

# SW Engineering CSC648/848 FALL 2020

## Let's Donate

<https://letsdonate.xyz/>

Team 3

Milestone 5 v1

December 10, 2020

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Full Stack Developer: Kunyu Ruan (kruan1@mail.sfsu.edu)

Date	Version
Dec 17, 2020	Milestone 5
Dec 17, 2020	Milestone 4, v2
Dec 10, 2020	Milestone 4, v1
Nov 30, 2020	Milestone 3, v2
Nov 19, 2020	Milestone 3, v1
Nov 12, 2020	Milestone 2 v2
Oct 29, 2020	Milestone 2 v1
Oct 8, 2020	Milestone 1 v2
Oct 1, 2020	Milestone 1 v1

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# Product Summary

San Francisco is one of the most expensive cities to live in throughout the world. The housing and furniture prices are high and can be almost non-affordable for most. In addition to that, there are many other expenses like hospital bills or insurance and there are almost no options available to the public that can help with this pricey lifestyle. Hence there is definitely a need for a support service where any individual can get at least some of the essentials like furniture and financial support from people with some privileges.

Let's Donate comes to the rescue to provide support to the people in need of daily use products for free along with some financial support to get help during difficult times. We at Let's Donate will build a community that revolves around helping people in need.

While Let's Donate strives to be completely free compared to the competition, to guarantee the longevity of the product, there will be a number of ways that we can obtain income. To ensure that our product is not taken advantage of, users will have a monthly limit of claiming five instances of support whether it be a physical item or monetary donation. If a user would like to be able to accept more support in a given month, there will be a fee that will lift that limit for the month. Another way to ensure the financial support for the product would be through monetary donations that users can give directly to Let's Donate. When a user provides financial support to someone in need, they will also have the option to donate to Let's Donate. In addition to a pay-off to receive more products and accepting donations, with enough traction, Let's Donate may also use advertising from other businesses to gain revenue. Doing so can guarantee that Let's Donate can continue to operate.

## **Uniqueness:**

Let's Donate is the only app promoting fundraisers and donation of products like table, chair, etc under the same roof with the service of direct communication facility with the donor. Apps like Facebook, Craigslist are filled with lots of overpriced used products. Our goal is to eliminate the wastage of products which are in good condition and otherwise would have been thrown away and we also focus on raising money for people in need.

## **Product Features:**

### **Guests:**

1. Guests shall be able to register themselves in the website
2. Guests shall be able to create their own accounts
3. Guests shall be able to become users
4. Guests shall be able to browse donations and fundraisers
5. Guests shall be able to view donations page
6. Guests shall be able to view fundraisers page
7. Guests shall be able to view user profiles
8. Guests shall be able to view other user posting history

### **Users:**

1. Users shall be able to login to the website
2. Users shall have a username
3. Users shall have a password.
4. Users shall be given an editable profile
5. Users shall be able to edit their user page
6. Users shall be able to set up their profile picture
7. Users shall be able to see other people's current posts
8. Users shall be able to visit their profile
9. Users shall be able to view their current posts

10. Users shall be able to reset their password
11. Users shall be able to shop
12. Users shall be able to search browse items
13. Users shall be able to direct message other users
14. Users shall be able to search items by name
15. Users shall be able to endorse fundraisers
16. Users shall be able to make payments
17. Users shall be able to place items up for donation.
18. Users shall be able to set up description of items for donation
19. Users shall be able to remove their own product posts
20. Users shall be able to remove their own fundraiser posts
21. Users shall be able to delete their own profile
22. Users shall be able to log out of the website
23. Users shall be able to see terms and condition of app while signing up
24. User shall sign up only after accepting terms and conditions

**Website:**

1. The website shall be regularly updated regarding items.
2. The Website shall update whenever a new post is made.
3. The website shall be regularly updated regarding history.

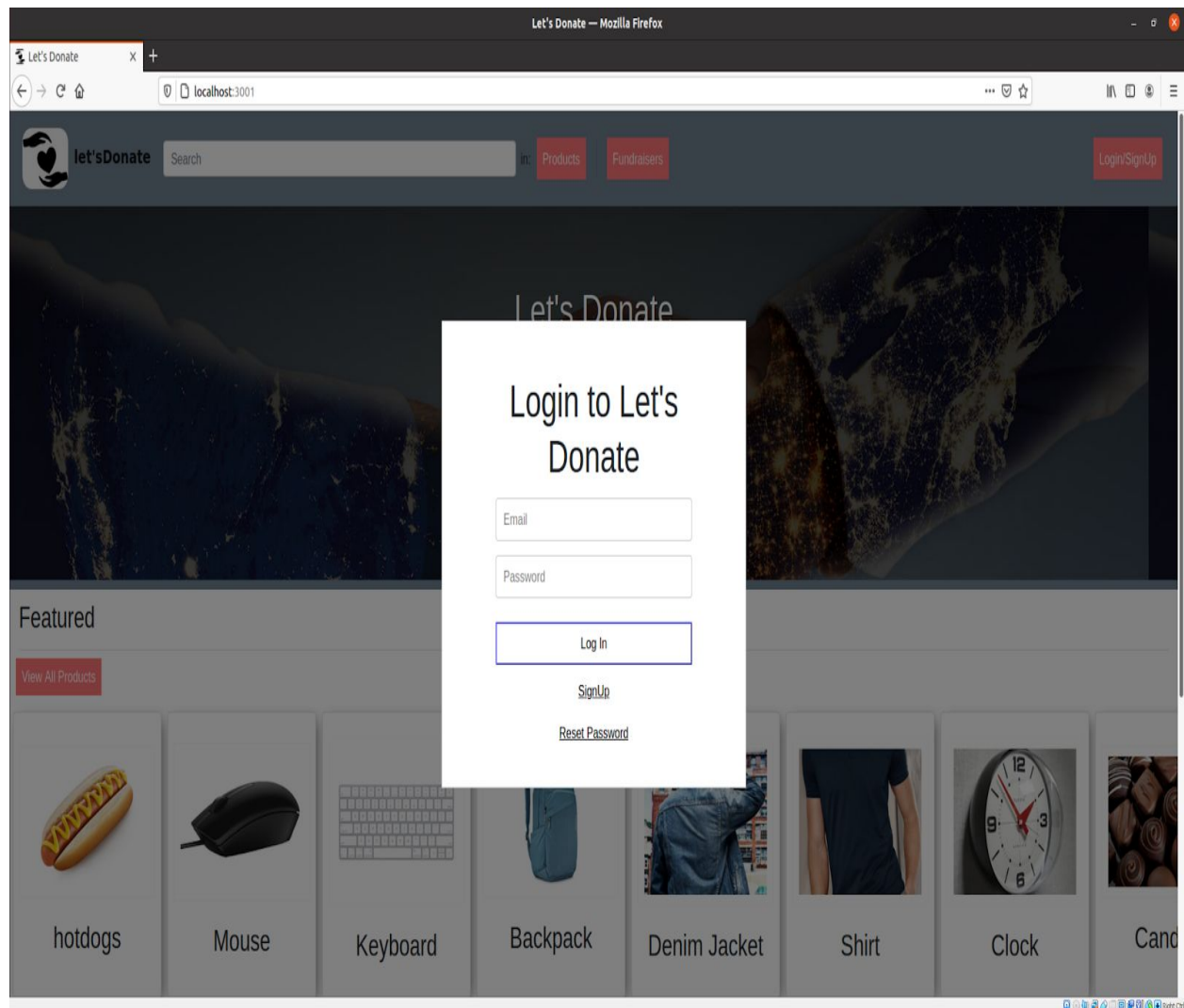
**Administrator:**

1. Administrators shall have the ability to ban users from using features of the website
2. Administrators shall be able to delete the spam items.
3. Administrators shall be able to remove posted items.
4. Administrators shall be able to remove posted fundraisers.

**Product Url:**

<https://letsdonate.xyz/>

# Screenshots of Product



Let's Donate — Mozilla Firefox

Let's Donate x +

localhost:3001/register

80%

let'sDonate Search

Products Fundraisers

Login/SignUp

## Sign Up to Let's Donate

**Name**

John Smith

**Email**

Enter Email

**Zip Code**

Enter Zip Code

**Password**

Enter Password

**Confirm Password**

Confirm Password

**Profile Image:**

Browse... No file selected.

## Recovery Questions

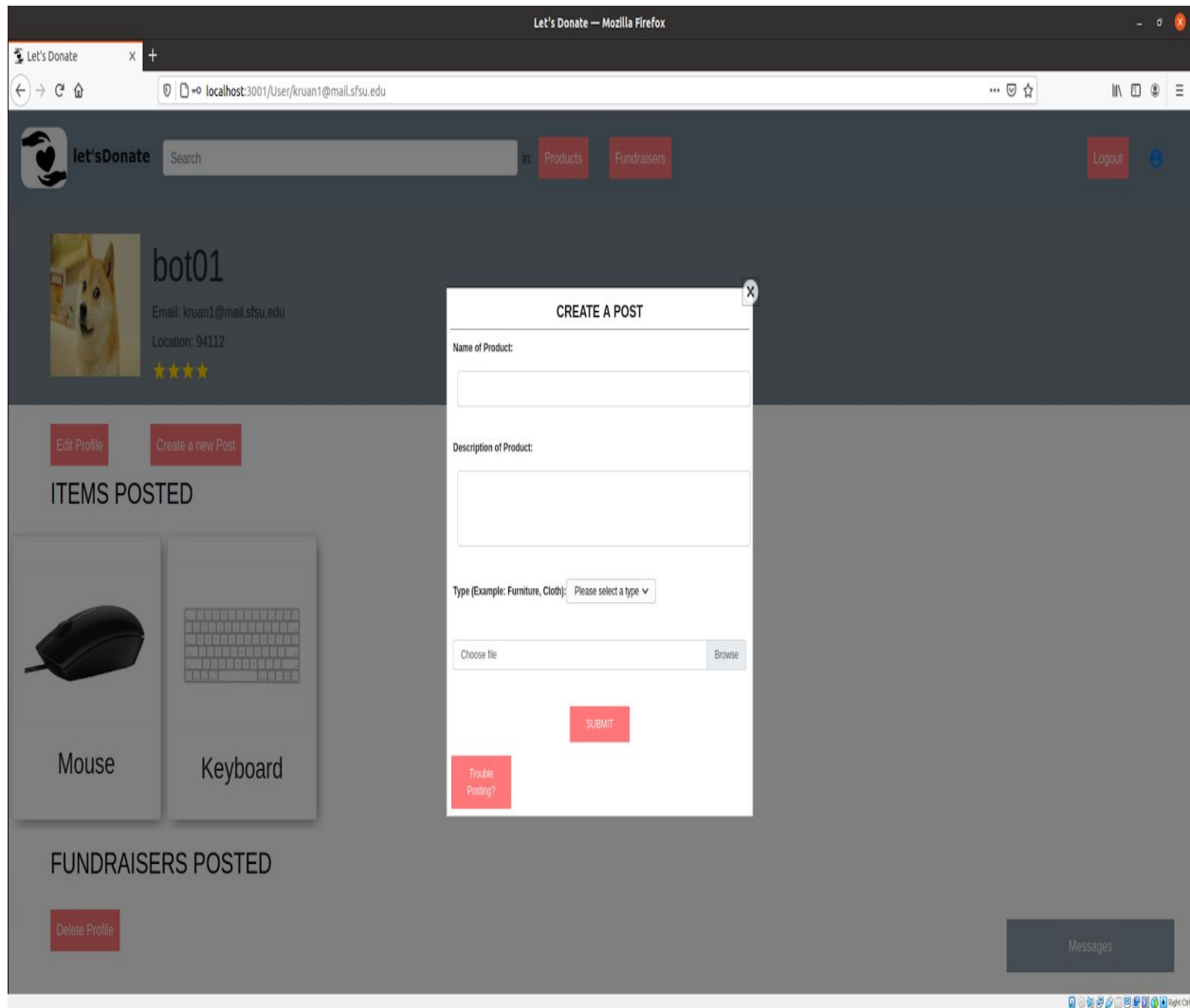
**What is your mother's maiden name?**

Smith

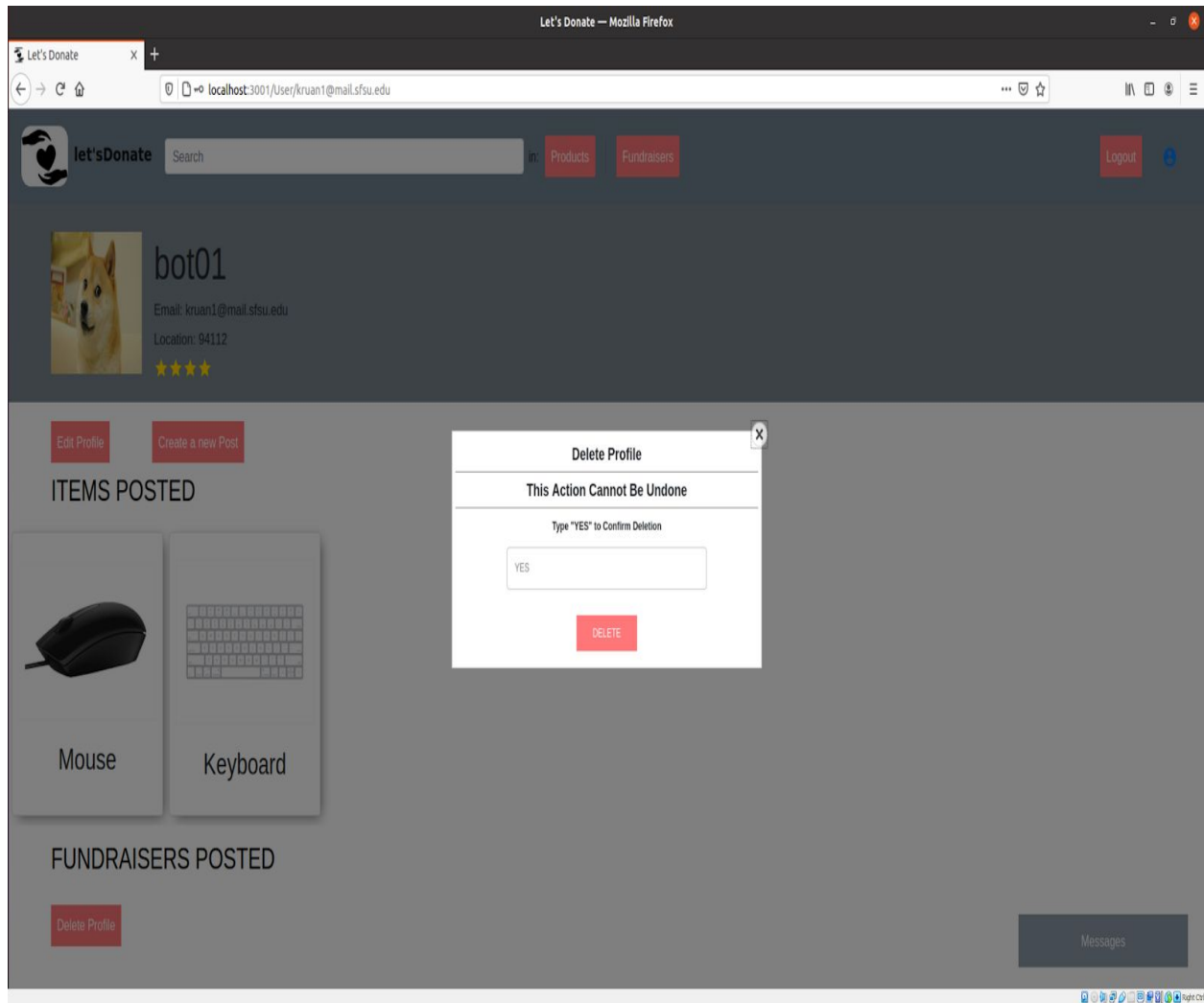
**What is the name of your childhood pet?**

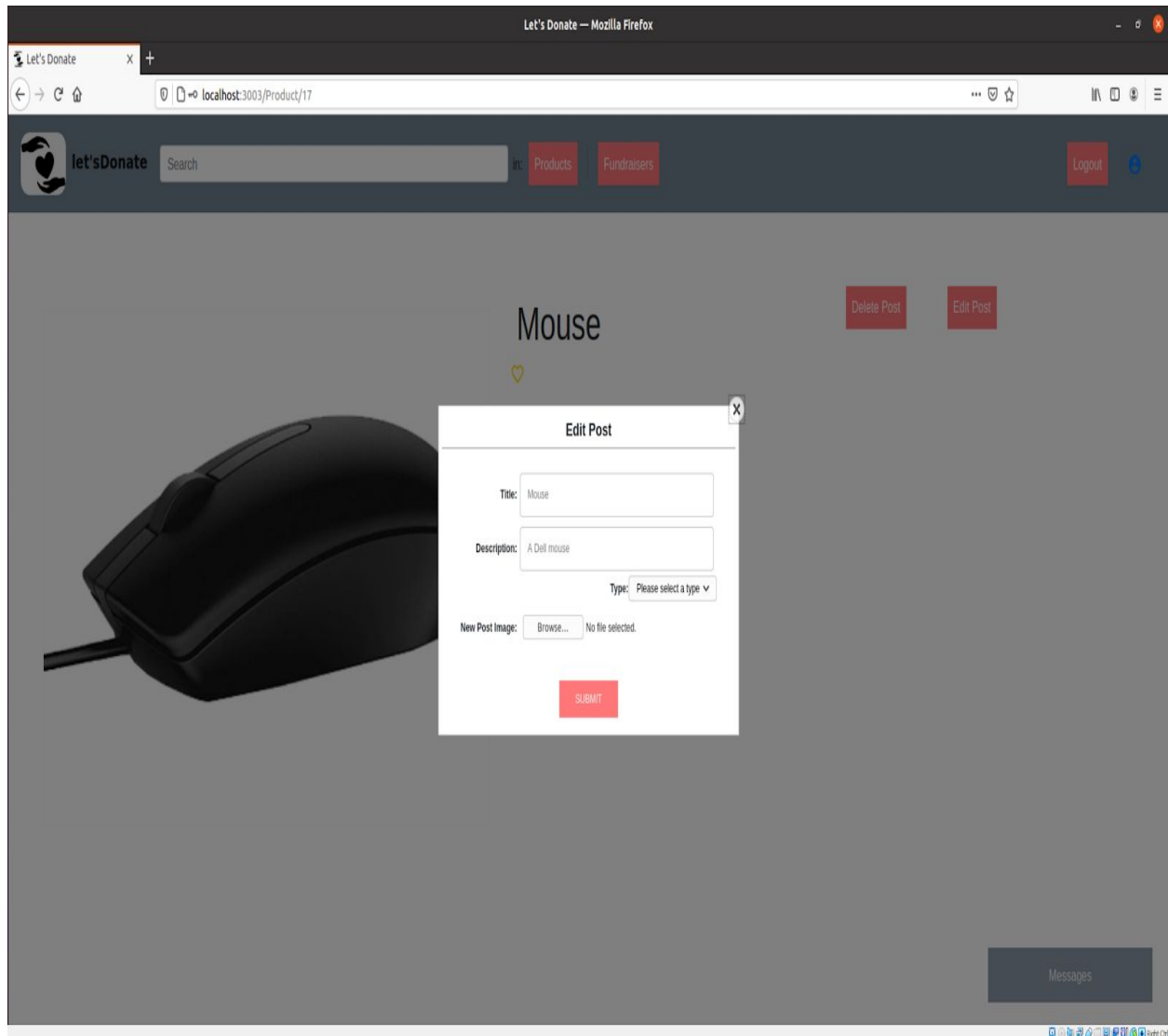
Fido

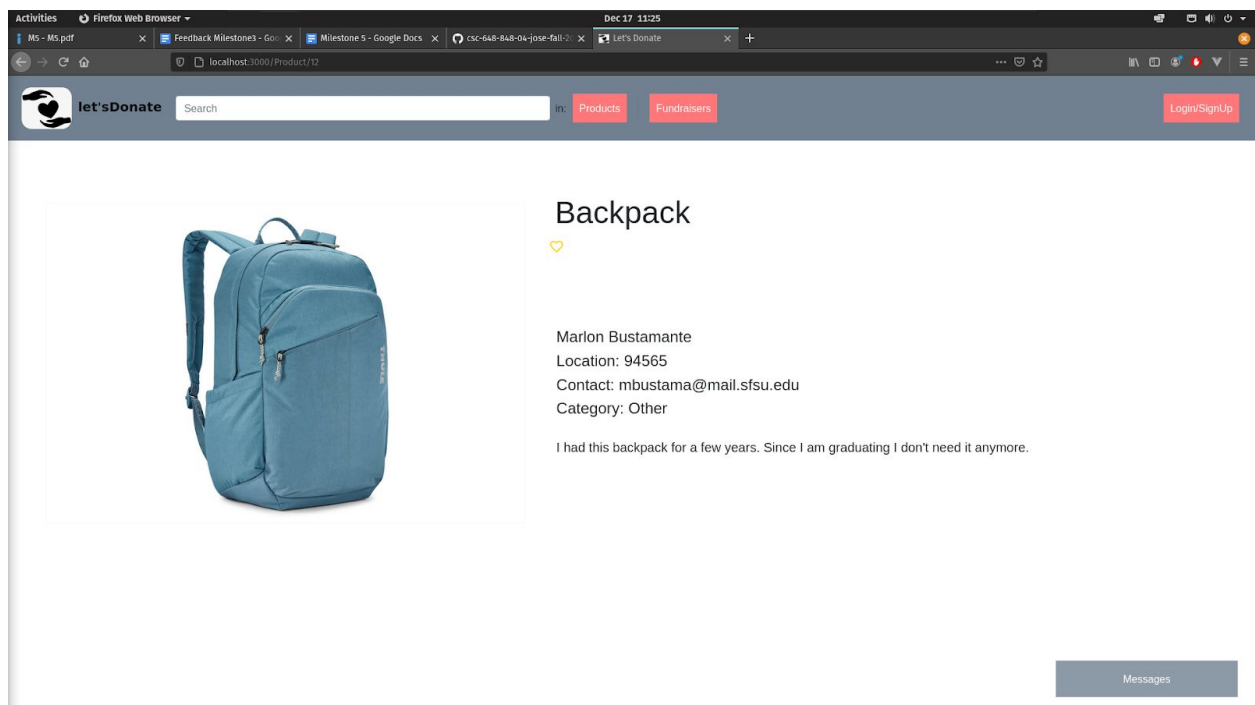
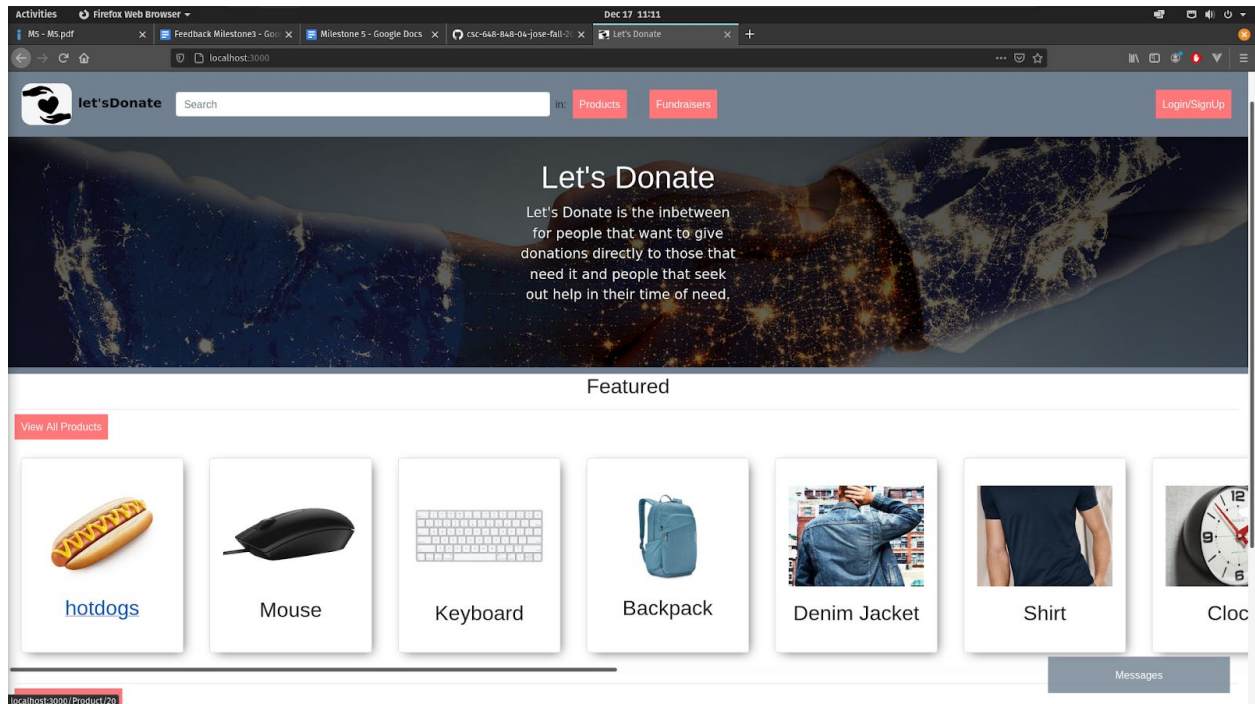
Click Here











Firefox Web Browser - Dec 17 12:00

MS - MS.pdf Feedback Milestone3 - Go Milestone 5 - Google Docs CSC-648-848-04-jose-fall-2 Let's Donate dog meme at DuckDuckGo

localhost:3000/Fundraiser/6

let'sDonate Search Products Fundraisers Logout

★ 0 Endorse Delete Post Edit Post

\$150 out of \$500 raised.

30%

test3  
Location: 111112  
Contact: t2@mail.abc  
Category: Medical

i need money to pay for doge's operations

Donate Now

Messages

Firefox Web Browser - Dec 17 13:19

MS - MS.pdf Feedback Milestone3 - Go Milestone 5 - Google Docs CSC-648-5F3U/csc-648-848-04-jose-fall-2 Let's Donate Let's Donate

localhost:3000/Products

let'sDonate Search Products Fundraisers Logout

Filters

- ☐ Clothes (5)
- ☐ Food (2)
- ☐ Furniture (1)
- ☐ Other (4)

hotdogs Mouse Keyboard Backpack Denim Jacket

Shirt Clock Candies Jeans Jacket













Messages

Activities Firefox Web Browser Dec 17 14:49

MS - MS.pdf Feedback Milestone3 - Go... Milestone 5 - Google Docs Contributors to CSC-648-5 Let's Donate

localhost:3000/users

let'sDonate Search Products Fundraisers Logout

 Marlon Bustamante Location: 94565	 Test Location: 94565	 Jack Location: 94132	 John Location: 94132	 Leo Location: 94132	 tester1 Location: 111111	 Test2 Location: 12345
 test3 Location: 111112	 Administrator Location: 12345	 bot01 Location: 94112	 sunny Location: 94132	 test3 Location: 12345		

localhost:3000/chatSpace?name=test3&room=test3

Messages

Activities Firefox Web Browser Dec 17 14:49

MS - MS.pdf Feedback Milestone3 - Go... Milestone 5 - Google Docs Contributors to CSC-648-5 Let's Donate

localhost:3000/chatSpace?name=test3&room=bot01

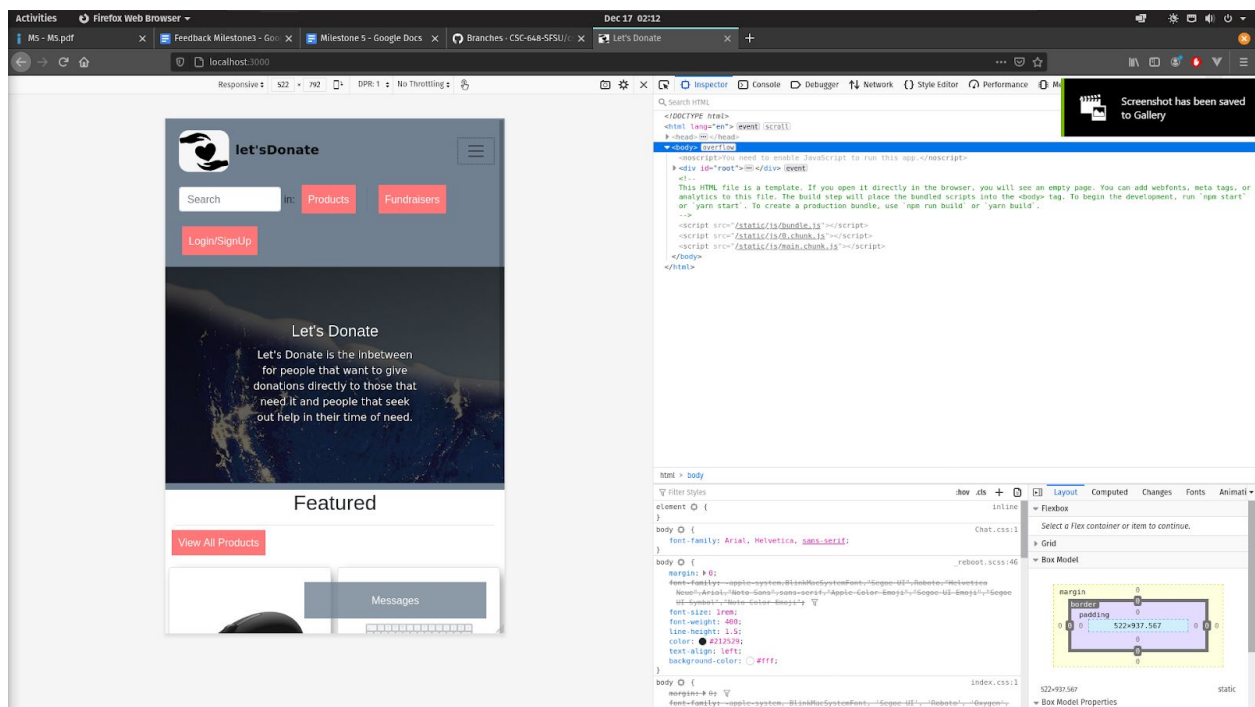
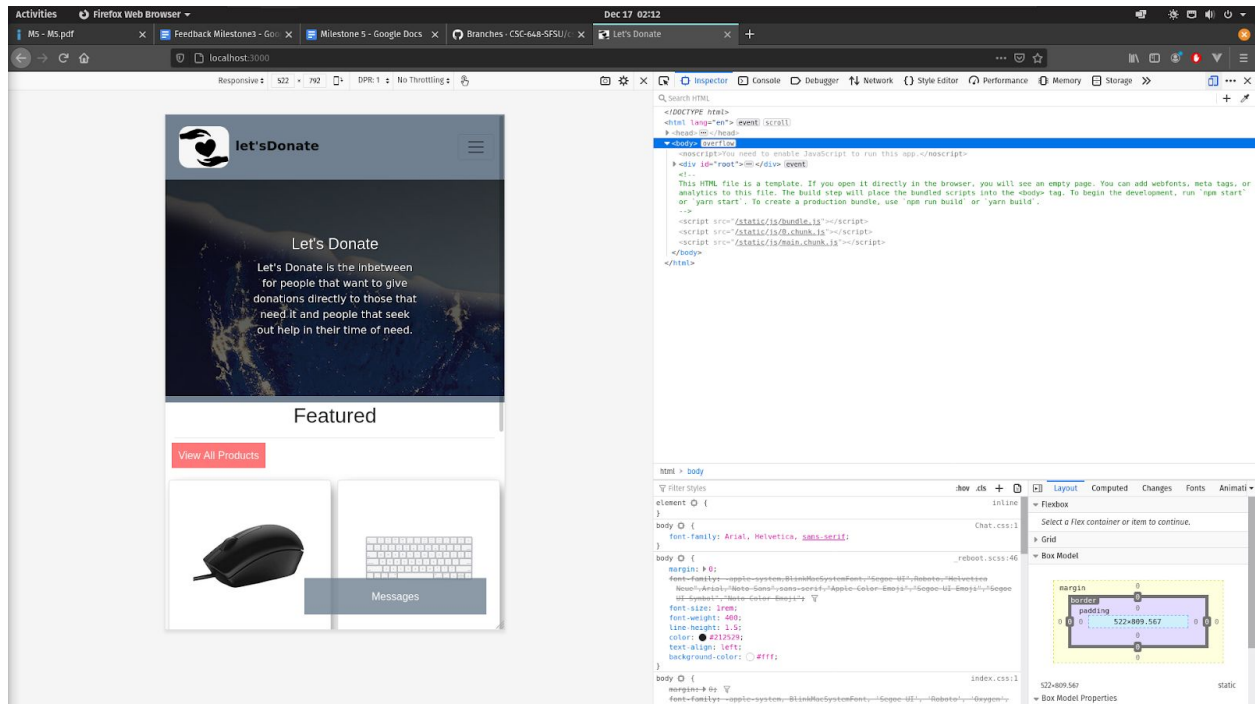
let'sDonate Search Products Fundraisers Logout

Welcome to bot01's chat room

test3: Hello there, Doge

SEND

Messages





```
1 SELECT * FROM letsDonate.fundraisers;
2 INSERT INTO fundraisers (title, description, fundType, requiredAmount, image, endorsement, owner)
3 VALUES ('Test', 'Money required for the hospital and medicine expenses.', 'Other', '15000', 'https://csc648images.s3.us-west-1.amazonaws.com/trav
```

## Chat table

Limit to 1000 rows

1 • `SELECT * FROM letsDonate.chat;`

<

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

	id	room	message
▶	1	Marlon Bustamante	John: Hello
	2	Marlon Bustamante	Leo: Hello John
	3	Marlon Bustamante	John: Hello
	4	Marlon Bustamante	John: Hello
	5	Marlon Bustamante	John: heyt
	6	Marlon Bustamante	John: How are you
	7	Marlon Bustamante	John: Hey
	8	Administrator	sunny : hey!
	9	Marlon Bustamante	John: Hi
	10	Marlon Bustamante	John: What are you doing?
	11	Test	John: Hey Test
	12	Jack	John: Hey Jack
	13	John	John: Hey John
	14	John	John: Ho are you?
	15	Marlon Bustamante	John: Hey, how are you
	16	Leo	John: Hey leo, how are you
	17	Leo	John: I am good, how are you?
	18	Leo	Leo: Hey, John How are you
*	NULL	NULL	NULL



## Database creation from source code

```
config.connect(function(fault){
  if(!fault){
    console.log("Connected");
    config.query("Create Database if not exists letsDonate;");
    config.query("USE letsDonate;", function(e, r, f) {});

    // creates products table
    config.query("CREATE TABLE IF NOT EXISTS products("+
      "id int NOT NULL AUTO_INCREMENT, " +
      "name varchar(30), " +
      "description varchar(255), " +
      "productType varchar(30), " +
      "productImage varchar(255), " +
      "owner varchar(255), " +
      "PRIMARY KEY (id) );",
      function(e,r,f){console.log(e)});

    // creates fundraisers table
    config.query("CREATE TABLE IF NOT EXISTS fundraisers("+
      "id int NOT NULL AUTO_INCREMENT, " +
      "title varchar(30) NOT NULL, " +
      "description varchar(255) NOT NULL, " +
      "requiredAmount varchar(30) NOT NULL," +
      "image varchar(255) NOT NULL, "+
      "endorsement int NOT NULL, "+
      "owner varchar(255), " +
      "PRIMARY KEY (id) );",
      function(e,r,f){console.log(e)});

    // creates users table
    config.query("CREATE TABLE IF NOT EXISTS users("+
      "id int NOT NULL AUTO_INCREMENT, " +
      "name varchar(30) NOT NULL, " +
      "email varchar(255) NOT NULL, " +
      "zipcode varchar(30) NOT NULL, "+
      "password varchar(255) NOT NULL, "+
      "userImage varchar(255) NOT NULL, "+
      "recovery1 varchar(255) NOT NULL, "+
      "recovery2 varchar(255) NOT NULL, "+
      "claimedProducts int NOT NULL, "+
      "PRIMARY KEY (id) );",
      function(e,r,f){console.log(e)});
  }else{
    console.log("Not Connected", fault);
    return;
  }
}
```

# Task Management

- ☐ Modify UI to look like the Mock Ups
  - ☐ Forms [Kunyu]
  - ☒ ~~Home/Landing Page [Milo]~~
  - ☐ Fundraisers Page [Himanshu]
  - ☒ ~~Products Page [Milo]~~
  - ☐ User Dashboard [Kunyu]
  - ☐ Item Post [Suman]
  - ☐ Fundraiser Post [Himanshu]
- ☐ Add chat component to be used for all pages (doesn't have to be connected to back end yet) [Milo and Himanshu]
  - ☒ ~~show messages and users that wrote them~~
  - ☐ take input to add to messages (partially)
  - ☐ add tabs to switch message chains (partially)
- ☐ adjust images so they don't stretch (mentioned by Prof) [SUMAN]
  - ☐ have a fixed width for each one without changing the layout of the cards, posts they're in
- ☐ Connect to backend
  - ☒ ~~Sign up creates new user [Marlon]~~
  - ☒ ~~product post creates a new post [Himanshu]~~
  - ☒ ~~fundraiser post creates a new post [Himanshu]~~
  - ☐ product edit edits an existing post [Kunyu]
  - ☐ fundraiser edit edits an existing post [Himanshu]
- ☐ Recognize sessions - the server needs to recognize if a user is logged in or not [Milo & Marlon] (partially done, need to work for all pages, not just navbar) (in Progress)
- ☐ then adjust pages and components to follow conditions if a session is a registered user [Milo & Marlon] (partially done, need to work for all pages, not just navbar)
- ☒ ~~Handle different product pages (i.e. if a user refreshes a product post page, they should still be on that page. Other sites like Youtube or Amazon)~~

team3-csc648-848-backend - Nov 30th



**Marlon Bustamante** 4:05 PM

Here's some things we need to get done.

- Login/Signup
- Fundraiser Table
- User Table

There's more that needs to be done, but this is what I had off the top of my head.

I was thinking that the User Table will have a column for a unique user id. This id will also be on products and fundraisers posted by that user. So the Products table and Fundraiser table need a column for that unique user id.

This is what I was thinking is needed for the 3 tables:

Products:

- Add a column for user id

Fundraiser:

- Same as the products but add a column for donation needed and a column for donations raised so far

Users:

- name
- password
- email
- zip code
- unique id
- avatar

There's obviously more needed, but let's start with these for now.

# Team member contributions

Marlon:

Marlon Sioco Bustamante

Wed 12/16/2020 3:01 PM

[More actions](#)

To:

- Himanshu Garg;
- Milo Abril;
- Dipendra Dhoj Rana;
- Suman Basaula;
- Kunyu Ruan

Hi Team,

As your backend lead, here's a list of contributions that I have made concerning our project.

- Created APIs for registering and logging in
  - Encrypt and decrypt passwords for users
- Setup dynamic routes for products, fundraisers, and users
- Created API's for deleting and editing posts
  - Delete and edit a user's product post
  - Delete and edit a user's profile
- Setup the functionality for the website to know who the current logged in user is
  - Helps to render only certain functions on the website
- Setup and implement the S3 bucket to remotely store user uploaded images
  - Setup and implementation to fetch the uploaded images
- Implemented the functionality for a user's page to display a user's post history
  - Displays the user's posted products
  - Displays a user's posted fundraisers
- Implemented the password reset functionality
- Implemented a dynamic filter for products posted

Let me know how you feel about what I have listed.

Thank you.

- Marlon Bustamante  
Himanshu Garg  
Thu 12/17/2020 1:10 PM

To:

- Milo Abril;
- Dipendra Dhoj Rana;
- Suman Basaula;
- Kunyu Ruan;
- Marlon Sioco Bustamante

Hi Marlon,

Thank you for your message.

I agree with the contributions you mentioned, you have been great with all parts of the project whether it is frontend, backend, database or even setting up the S3 bucket on aws.

You have always been attentive to all the meetings and your approach towards different problems really helped the team to make good progress with the project.

Best,

Himanshu.

Milo:

## Contribution

---

**Himanshu Garg** <hgarg@mail.sfsu.edu>

Thu, Dec 17, 2020 at 1:15 PM

To: Marlon Sioco Bustamante <mbustama@mail.sfsu.edu>, Kunyu Ruan  
<kruan1@mail.sfsu.edu>, Suman Basaula <sbasaula@mail.sfsu.edu>, Dipendra Dhoj Rana  
<drana1@mail.sfsu.edu>, Milo Abril <mabril0526@gmail.com>

Hi Milo,

Thank you for your message.

I agree with the contributions you mentioned to the team project. You have been a great Front product and implemented the same with great effort. Really liked your ideas towards different work among all of the members in your team and managed to get the best product.

Your participation and ideas for the project really helped us grow as a team.

Best,  
Himanshu.

---

**From:** Milo Abril <[mabril0526@gmail.com](mailto:mabril0526@gmail.com)>

**Sent:** Thursday, December 17, 2020 10:10:35 AM

**To:** Himanshu Garg <[hgarg@mail.sfsu.edu](mailto:hgarg@mail.sfsu.edu)>; Marlon Sioco Bustamante <[mbustama@mail.sfsu.edu](mailto:mbustama@mail.sfsu.edu)>  
<[sbasaula@mail.sfsu.edu](mailto:sbasaula@mail.sfsu.edu)>; Dipendra Dhoj Rana <[drana1@mail.sfsu.edu](mailto:drana1@mail.sfsu.edu)>

**Subject:** Contribution

Hello, Team,

It was a definite experience to work with you all.

Anyways, here's a list of contributions that I have made as Front End Lead:

- Designing

- Designed mockups of website's UI
- Designed usage cases for site
- Formed and performed Usability tests
- Aided in coming up with requirements (more functional than nonfunctional)

- Developing:

- Helped set up Links and Routers for all pages
- Started on .js components and .css files
- Set up Navbar
  - made it responsive to browser size
- Set Up homepage
- Styled post cards
- Started pop up forms

- Worked on finishing UI implementation

- # of commits to development:

- ~50 commits

Please let me know if you have any agreements or disagreements









# SUMAN

SB

Suman Basaula

Thu 17/12/2020 11:47

Cc: Milo Abril; Marlon Sioco Bustamante; Himanshu Garg; Dipendra Dhoj Rana; Kunyu Ruan



Hi all,

I hope you all are doing well. It was a great experience working with you guys as a team. Below are the contributions that I had made to the project:

- Redesigned the Item post page
  - o Designed the various buttons as edit, save, and delete
  - o Fixed the auto stretching if item image
  - o Designed the send message area
- Fixed the auto stretching of images in Item post and fundraiser post
- Fixed the auto stretching of images in the list of item post on the home page

Please let me know if you have any agreements or disagreements. Thank you all!







HG

Himanshu Garg

Thu 17/12/2020 14:19

To: Suman Basaula

Cc: Milo Abril; Marlon Sioco Bustamante; Dipendra Dhoj Rana; Kunyu Ruan



Hi Suman,

Thank you for your message.

I agree with the contributions you mentioned. You have definitely added a great value to the project and have always been up to the mark for various milestones. Loved your spirit towards working for the completion of our project. Will definitely like to see a little more from you in the app development part.

Best,  
Himanshu.

...

Reply

Reply all

Forward

Kunyu:

**From:** Kunyu Ruan <kruan1@mail.sfsu.edu>

**Sent:** Thursday, December 17, 2020 1:10:02 PM

**To:** Himanshu Garg <hgarg@mail.sfsu.edu>

**Cc:** Milo Abril <mabril0526@gmail.com>; Marlon Sioco Bustamante <mbustama@mail.sfsu.edu>; Suman Basaula <sbasaula@mail.sfsu.edu>; Dipendra Dhoj Rana <drana1@mail.sfsu.edu>

**Subject:** Team Contribution

Hi team,

At the ending of the semester, I want to say it's my pleasure to work in a team with you all. You guys are making a lot of effort to finish this project. I've learned from you guys a lot. A few contributions I've made include:

- make login form match the mockup
- make user dashboard match the mockup
- fix popup forms auto resize
- improve popup forms design

Please let me know if there is any mistake.

Himanshu Garg

Thu 12/17/2020 1:27 PM

To: Kunyu Ruan

Cc: Milo Abril <[mabril0526@gmail.com](mailto:mabril0526@gmail.com)>; Marlon Sioco Bustamante; Suman Basaula; Dipendra Dhoj Rana

Hi Kunyu,

Thank you for your message.

I agree with the contributions you made for the project. You have definitely put in effort in the assigned tasks. I have seen you trying to work on different parts of the project with complete dedication and time. Things ran a little slow but you definitely managed to complete all the tasks from your side. You surely added great value to the team.

Thank you for the contributions.

Best,

Himanshu.

# Dipendra



Dipendra Dhoj Rana

Thu 12/17/2020 12:48 PM

To: Suman Basaula; Milo Abril <mabril0526@gmail.com>; Marlon Sioco Bustamante; Himanshu Garg; Kunyu Ruan



Good afternoon all,

I hope you all are doing well. It was a great experience and learning from you guys. I didn't make any major contribution to the team. I was working under the mentorship of Marlon, Himanshu who were highly skillful and talented. I was

working with apis

working on fundraiser table but it was done before hand

Thank you all!. Really appreciate your hardwork.



Himanshu Garg

Thu 12/17/2020 1:22 PM

To: Suman Basaula; Milo Abril <mabril0526@gmail.com>; Marlon Sioco Bustamante; Kunyu Ruan; Dipendra Dhoj Rana



Hi Dipendra,

I agree that you have not been upto the mark for the project. You seemed to work a lot during the early milestones but we definitely wanted your contributions in the later part of the course. I will definitely recommend to at least be in contact with the team and respond to all the messages.


It's been a great semester working with you.

Best,  
Himanshu.

...

[Reply](#) | [Reply all](#) | [Forward](#)







Himanshu:



Himanshu Garg

Thu 12/17/2020 1:42 PM

To: Dipendra Dhoj Rana; Kunyu Ruan; Milo Abril <mabril0526@gmail.com> +2 others



Hi Team,

Its been a great semester working with you all. Some of the tasks I did are


Team Management :

- Set up Weekly Team Meeting.
- Created a slack channel for general doubts and discussions.
- Assigned roles to all team members for the project.
- Swapped work load based on team member needs.
- Assisted everyone with different queries related to the project.

Development Part:

- Set up the aws for EC2 deployment and deployed the website.
- Set up the database for the project.
- Set up chat table in the database.
- Implemented the chat functionality part of the project making relevant files in frontend and relevant routes in the backend.
- Implemented the fundraisers page of the project and created relevant routes.







Thank you again everyone for the good work. Hope to work with you all again sometime soon.



Marlon Sioco Bustamante

Thu 12/17/2020 1:49 PM

To: Himanshu Garg; Dipendra Dhoj Rana; Kunyu Ruan; Milo Abril +2 others




Hi Himanshu,

I agree with everything that you have listed. It was great having worked on this project under your leadership. While this was a large and difficult project to undergo, I never felt pressured from you and you were very fair throughout the project. You always provided great feedback for the progress we have provided and were always there to help if we had any issues.

Thank you for leading this team.

Marlon Bustamante



## Team Contribution



Milo Abril <mabril0526@gmail.com>

Thu 12/17/2020 1:53 PM

To: Marlon Sioco Bustamante

Cc: Himanshu Garg; Dipendra Dhoj Rana; Kunyu Ruan; Milo Abril; Suman Basaula



I definitely agree with Marlon here,

Though this was a difficult project with what we were working with, you led us fairly and didn't hesitate to check up on us. You also were right there with us when it came to development.

Thank you for all your effort and hard work.

Milo Abril



Reply

Reply all

Forward

# POST ANALYSIS:

For most, if not all of the members in our group, it was the first time we've worked on a project of this scale. There was a lot of freedom in making our own decisions and what directions we wanted to go with things. Add to that our lack of experience working with the ReactJS framework, NodeJS, Amazon AWS deployment, MySQL, and any other entity we happened to use in our project along with the how classes and meetings are exclusively handled remotely due to the current pandemic, we were pretty slow going with our progress on our implementation. For example, during our vertical prototype implementation, what should've taken us a few hours took us an entire day just to set up a single page. However, throughout the journey of this course, all the team members learnt a lot about new technologies, fast learning, team-work and problem-solving. We are happy that we reached this far and made a successful submission of the project with almost all the requirements we expected to finish.

There were more obstacles that we faced like running late with different milestones and submitting at the last moment, learning new technologies and failing to implement them and therefore re-doing the tasks with new approaches, crashing the app after adding new features and definitely bad time management skills. All these obstacles surely slowed down the progress rate but that is how we learn and grow as a Software Engineer, Not many great softwares are built in the first trial.

There are few things that could have been improved if given a little more time like that chat part could have been real-time with the help of sockets. We were able to first set up the sockets and have the real time chat on our app but later realized that we need to add an extension named moseif origin and cors in order to run it on the browser but later realized that the extension is not compatible with many other browsers and hence we dropped using sockets.

Another improvement that we could have used for our website was if we were able to implement the payment system for donating to fundraisers. We knew there were APIs to implement a payment system like Stripe. We also knew that this wouldn't be an easy implementation. Since time management was a very big contributor to the issues we faced. We weren't able to provide enough time to learn the implementation and include the payment system in our final project.

Overall, with the steep learning curve we all faced and spending too much time with trials and errors, we did manage to bring about something we can find some pride in even with its faults and short-comings.