	data:i...	
13	6	3	NVIDIA 3080	A very expensive Paper Weight	1000	BLOB	1	2022-05-20 12:40:1...	data:i...	
14	4	1	1984	A book i had to read in highschool	15	BLOB	0	2022-05-20 12:40:1...	data:i...	
25	1	4	Bed Frame	New bed frame for sale	25	BLOB	1	2022-05-20 12:40:1...	data:i...	
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Messages Table

Messages Limit to 1000 rows

1 • SELECT * FROM Team6.Messages;

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

	sender	receiver	message	mid	location	time	post
▶	4	6	Hello, I am interested in...	8	Main Library	2022-04-17 12:46:08.0	13
1	4		I am interested in your ...	9	Police Station	2022-05-12 12:46:08.0	11
6	4		im interesting in your tee	10	Main Library	2022-05-05 12:46:08.0	11
1	4		Hello, I am interested in...	12	SFSU	2022-05-18 12:46:08.0	12
1	4		I am interested in your ...	13	Main Library	2022-05-17 12:46:08.0	12
1	4		I am interested in your ...	14	Police Station	2022-01-10 12:46:08.0	12
3	4		Cool T-Shirt	15	SFSU	2022-02-20 12:46:08.0	11
2	4		I would like to trade you...	16	Police Station	2022-02-17 12:26:08.0	11
3	4		let me know when you ...	17	Main Library	2022-01-20 12:30:08.0	11
2	4		What beach did you ge...	18	SFSU	2022-02-04 12:39:08.0	11
6	4		I'll pay you 7 dollars for ...	19	Police Station	2022-03-18 12:46:08.0	11
1	6		Hello, I am interested in...	20	Main Library	2022-05-20 12:46:08.0	13
4	6		Nice GPU I would like o...	21	Main Library	2022-05-20 15:00:44.0	13
*	HULL	HULL	HULL	HULL	HULL	HULL	HULL

Roles Table

Roles Limit to 1000 rows

1 • SELECT * FROM Team6.Roles;

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

	rid	usertype
▶	3	admin
2		registered
1		unregistered
*	HULL	HULL

Users Table

The screenshot shows the MySQL Workbench interface with the 'Users' table selected. The table has columns: uid, fname, lname, phone, email, password, and usertype. The data grid contains 6 rows of user information.

	uid	fname	lname	phone	email	password	usertype
▶	1	Mike	Davichick	1(209)222-3333	Mdavichick@mail.sfsu.edu	Password	3
	2	John	Doe	1(123)456-7890	Something@mail.sfsu.edu	Secret123	2
	3	Michael	Almeda	1(209)222-3333	Malmeda@mail.sfsu.edu	Password	3
	4	Bobby	Roots	1(209)212-3222	Broots@mail.sfsu.edu	Password	2
	5	Michael	Wang	1(209)415-2233	Mwang@mail.sfsu.edu	Password	2
*	6	William	Rattan	123-456-7890	wrattan@mail.sfsu.edu	Password	3
	NULL	NULL	NULL	NULL	NULL	NULL	NULL

6) Github Organization

- A. List of main branches
 - a. main: only Github Master and Team Lead had access to the main branch.
 - b. Frontend
 - c. Backend
- B. Top level folder in GitHub file organization
 - a. client
 - i. Contains 95% of our projects JavaScript files.
 - b. server
 - i. Contains API calls
 - ii. Connects to database
- C. Screenshot of GitHub home page

 Search or jump to... Pulls Issues Marketplace Explore

[CSC-648-SFSU / csc648-03-sp22-team06](#) Private Watch 1 Fork 0 Star 0

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main Go to file Add file Code

malmeda Merge pull request #28 Backend to main ... 2 hours ago 175

.vscode Product Page last month

Milestones Add files via upload 4 days ago

application Fixed Confirmation of Post bug, Fixed Time di... 2 hours ago

credentials Credentials updated with Server info and dat... 28 days ago

LICENSE Initial commit 3 months ago

README.md Updated README 2 months ago

README.md

csc648 Repository

Please when ready add your teams application URL or IP to the repository description. This will help with grading. Teams are expected to keep this value up to date.

Please do the following steps before completing Milestone 0.

a. 1. Change the name of the repository. All that needs to change is the NN to

About

csc648-03-sp22-team06 created by GitHub Classroom

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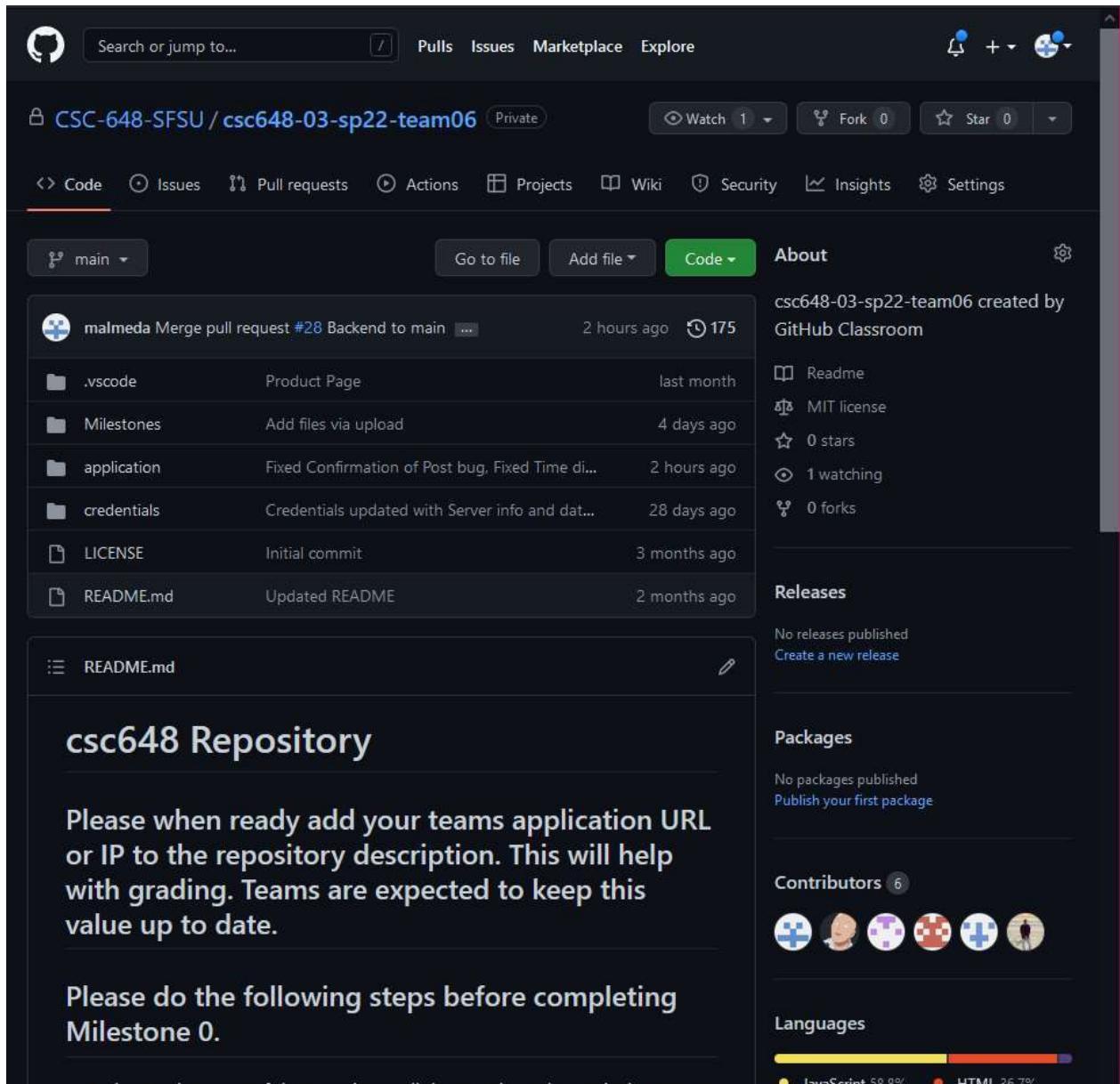
Packages

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Languages

JavaScript 58.8% HTML 36.7%

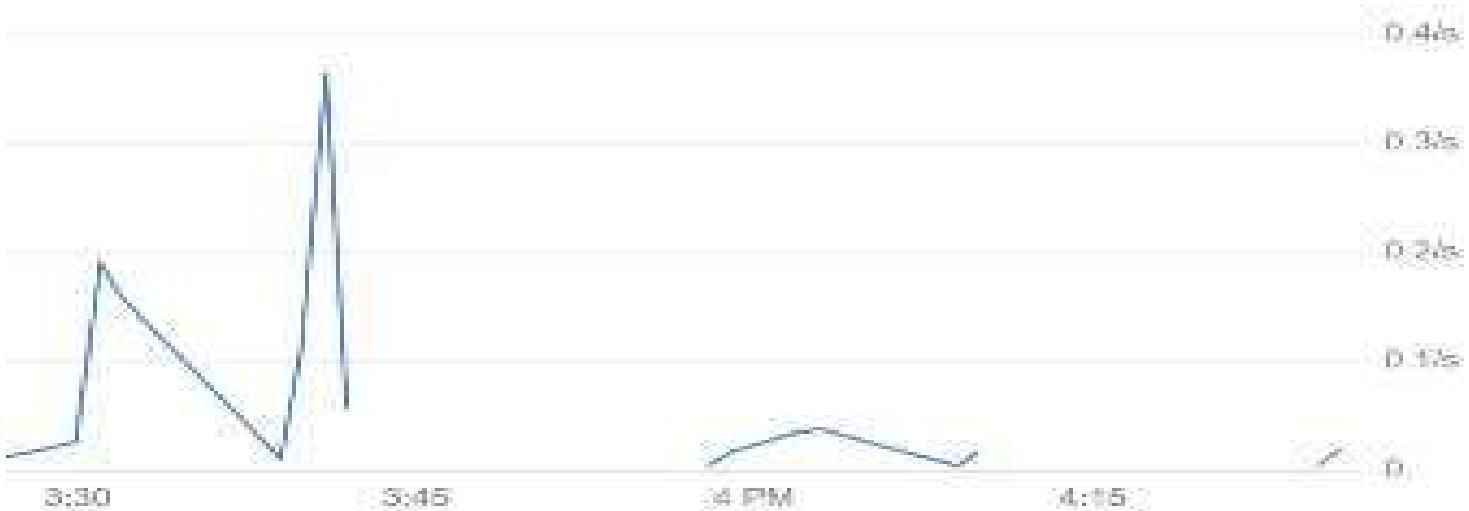


7) Google analytics status plot for your www site



API APIs

Requests (requests/sec)



● Requests: 0.017/s

→ Go to APIs overview

App Engine



Summary (count/sec)



→ Go to the App Engine dashboard

8)Project management

N/A

9) Team member self assessment and contributions

CSC 648 Team member self assessment and contributions

BR

Bobby Roots



To: William Rattan; Michael Andrew Davichick; Michael Anthony Almeda; Michael Wang

Fri 5/20/2022 2:55 PM

Confucius once said, "If you are the smartest person in the room, then you are in the wrong room." I was definitely in the right room regarding my team. These four people are absolutely brilliant, and they are hard workers that would be an asset to any company they work with. My contributions to the team project were not that great when in comparison to everyone else.

Even though I have 18 commits on main most were not for code. My main contribution was to ensure that we all were on the same page and the workflow continued. Teamwork was key in completing this assignment. In this aspect I found myself very fortunate to have a team with people that work well together and were focused on the task.

One of the main challenges I encountered in the team project was doing it over zoom. The lack of in-person interaction was a challenge. Usually as team lead, I would take them out for lunch to celebrate the completion of the product but in the times, we live in now that is not possible. This was the first time being a team lead for any computer science project. One thing I would do better next time would be to improve our SCRUM meetings. When we conducted our meetings, I did not focus the conversations well enough. That lead to our meetings lasting for over an hour on some occasions. This could also be due to the lack of human interaction due to us holding meetings over zoom. I wish I could have met the team in person because my interactions with them leads me to believe that they are outstanding people that I hope one day to work with outside of college.

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Michael Davichick - Team 6 Self Assessment and Contributions



MD Michael Andrew Davichick

To: Bobby Roots; William Rattan; Michael Anthony Almeda; Michael Wang
Cc: Michael Andrew Davichick

Fri 5/20/2022 2:57 PM

A) Contributions to Team project and Teamwork

- Initialization of React Project
- Template implementation of Create Post and Create User- Created and saved state variables to send to Backend.
 - Form dropdown
 - Photo conversion to Blob format
- Created Results Page that houses the functionality for searching through the Backend Database
- Created and implemented Sign In page
- Implemented Sessions that work across the entire application
- Created API Calls for both Frontend and Backend
 - Post - CreateUser, CreateItem, CreateMessage
 - Get - SignIn, getMessages, MyPosts, Products
 - Helped William implement the other APIs
- Worked alongside William to update Server.js for both Local and Server deployment
- Created all tables in the Backend MySQL server alongside William

B) Number of Submissions made to GitHub

- 25 Commits to Backend, 12 Commits to Main

C) One brief paragraph on main challenges encountered

- One main challenge encountered was the conflict of contributions when working with different teams on a single page. Often, I would be the one to implement the functionality needed to store variables for API calls used to send the data to the Backend. However, with so few team members, we often found ourselves working together on a single page (Frontend CSS and Backend Functionality). This caused a lot of overwrites and conflict when attempting to merge pages. The second challenge faced early was the creation of the Server used to house our application. Due to how green our team was when working on a server, I thought it would be in everyone's best interest to implement a GUI to traverse the server. This caused our server to crash throughout the installation process of needed apps and a lot of headaches.

D) One brief paragraph on what I would do better next time based on what was learned in the class about SE management and Processes

- One of the biggest things I would improve on for next time is my communication with the other teams in our group. Many times, we found ourselves working together on a page but separately; taking the extra time to plan beforehand would have avoided many conflicts and loss of code. We could have written different components on our own then come together on a main page and brought everything together cohesively. Another change that I would implement next time is to plan out all the functionality of the page beforehand. This would allow the Frontend team to work on a finished product instead of Backend coming back to complete a task that causes a conflict.



Fri 5/20/2022 2:53 PM

Team member self assessment and contributions



Michael Wang

To: Bobby Roots

Cc: Michael Anthony Almeda; Michael Andrew Davichick; William Rattan



Fri 5/20/2022 2:53 PM

a)

- Team page
- Home page
- Product Page
- Nav Bar
- Figma
- CSS for those pages
- Bug fixes

b)

- 34 commits

c)

- Frontend CSS React Bootstrap conversion. Working with backend to bring backend changes to frontend. Completion of milestones on time while working on projects from multiple other classes. Fulfilling all priority one requirements listed on milestone.

d)

- Setting a consistent color and design theme with frontend pages so that all frontend pages look consistent. A dark and light mode in profile settings for users to select. A dedicated mobile site version of the URL.

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CSC 648 Team Member Self Assessment and Contributions

↶ ↷ ↲ ↳ ...

MA Michael Anthony Almeda
To: William Rattan; Michael Andrew Davichick; Bobby Roots; Michael Wang

Fri 5/20/2022 2:56 PM

The following are my contributions to our team project.

- Fulfilled the role of GitHub master.
- Created GitHub repository.
- Maintained all branches on GitHub repository.
- Merged commits to main branch.
- Assisted Frontend in development.
- Helped create sign in page.
- Helped create create post page.
- Helped create create user page.

Number of submissions made to GitHub

- 43

Challenges faced in team project

- The challenges I faced was taking on the role as GitHub master. I used GitHub for previous classes before but never had to take on the responsibility of maintaining a repository. I had to learn how to set restrictions for certain branches by not letting everyone in my group be able to commit to the main branch. I also had to learn the proper way of using commit messages and enforcing my group members to follow proper commit message etiquette.
- Setting up the server. I worked with Backend to help setup the server with AWS but we struggled with it. We decided to take another route and use Google's Cloud Services, and everything worked.

Aspects I would do better on next

- Reflecting on my experience with this group project, I wish I was more involved with other aspects of the web application development. Being in a small group of five, I had the opportunity to flex from working in different areas, however I didn't take full advantage of it. I could have learned a lot more from all aspects of development.

Overall, this team project was a great learning experience, and I was fortunate to be in a group of skillful members.

Best regards,

Michael Almeda | GitHub Master

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CSC 648 Team member self assessment and contributions



William Rattan

To: Bobby Roots; Michael Andrew Davichick; Michael Anthony Almeda; Michael Wang



Fri 5/20/2022 2:51 PM

- Created API for getting a single item post
- Created API for getting the three most recent item posts
- Helped created API for creating messages
- Helped create API for receiving messages
- Helped create API for signing in
- Helped create API for creating a user
- Helped create API for getting all products
- Created the website server for the application
- Managed the website server for the application
- Helped create middleware for Frontend to use APIs from backend

25 commits on the Backend branch and 6 commits on the Main Branch

The first challenge I ran into was creating the website for the application. Amazon AWS gave me a lot of trouble and it wasn't easy to set up a working server that the back end could get into. I changed to google cloud which while easier was also tricky. When we needed to have the server work off a database it took some time to figure out how to get the google app engine that ran the frontend code to receive APIs from the backend that ran from the google cloud SQL database. With the database having one table reference another table's values took quite some time to figure out as I had not had much experience with foreign keys.

I learned quite a bit the first thing I would do differently/improve on is creating the google cloud server. I would try to use and set up other applications and APIs to make the process a lot smoother such as docker. I would also set up other middleware for the project such as multer for image uploads. I would also try to change the cloud server from running two app engines to running two VMs for the website as it would result in a lighter load for the server. Lastly, In team meetings would go more in-depth about how to use the API calls from the backend to the frontend team to avoid any confusion about how to grab items, users, or messages from the database.

From,

Backend Member: William Rattan

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