Final Project for SW Engineering Class
CSC 648-848 Spring 2020

Gator Trade

Team 03

Samuel Bahlibi (Team Lead) samuel.bahlibi@gmail.com
Qian Hu (Front-end Lead)
Tingfeng Wan (Back-end Lead)
John Joshua Gutierrez (Github Master)
Eric Ngo (Full-Stack Developer)
Marvin Nguyen (Front-end Team)

Website Demo URL: http://3.22.78.154:3000/home/home.html

Product Summary

Product Name: Gator Trade

Our Product: Gator Trade offers San Francisco State students and faculty a convenient way to post and access media pertaining to their classes and other activities through a web client service. We aim to build a local e-commerce market that will exclusively allow students and faculty to post, search, browse, buy, sell and trade items for San Francisco State University student projects and/or class material for faculty members. Gator Trade's content is exclusive only to San Francisco State's class materials, therefore eliminating the need to browse other sites for content related to the user's class. Gator Trade is unique in which users are able to filter searches through categories pertaining to SFSU specific departments. Users are also able to select a meetup location on the SFSU campus when choosing to buy a physical object. Various major locations are available to select when a user is uploading media to the website such as the Malcolm X plaza or the library.

Major Functions:
1. Users shall be browse for media on the website
2. Users shall be register an account
3. Users shall be filter media by SFSU media classes
4. Users shall be search for media
5. Users shall be able to log in
6. Registered users shall also do 1-5
7. Registered users shall download free media
8. Registered users shall be able to message another user
9. Registered users shall be able to upload digital media to the website
10. Registered users shall be able to view a list of media they posted and messages

Website URL: http://3.22.78.154:3000/home/home.html

Product Screenshots

Home Page

Login Page:

Register Page

SFSU Software Engineering Project CSC 648-848, Spring 2020. For Demonstration Only

Register
* denotes required field

First Name:*

[Enter first name]

Last Name:*

[Enter last name]

Email address:*

[Enter email]

School Role:*

[▼]

Phone Number:*

[Enter phone number]

Password:*

[   ]

Confirm Password:*

[   ]

☐ I accept the terms and conditions .*

☐ I'm not a robot
reCAPTCHA

Search Page

SFSU Software Engineering Project CSC 648-848, Spring 2020. For Demonstration Only
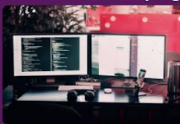
Gator GT Trade

Welcome! This is a site where faculty and students can post school related content.

[All ▼] [Search]

13 of 13 results for ""
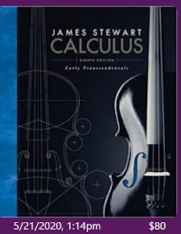
Freelance Developing

5/21/2020, 1:33pm $65

Apple Pencil Gen 1

5/21/2020, 1:20pm $150

Clipart of Pencil

5/21/2020, 1:59pm   Free

James Stewart Calculus Textbook

5/21/2020, 1:14pm $80

Queen Bed Frame

5/21/2020, 1:17pm $60

Lifeguard Fanny Pack   iPad Pro 10.5 2nd   PSY 330 Reader   Effective Modern C++   Rubber Duck

Message Page

Create Post   Setting   Account Page   Logout

SFSU Software Engineering Project CSC 648-848, Spring 2020. For Demonstration Only

Messages

Send Message

Inbox

Sent

Received From:	Messages:	Date:
sam@sfsu.edu	It's yours can you meet tomorrow at 1pm?	5/21/2020 1:44pm

---

Setting Page

About   Message

Create Post   Setting   Account Page   Logout

SFSU Software Engineering Project CSC 648-848, Spring 2020. For Demonstration Only

Setting

Password: ********   Edit

First Name: test   Edit

Last Name: LastName   Edit

Phone Number: 4154154555   Edit

Account Page

My page
Name: test LastName
Email: test@sfsu.edu
Phone Number: 4154154555

My post

Title: Lifeguard Fanny Pack, Date: 5/21/2020 1:52pm, Cost: 20
Title: Milestone 4, Date: 5/21/2020 4:31pm, Cost: 0

My purchased

3.22.78.154:3000/contact-page/contact.html

About Page

Team 03

We are students from San Francisco State University that are trying to help each other as well as faculty
by providing a web service that can buy, sell and/or share digital media to its users.

Project Manager

DB Organization

Posts

id	creator_email	create_time	title	cost	has_file	file_name	file_type	media_preview	media_content	post_body	license	is_approved	approver_email
1	rpaulson@mail.sfsu.edu	2020-05-21 20:33:30	Freelance Developing	65	0		null	/home/ubuntu/user-files/upload_352...		Many developers will just jump s...	For Sale	1	sam@sfsu.edu
2	sam@sfsu.edu	2020-05-21 20:20:19	Apple Pencil Gen 1	150	0		null	/home/ubuntu/user-files/upload_f4fd...		Two apple pencils for sale 150 f...	For Sale	1	sam@sfsu.edu
3	mnguye12@mail.sfsu.edu	2020-05-21 20:59:42	Clipart of Pencil	0	1	Single-Pencil-1-103...	image/jpeg	/home/ubuntu/user-files/upload_7aa...	/home/ubuntu/user-files/...	Free picture of a pencil. Please ...	Free Use and Modification	1	sam@sfsu.edu
4	sam@sfsu.edu	2020-05-21 20:14:44	James Stewart Calc...	80	0		null	/home/ubuntu/user-files/upload_1c4...		Textbook used for calc 1 and ca...	For Sale	1	sam@sfsu.edu
5	sam@sfsu.edu	2020-05-21 20:17:33	Queen Bed Frame	60	0		null	/home/ubuntu/user-files/upload_ff22...		Selling a queen sized bed frame...	For Sale	1	sam@sfsu.edu
6	test@sfsu.edu	2020-05-21 20:52:42	Lifeguard Fanny Pack	20	1	2CFD1F53-22C8-4...	image/jpeg	/home/ubuntu/user-files/upload_4d0...	/home/ubuntu/user-files/...	Need to save a life? Here's a ba...	For Sale	1	sam@sfsu.edu
7	sam@sfsu.edu	2020-05-21 20:22:03	iPad Pro 10.5 2nd G...	500	0		null	/home/ubuntu/user-files/upload_328...		iPad Pro 10.5 2nd gen 64gb app...	For Sale	1	sam@sfsu.edu
8	mnguye12@mail.sfsu.edu	2020-05-21 20:23:21	PSY 320 Reader	10	0		null	/home/ubuntu/user-files/upload_145...		Bought reader for PSY 320. Wo...	For Sale	1	sam@sfsu.edu
9	rpaulson@mail.sfsu.edu	2020-05-21 20:23:22	Effective Modern C...	15.69	0		null	/home/ubuntu/user-files/upload_ec6...		Coming to grips with C++11 an...	For Sale	1	sam@sfsu.edu
10	mnguye12@mail.sfsu.edu	2020-05-21 20:25:48	Rubber Duck	0.5	0		null	/home/ubuntu/user-files/upload_671...		It is a pretty nice duck.... I wou...	For Sale	1	sam@sfsu.edu
11	rpaulson@mail.sfsu.edu	2020-05-21 23:24:29	Everybody Poop	2	1	everyone_poops.pdf	applicati...	/home/ubuntu/user-files/upload_d69...	/home/ubuntu/user-files/...		For Sale	0	NULL
12	test@sfsu.edu	2020-05-21 23:31:29	Milestone 4	0	1	CSC648-848_Sprin...	applicati...	/home/ubuntu/user-files/icons8-file-p...	/home/ubuntu/user-files/...	CSC 648 Milestone 4 Document	Free Use and Modification	0	NULL
13	sam@sfsu.edu	2020-05-21 23:33:48	Pencil	0	0		null	/home/ubuntu/user-files/icons8-file-p...		Test123	Free Use and Modification	1	sam@sfsu.edu
NULL	NULL	NULL	NULL	NULL	NULL	NULL		NULL	NULL	NULL	NULL	NULL	NULL

PostCategories, PostLocations, and Purchases (to support n-to-n relations)

post_id	category
1	Services
2	Supplies
3	Supplies
4	Books
5	Furnitures
6	Other
7	Electronics
8	Books
9	Books
10	Other
11	Books
12	Other
13	Other
NULL	NULL

post_id	location
1	Library
2	Malcolm X Plaza
3	
4	Library
5	Library
6	Library
7	Student Services Building
8	Malcolm X Plaza
9	Malcolm X Plaza
10	Library
11	
12	
13	Library
NULL	NULL

user_email	post_id
rpaulson@mail.sfsu.edu	6
NULL	NULL

Users

email	first_name	last_name	is_faculty	is_admin	hashed_password	phone_number
john@sfsu.edu	John	Gutierrez	1	0	bc94e6b2b231c0bf3e994df9f802b16c	4154154155
mnguye12@mail.sfsu.edu	Marvin	Nguyen	0	0	098f6bcd4621d373cade4e832627b4f6	1231231234
rpaulson@mail.sfsu.edu	Robert	Paulson	0	0	8dd6bf7dab3d7412315a015f72dc7f2b	4084202133
sam@sfsu.edu	Sam	Bahlibi	1	1	5f4dcc3b5aa765d61d8327deb882cf99	3312313132
test@sfsu.edu	test	LastName	0	0	5f4dcc3b5aa765d61d8327deb882cf99	4154154555
NULL	NULL	NULL	NULL	NULL	NULL	NULL

UserMessages

id	sender_email	recipient_email	message	timestamp
21	sam@sfsu.edu	mnguye12@mail.sfsu.edu	Hey, I'm taking this class next semester ...	2020-05-21 20:32:53
22	mnguye12@mail.sfsu.edu	sam@sfsu.edu	Hey! Yeah this book is still available! When woul...	2020-05-21 20:35:01
23	sam@sfsu.edu	mnguye12@mail.sfsu.edu	I can meet up anytime tomorrow!	2020-05-21 20:36:01
24	mnguye12@mail.sfsu.edu	sam@sfsu.edu	Sounds great! How about we meet around 1pm?	2020-05-21 20:40:14
25	sam@sfsu.edu	mnguye12@mail.sfsu.edu	Lets do it!	2020-05-21 20:41:04
26	test@sfsu.edu	sam@sfsu.edu	Hello! I would like to buy this ipad pro! I would l...	2020-05-21 20:44:02
27	sam@sfsu.edu	test@sfsu.edu	It's yours can you meet tomorrow at 1pm?	2020-05-21 20:44:35
28	sam@sfsu.edu	mnguye12@mail.sfsu.edu	Testing 1234151	2020-05-21 23:36:17
29	mnguye12@mail.sfsu.edu	sam@sfsu.edu	Another test!	2020-05-21 23:37:09
NULL	NULL	NULL	NULL	NULL

Google Analytics

Analytics Gator Trade
All Web Site Data

Go to report

Audience Overview

All Users
100.00% Users

May 14, 2020 - May 20, 2020

Overview

● Users

	Users	New Users	Sessions
	11	11	43
	Number of Sessions per User	Pageviews	Pages / Session
	3.91	905	21.05
	Avg. Session Duration	Bounce Rate	
	00:27:57	23.26%	
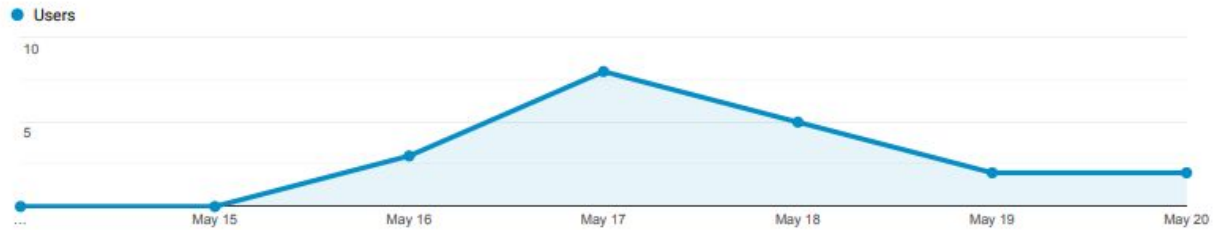
■ New Visitor ■ Returning Visitor

26.7%

73.3%
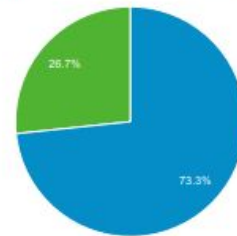
Language	Users	% Users	
1. en-us	8		72.73%
2. en	2		18.18%
3. zh-cn	1		9.09%

Project Management

m2 Things To Do	m2 In Progress	m2 Finished
+ Add a card	+ Add a card	**Milestone 2** ☑ 0/1
		UI Mockup/Storyboard 👁 ☑ 8/8 H J M S
		Create a UML 👁 H J M S S TW
		Create a High level DB Architecture S TW
		Vertical Prototype S TW
		Team Bonding 👁 H J M S S TW
		Contact CEO for a review 👁 S
		Finish revisions 👁 H J M S S TW
		+ Add another card

M3 Things To Do	M3 In Progress	M3 Finished
+ Add a card	Milestone 3	Display items properly on Home Page
	+ Add another card	J
		Users shall be able to filter media by sfsu classes
		Create Post Function
		Users shall be able to search for media
		Connect Search Page to Back-End
		Develop Landing Page
		☑ 4/4 J
		Develop About Page
		☑ 2/2 J
		Develop Register Page
		M
		Develop Search Results
		👁 S
		Develop Account Page
		H
		Develop Login Page
		☑ 3/3 J
		+ Add another card

Post User Feedback (PUF) ...

Right hand side under the search bar can have some filters

👁   S

+ Add another card

PUF In Progress ...

+ Add a card

PUF Finished ...

Captcha for Register page

M

Describe what media each individual result is

👁   S

Tell what item type is on results page

👁   S

Check boxes under search that describe the type of content

J

Results for search on the left for visability

👁   S

Have media type for post

S   TW

Let user who uploads data determine the category

S   TW

Above search bar put a class disclaimer

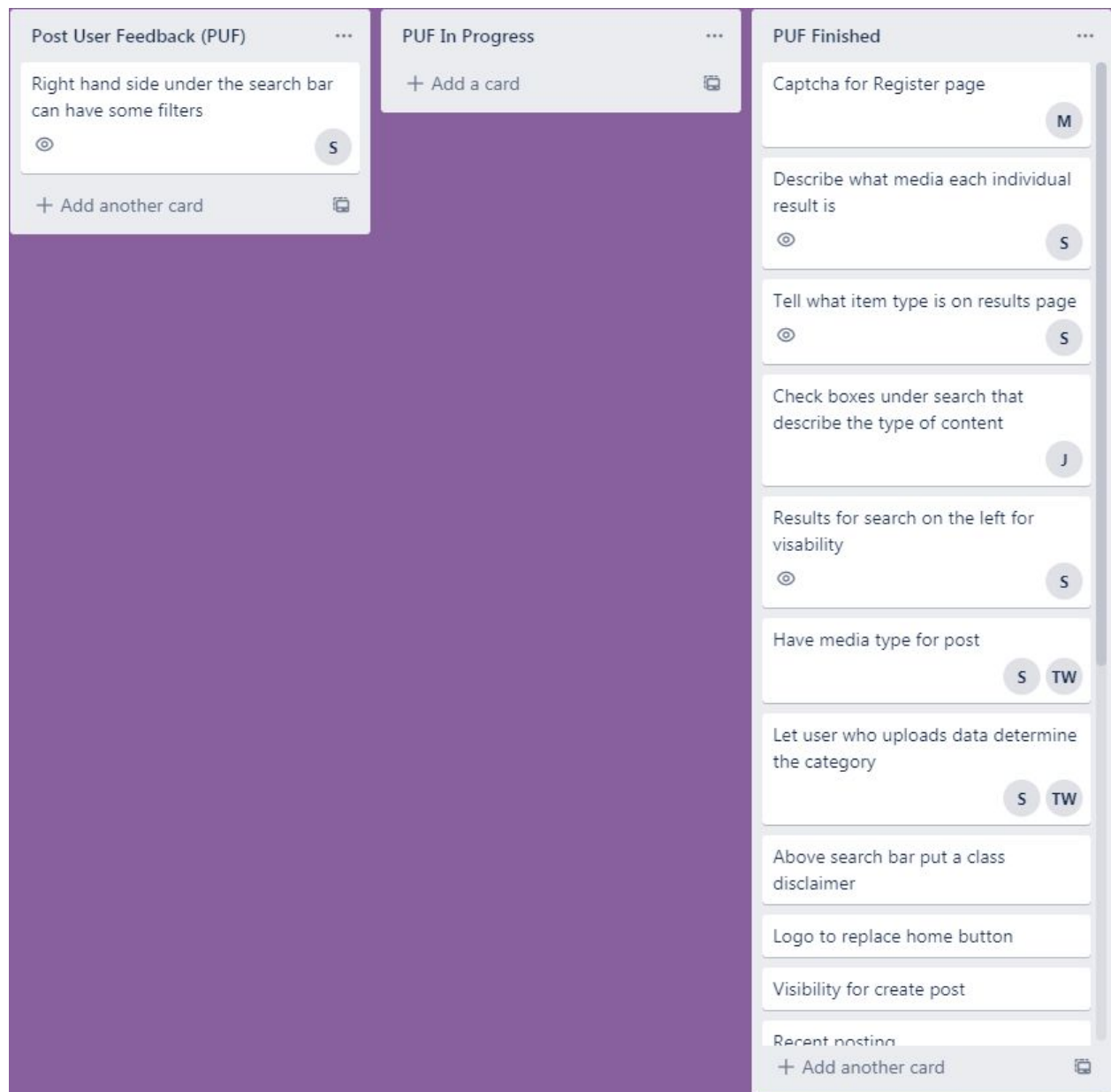Logo to replace home button

Visibility for create post

Recent posting

+ Add another card

Team Member Self Assessment and Contributions

Marvin Nguyen (Front-end member):
  a) Contributions:
      ○ Assisted with front-end development
      ○ Created Register page and Create Post Page
      ○ Assisted with connecting to APIs created by back-end team
      ○ Assisted other team members with technical difficulties regarding HTML, Javascript, Bootstrap
  b) Number of submissions to Development: 57 commits
  c) Main challenges: One of the main challenges I faced was technical difficulties with Javascript. When I first started on the project, I did not have too much experience with Javascript and was learning as I go. Due to the inexperience, I ran into problems here and there when it came to creating functions for the specific page or using the APIs created by the back-end team.
  d) What would I do better next time: Next time, I would plan out the design and functions of what I want the page to do better. I wound up changing a lot of things and my functions would end up not being very dynamic. If I wanted to add something new, I usually would end up having to reformat the code quite a bit in order to add the new functionality or fix an error that popped up from adding in the new functionality.

Tingfeng Wan (Back-end Team Lead):
  a) Contributions:
      ○ Lead in the database's design
      ○ Supported growing front-end needs as they arise
      ○ Maintained, iterated, and optimized the database with evolving constraints
  b) Number of submissions to development branch: 6 commits 46++ 2-- (primarily applied SQL statements on live server)
  c) The main challenge I've faced in the development of this project is adjusting to the evolving needs and shifting design of the backend database. The initial design of the database was failing to address surfacing requirements that weren't initially identified. By the end of the project's lifespan, the database has grown in complexity and size compared to the initial design.
  d) Next time, I would involve myself more into endpoint development, which allows me to be able to address issues with endpoints when they occur, and be able to support the front-end with structures for local testing.

John Joshua Gutierrez (Github Master, Front-end member):
  a) Contributions:
     ○ Assisted with front-end development
     ○ Created Login and Home Pages
     ○ Assisted with connecting to APIs created by back-end team
     ○ Assisted other member with technical difficulties regarding Github, HTML, Javascript
  b) Number of submissions to development branch: 230 commits
  c) A challenge I faced at the beginning of this project was the fact that I learned web development first through the React framework. I did not know how to transfer that knowledge to regular HTML, Javascript and CSS at first but then I slowly started seeing the similarities and most concepts just clicked eventually.
  d) Ask the backend to set up the database to allow for local testing to avoid unnecessary commits to happen. Have a better github flow amongst teammates. Establish that same github flow to teammates.

Samuel Bahlibi (Team Lead, Front-End Member)
  a) Contributions
     ○ Assisted with front-end development
     ○ Created the Search Page and the About Page
     ○ Assisted with connecting to APIs created by back-end team
  b) Number of submissions to development branch: 17 commits, 1,537++ 502--
  c) A challenge I faced was trying to get everyone to agree on the initial stack we were going to use. I also had trouble connecting to the API set by the backend team. I'm a very stubborn person when it comes to admitting I don't know something but I ended up swallowing my pride to ask for help from my teammates. I also struggled with my knowledge on JavaScript. I thought I knew a lot more that I did and ended up having to learn a lot more than I thought I would.
  d) One thing I would do better is create a local environment for the front-end team to test development on. The way we had it set up was the server was running off our development branch so unless we merged our branches into development we wouldn't be able to see any local changes. I also learned a lot more about being a PM and I'm very excited to try to get a role as one. Agile workflow has stuck with me and I'll continue to remember everything learned in this class to aid me in the future.

Qian Hu (Front-end member):

   a) Contributions:
   - ○ Assisted with front-end development
   - ○ Created Account page and Setting page

   b) Number of submissions to development: 39 commits

   c) Main challenges: The main challenge I had is lack of knowledge with JavaScript, HTML, and CSS. I had a lot of trouble when I created my pages, such as formatting, using bootstrap, and writing functions. However, my teammates help me with these problems with huge patients.

   d) What would I do better next time: I will spend more time improving my knowledge, keep asking, and keep practicing on JavaScript. Try to make the pages more professional and useful.

Eric Ngo (Full-stack member):

   a) Contributions:
   - ○ Created backend endpoints.
   - ○ Helped sync frontend requirements with backend APIs.
   - ○ Assisted with DB management.

   b) Number of submissions to development branch: 63 commits

   c) A challenge faced was the difference in development environments across the whole team. This caused the backend to miss bugs that the frontend would encounter. Furthermore, due to a lack of setup, our development workflow was very inefficient as we would have to push code onto the server in order to test it.

   d) The backend should have helped ensure that a uniform test environment was created for each member to allow for a more efficient workflow. Enforced better practices in development and git.