



# GATOR TRADER

December 17, 2019

Final Project for SW Engineering Class CSC 648-848 Fall 2019

Team number: 10

URL: <http://gatortrader.ga/>

Team members:

- Ibraheem Chaudry Team Lead ([ichaudry@mail.sfsu.edu](mailto:ichaudry@mail.sfsu.edu))
- Alexander Beers Back-end Lead
- Lance Santos Front-end Lead
- Tom Sechrist GitHub Master
- Paul Lueng Front-end developer
- Saleh Zahran Back-end developer



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## **Product summary:**

Gator Trader provides an online e-commerce platform personalized for SF State students. The main functions of the product are as follows:

User features:

shall be able to register for an account.

shall be able to browse through the website.

shall be able to use the search bar to search for items.

shall be able to view all item details. shall be able to fill out a form to post an item for sale.

shall be able to log into the web application. shall be able to post items for sale.

shall be able to contact other registered users about products.

shall be able to receive messages from other registered users.

shall be able to delete their post.

## **Milestone documents – M1-M4**

The following pages contain milestone 1 through 4 frozen after feedback

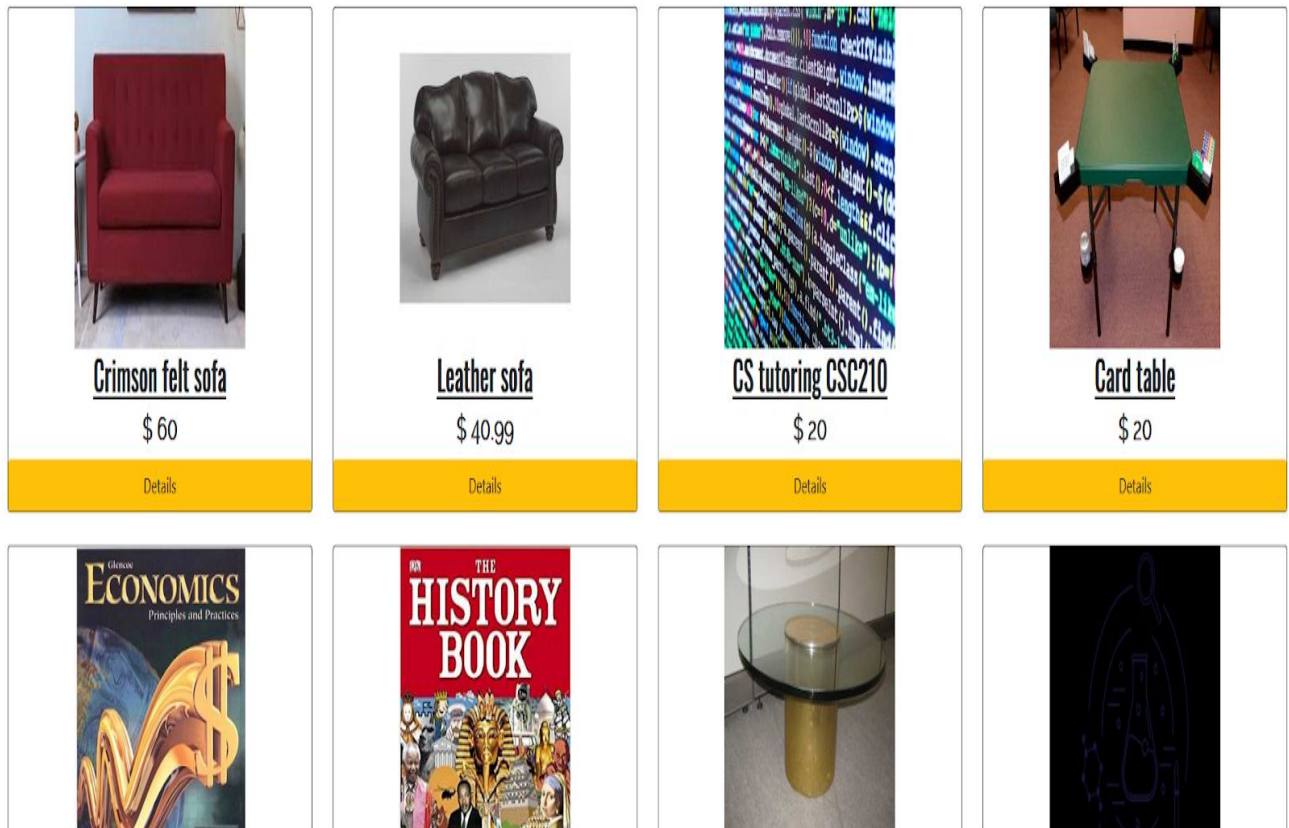


## Product Screenshots:

### Items



Recently posted on *Gator Trader*

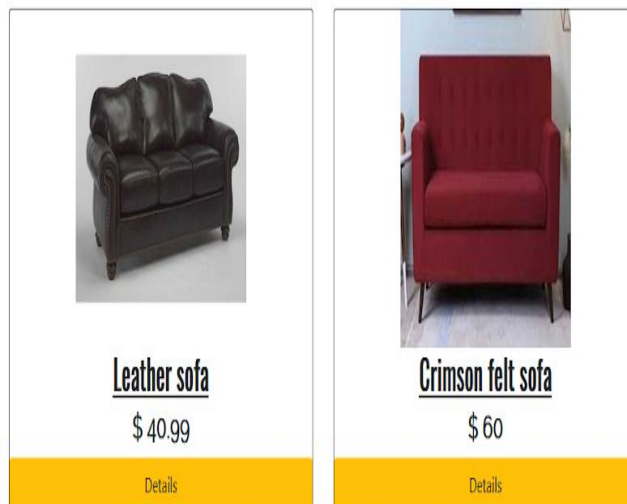




## Search function



Search returned 2 result(s) from 11 total posts.



### Item Detail


A screenshot of a web application interface. In the background, there are several product listings. One listing for a 'Leather sofa' is partially visible, showing a price of '\$40.99' and a 'description here' placeholder. Another listing for 'History' is visible with a price of '\$40.99'. A third listing for 'CSC210' is also visible. A modal window is open in the center, displaying a detailed view of the 'Leather sofa'. The modal has a title 'Leather sofa' with a close button (X) in the top right corner. Below the title is an image of a black leather sofa. Underneath the image, the price '40.99' is displayed, followed by the text 'description here'. At the bottom of the modal, there are two buttons: a grey 'Close' button on the left and a yellow 'Contact Seller' button on the right.



## Contact Seller

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Login/Register

 **Gator Trader**

All Search for products... Search Sell

About

### Contact Seller

Name \*

Phone Number \*

(\*) Mandatory Fields

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## Posting Form

gator market

Home Search for products... Search Sell

About

### Posting Form

Item Name

Category

Description

Price

Image  No file selected.

☐ By checking this box I agree to the [Terms and Conditions](#).  
Adminstrator approval of all posts may take up to 24 hours.





## Register Modal

Furniture

Search for products...

Search

Sell

REGISTER

✕

First name

e.g John

Last name

e.g Doe

SFSU Email

e.g johndoe@mail.sfsu.edu

Password

min 8 chars

☐ Show Password

Confirm Password

Confirm Password

Register

\*By Registering I Agree To The [Terms And Conditions](#)



## Log-in Modal

**LOG IN** ✕

Email

Email

Password

Password

☐ Show Password

Login [Forgot Password / Email](#)

Don't have An Account? [Register](#)

sts.

Card

\$

sofa

99

Details


Details



## User's sales items

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User ▾

 **Gator Trader**

Furniture ▾ Search for products... Search Sell

About

Messages Sales Items

| Date ▴ ▾                 | Item Name ▴ ▾      | Price ▴ ▾ |        |
|--------------------------|--------------------|-----------|--------|
| Thu Dec 12 2019 20:40:37 | History Textbook   | 10        | Delete |
| Thu Dec 12 2019 20:36:45 | Used blender       | 15        | Delete |
| Thu Dec 12 2019 20:41:45 | Card table         | 20        | Delete |
| Thu Dec 12 2019 20:39:55 | Glass coffee table | 30        | Delete |
| Thu Dec 12 2019 20:35:39 | Purple bicycle     | 45        | Delete |
| Thu Dec 12 2019 20:40:53 | Econ Textbook      | 120       | Delete |

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1



## User dashboard messages:

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User ▾

 **Gator Trader**

Furniture ▾ Search for products... Search Sell

About

Messages Sales Items

| Date ▴▾                  | Item Name ▴▾     | Name of Sender ▴▾ | Sender's Phone Number ▴▾ |        |
|--------------------------|------------------|-------------------|--------------------------|--------|
| Thu Dec 12 2019 20:54:11 | History Textbook | Alex              | 7071111111               | Delete |
| Thu Dec 12 2019 20:54:20 | Econ Textbook    | Alex              | 7071111111               | Delete |
| Thu Dec 12 2019 20:54:29 | Card table       | Alex              | 7071111111               | Delete |

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1





## Message:

message - Table

Table Name:  Schema: **gatortrader\_test**

Charset/Collation:   Engine:

Comments:

| Column Name | Datatype    | PK                                  | NN                                  | UQ                       | B                        | UN                                  | ZF                       | AI                                  | G                        | Default/Expression |
|-------------|-------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--------------------|
| mID         | INT(11)     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                    |
| date_sent   | DATETIME    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | CURRENT_TIMESTAMP  |
| senderID    | INT(10)     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |                    |
| recieverID  | INT(10)     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |                    |
| phoneNumber | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| name        | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| itemID      | INT(10)     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |                    |
| itemName    | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |

## User:

User - Table

Table Name:  Schema: **gatortrader\_test**

Charset/Collation:   Engine:

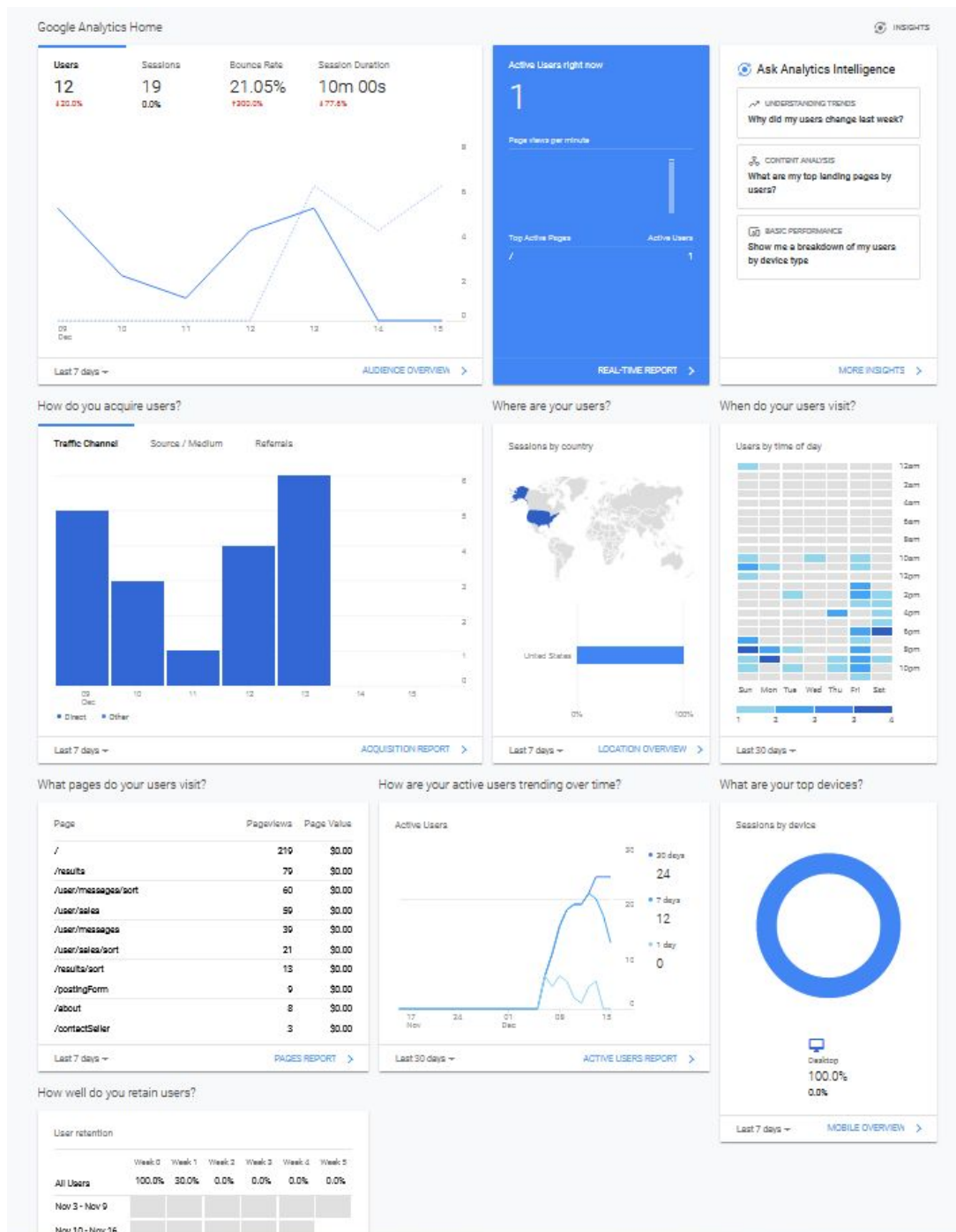
Comments:

| Column Name | Datatype    | PK                                  | NN                                  | UQ                                  | B                        | UN                                  | ZF                       | AI                                  | G                        | Default/Expression |
|-------------|-------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--------------------|
| firstname   | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| lastname    | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| email       | VARCHAR(45) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| password    | VARCHAR(60) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | NULL               |
| userID      | INT(10)     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                    |



## Google Analytics plot

Sample of Google Analytics data from all website data:





# Task management system

Task management and team communication was done using direct messaging primarily using slack with the addition of the Kyber add-on. Text and email among teammates was also commonly used.

**Team 10** is on a roll  
Your team's now 6 members strong, with 3335 messages sent across 9 channels. You can track your team's progress via the main menu.

Wednesday, December 4th

**Ibraheem Chaudry** 3:45 PM  
joined #pending-features.

**Ibraheem Chaudry** 3:45 PM  
set the channel description: Creating a to-do list to track back log of p1 features

**Ibraheem Chaudry** 3:47 PM  
@Ibraheem Chaudry, Fix modals and Flash Messages

Completed by @Ibraheem Chaudry on Thursday, Dec 05

Add Google Analytics

Completed by @Alexander Beers on Friday, Dec 06

Form inputs stay persistent after reload

Completed by @Ibraheem Chaudry on Monday, Dec 16

Display search result number on top of page

Completed by @Ibraheem Chaudry on Monday, Dec 16

Add sort functions to user dashboard and results page

Completed by @Ibraheem Chaudry on Sunday, Dec 08

Connect user dashboard api to latest front-end design

Completed by @Ibraheem Chaudry on Friday, Dec 06

**Team 10** is on a roll  
Your team's now 6 members strong, with 3335 messages sent across 9 channels. You can track your team's progress via the main menu.

Friday, December 13th

part 4

**Ibraheem Chaudry** 3:34 PM  
Thanks me and Alex are on it. I'll let you know as soon as M4 is done and you can add it to github.

**Tom Sechrist** 4:13 PM  
Milestone 4 done. I'll put it into a pdf soon. Tom can you please just read it through when you get a chance a see if we got everything. Also can you overwrite development with backend

**Tom Sechrist** 4:25 PM  
yes and yes. Will do it tonight

**Ibraheem Chaudry** 4:03 PM  
Guys can you all read this once so we all know. Thanks

CSC648-848 Fall 2019 Milestone4 Team10.pdf  
349 KB PDF

SW Engineering CSC648-848 Fall 2019  
Gator-Trader  
Team 10

I will send it to Porfivic soon

**Paul Lueng** 11:06 PM  
It's perfect, good job guys.





## Team member contributions

### Ibraheem Chaudry

#### Team Project Launch



Ibraheem Chaudry

To: Saleh Adel Zahran; Alexander Richard Beers; Lance Javier Santos; Paul Lueng; thomassechrist@gmail.com

Reply

Reply All

Forward

Tue 12/17/2019 1:52

Hello Team,

It's been a great experience working on this project with you all this semester and I am happy we are delivering a fully functional product with operational priority one functions.

My contributions to this project:

- Organizing and streamlining workflows to ensure efficient productivity
- Performing bug fixes and QA throughout the software engineering process
- Doing backend and front end work for various product functions
- Doing code review and maintaining a standard of code styling to follow throughout

Total Commits: 83

Pleasure working with you all.

Best regard,

Ibraheem Chaudry

### Alexander Beers

#### Team member contribution email



**Alexander Beers** <alexanderbeers15@gmail.com>

10:43 AM (3 minutes ago)



to ichaudry, Szahran, Tsechrist, plueng, Lsantos10

Team 10,

Hey guys, It's been a pleasure working with you all. This has been my first software engineering experience working with a team of this size and I was more than happy with the collaborative effort everyone put in and the ease of communication throughout the project. I think that we ended up with a product that turned out exceptional given our initial intent. As per milestone 5, here are some of the contributions I made to the project.

Primarily I focused on back-end development as the back-end lead for the project:

- Developed vertical prototype using the software stack team decided on
- Planned and implemented database schema
- Coded forms the posting form and contact seller form with all necessary data handling and database querying
- Contributed to documentation throughout project
- Helped develop main application file
- Coded search/browse functions
- Coded the route handling and middleware for many back-end files
- Added form validation and some aesthetic changes to front end files such as the user dashboard, posting page, etc
- Added front-end functionality with data taken from back-end files using the chosen templating language

Commits / Submissions to Github Team Development Branch: **49 Commits**



Paul Lueng

### Milestone 5 Front-end Engineer Contribution



Paul Lueng <plueng@mail.sfsu.edu>  
12:46 AM



To: Ibraheem Chaudry; Saleh Adel Zahran; Thomas Patrick Sechrist; Lance Javier Santos; alexanderbeers15@gmail.com

Dear Team Members,

Building this application has truly taught me a lot about working as a team, and what the software engineering process as a whole is about. It has been my pleasure to have worked with a group of talented individuals. This is an email highlighting some of the contributions that I have made to the team project. As our teams front-end developer, I had most of my work on more of the design, regardless these are some of the highlights of my work:

- Milestone 1 document: Listing of Functional and Nonfunctional Requirements
- Milestone 2 document: Learning and using Figma to design UI Mockups and Storyboards for early design of application.
- Discussing design aspects of application with Front-end lead
- Changing design based off of user feedback (Milestone 3)
- Changing the Search Results to appear in desired format (Rows of 4) using Bootstrap
- Learning to make modals to design and implement popup Login / Register Modals
- Design and Implementation of Contact Seller Page using Bootstrap
- Design and Implementation of User Dashboard(Message/Sales Item Tabs) Page using Bootstrap
- Fixing Navigation Bar to be resizable using Bootstrap

Commits / Submissions to Github Team Development Branch: **18 Commits(645 Lines of Code)**

Regards,

Paul Lueng

Front-End Engineer (GatorTrader)

Lance Santos



Lance Javier Santos  
Tue 12/17/2019 3:21 PM  
Ibraheem Chaudry; alexanderbeers15@gmail.com; Thomas Patrick Sechrist; Paul Lueng; Saleh Adel Zahran ✉



Dear Team 10,

This project has taught me a lot about teamwork and what it is like to build software throughout its whole lifecycle. Team 10 had great teamwork, everyone knew their role, and worked autonomously towards completing their task. As Team 10's front-end lead, I worked on designing the website, here's some of the contributions I made:

- Milestone 1, Completed Section 8 of the assignment, Team and Roles.
- Milestone 2, Created Mockups and storyboards for early design of application using Figma.
- Worked with Team-lead and Front-end to ensure that our project had a user centered design.
- Designed and implementation the Homepage, Sell page, and navigation bar using bootstrap.
- Added visual aspects that were requested by the back-end, e.g., sort dropdown.
- Redesigned Sell page based off of user feedback.
- Designed GatorTrader logo, and color scheme.

Commits / Submissions to Github Team Development Branch: **13 Commits**

Lance Santos



## Tom Sechrist

### Milestone 5



Thomas Patrick Sechrist

Tue 12/17/2019 12:55 PM

Ibraheem Chaudry; Saleh Adel Zahran; alexanderbeers15@gmail.com; Paul Lueng; Lance Javier Santos ☺



Dear Team Members,

This is an e-mail showcasing what I have contributed to this team project this semester. As github lead, I was primarily focused the structure of our project development upheld, although I did not have to do much as you guys did an amazing job with your work. I could not have asked for a better team.

- Milestone 1, Completed the competitive analysis portion of the assignment.
- Milestone 1, wrote my own 'about' page.
- Milestone 2, created the high level UML diagrams for our project.
- General help on all documents for the project.
- Wrote most of the content of Milestone 4 including usability, QA tests and features.
- Did my best to upkeep the projects github including generalizing the stream of development branches, helping some team members stay on track with github usagem and merging important branches.
- Provided general QA testing and feedback on the project at all stages of development.

Commits / Submissions to Github Team Development Branch: **19 Commits**  
Thomas Sechrist

## Saleh Zahran

### Team 10



Saleh Adel Zahran

Tue 12/17/2019 3:34 PM

Lance Javier Santos; Alexander Richard Beers; Ibraheem Chaudry; Paul Lueng ☺

You made me believe once again that hard work and coordination can accomplish anything. I'm really proud to be part of this team. Congratulations! This project would never be complete with a bunch of highly talented and inspiring team members like you. My heartiest thanks to each one of you for your unparallel contributions!

Primarily I focused on back-end development:

- Helped planned and implemented database schema
- Added login registration features.
- Wrote database query for multiple function.
- Helped develop main application file
- Added flash messages for display users actions
- Assisted with coding route handling and middleware for many back-end files.
- Adding contact seller messages to database
- Assisted in coding and displaying messages onto users dashboard

Commits / Submissions to Github Team Development Branch: **12 Commits**



## Post analysis

The technology used to develop the product was fairly new to the majority of the team and there was a learning curve involved but with application of extreme programming skills and heavy sprints delivery of functioning product on time was made possible.

It didn't take long for the team to figure out a system that worked efficiently and every member pitched in ways that made successful software engineering possible without too many backlogs and bottlenecks.

Bug tracking presented itself as a major hurdle in developing this product and it became an increasing challenge to track bugs as the application kept scaling. However, through communication of commits by individual team members, good comments, and intuitive debugging it got easier over time.

One of the most important lessons learned in this project was that working conjointly on completing tasks leads to efficient implementation and everyone learns from each others' mistakes.

### **Note from Team Lead:**

I am humbled to have lead an amazing team deliver a quality product and am grateful for the positive response received from all members. Each member's commitment to the implementation of the application became pretty clear at the time we started developing and we all trusted each others abilities to get our tasks done and not leave the team hanging.

Problems are always expected when dealing with projects of this scale. The main problems our team faced were mostly software bugs and styling issues that became a headache to figure out and created a backlog of to-do tasks. However, through everyone pitching in and having the team's back those challenges were successfully swept away.

To conclude, I just want to say thank you for allowing me to be the lead of this project and making this whole experience educational and positive.