# SW Engineering CSC648/848 Spring 2021

GatorDash

## Team 05

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Backend lead: Denny Feng
Github lead: Marco Marino
Calvin Tan
Huan Nguyen

## Milestone 4

## 5/14/21

## History Table

- Version 1 of Milestone 4 - 5/14/21
- Version 2 of Milestone 4 - 5/21/21
    - Revised according to CEO feedback

# Table of Contents

# 1. Product Summary

a. Gator Dash

b. Major committed functions

i. **General User:**
   1. General users shall be able to create an account
   2. General users shall be able to use search (all features)

ii. **Registered User:**
   1. Registered users shall be able to order food
   2. Registered users shall be able to choose pickup or delivery
   3. Registered users shall be able to login

iii. **Restaurant:**
   1. Restaurants shall be able to upload restaurant info with our service
   2. Restaurants owners shall be able to manage (add or delete) their menu

iv. **Deliverer:**
   1. Shall be able to view orders available to be picked up and delivered
   2. Shall see order details of order they are delivering
   3. Shall have access to an SFSU map
   4. Shall see map with pin on restaurant address

v. **Admin:**
   1. Admins shall have an easy to access list of the restaurants that are applying to join the service.
   2. Admins shall be required to approve restaurant registrations before they go live.

c. URL: http://ec2-3-135-197-193.us-east-2.compute.amazonaws.com/

# 2. Usability Test Plan

## a. Test objectives

i. We will be testing our website's search function. The goal of this test will be to assess its thoroughness in retrieving the requested information and presenting it to the user in an organized, easy to read manner. The search function is a vital component of any website and provides a method that allows users to find the information they want as quickly and easily as possible. A search function in a website like ours is especially critical as a malfunctioning search function is liable to cause immense frustration in users and almost immediately dissuade them from using our website any longer. We want to use user feedback to best understand how to streamline our search function and improve its effectiveness, efficiency, and ease of use.

## b. Test background and setup

i. Each user in our test will have their

ii. Each user will start their usability test on the homepage of our website.

iii. The intended users are SFSU students and faculty

iv. The URL to be used will be http://ec2-3-135-197-193.us-east-2.compute.amazonaws.com/

v. We will be measuring the user satisfaction of our testers after the testing process using likert questions and fill-in questions. The questions will cover not just the holistic satisfaction of the user during the test but will cover their thoughts on the search function's ease-of-use, simplicity of design, aesthetics, and readability.

## c. Usability Task description

i.

| | |
|---|---|
| Task 1 | Search for Italian food |
| Task 2 | Search for a Korean restaurant |
| Task 3 | Search for American food |

d. Evaluation of Effectiveness
    i. We would measure the effectiveness of the search based on the number of users able to complete their task
e. Evaluation of efficiency
    i. We would measure the efficiency of our search based on the time spent by the user to complete the assigned task as well as the number of screens seen and clicks needed to do so.
f. Evaluation of user satisfaction

| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| The search bar was easy to use. | | | | | |
| The search results were easy to understand. | | | | | |
| The search bar was easy to find. | | | | | |

## Comments/Suggestions

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|---|
| |

# 3. QA Test Plan

## a) Test Objectives

i. The goal of our QA testing is to assess the accuracy at which our search performs based on our specs. The search function is being tested to ensure output is correct and to discover any bugs the search function may have. The search function must return the correct amount of relevant results with no issues.

## HW and SW setup

### ii. HW

1. Our server host is running Ubuntu 20.04 LTS off of AWS t2.micro. It has 1vCPU at 2.5 GHz and 1GiB memory.

### iii. SW

1. Our web server is running Express 4.17.1.
2. Our database is running MySQL 8.0.23
3. Our website is also using Node 14.15.5 LTS, React 17.0.1, and Redux 4.0.5
4. The URL for our website is http://ec2-3-135-197-193.us-east-2.compute.amazonaws.com/

## Feature to be tested

### iv. Search function

## QA Test plan

| Test # | Test Title | Test Description | Test Input | Expected correct output | Test Result |
|---|---|---|---|---|---|
| 1 | Test cuisine selection pulldown. | Tests backend for filtering restaurants by cuisine. | Press search button in navigation bar then use cuisine | The restaurant ItalianCusine is the only search result | |

| | | | | | |
|---|---|---|---|---|---|
| | | | selector from navbar to select Italian | | |
| 2 | Test partially correct search string. | Tests backend for %like restaurant name. | Type “Dim” into search bar and press search button | Taken to search result page and restaurant DimSum is the only result. | |
| 3 | Test empty search string | Tests front end for providing all restaurants in service. | Press search button on navigation bar without typing anything into search bar | Taken to search result page and all available restaurants are listed | |

b)

Test 1 Safari Browser:

| Test # | Test Title | Test Description | Test Input | Expected correct output | Test Result |
|---|---|---|---|---|---|
| 1 | Test cuisine selection pulldown. | Tests backend for filtering restaurants by cuisine. | Click on cuisine selector pulldown and select “Italian” | The restaurant ItalianCusine is the only search result | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | | | from the list. | | |
| 2 | Test partially complete search string. | Tests backend for %like restaurant name. | Type “Dim” into search bar and press search button | Taken to search result page and restaurant DimSum is the only result. | PASS |
| 3 | Test empty search string | Tests front end for providing all restaurants in service. | Press search button on navigation bar without entering a search term. | Taken to search result page and all available restaurants are listed | PASS |

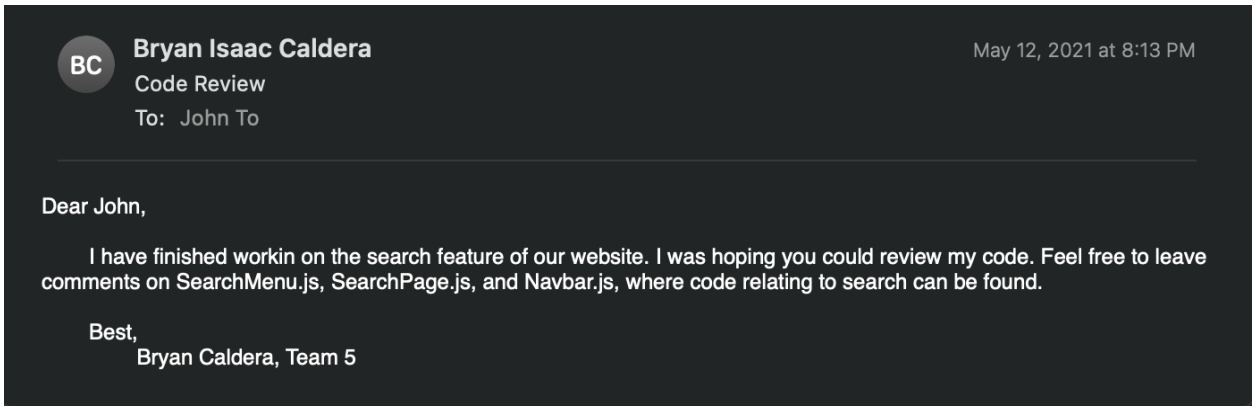
## Test 2 Chrome Browser:

| Test # | Test Title | Test Description | Test Input | Expected correct output | Test Result |
|---|---|---|---|---|---|
| 1 | Search for italian cuisine | Tests backend for filtering restaurants by cuisine. | Press search button in navigation bar then use cuisine selector from navbar to select Italian | The restaurant ItalianCusine is the only search result | PASS |

| | | | | | |
|---|---|---|---|---|---|
| 2 | Search for restaurant | Tests backend for %like restaurant name. | Type “Dim” into search bar and press search button | Taken to search result page and restaurant DimSum is the only result. | PASS |
| 3 | Search for All cuisines | Tests front end for providing all restaurants in service. | Press search button on navigation bar without typing anything into search bar | Taken to search result page and all available restaurants are listed | PASS |

# 4. Code Review

## John reviewing Bryan:

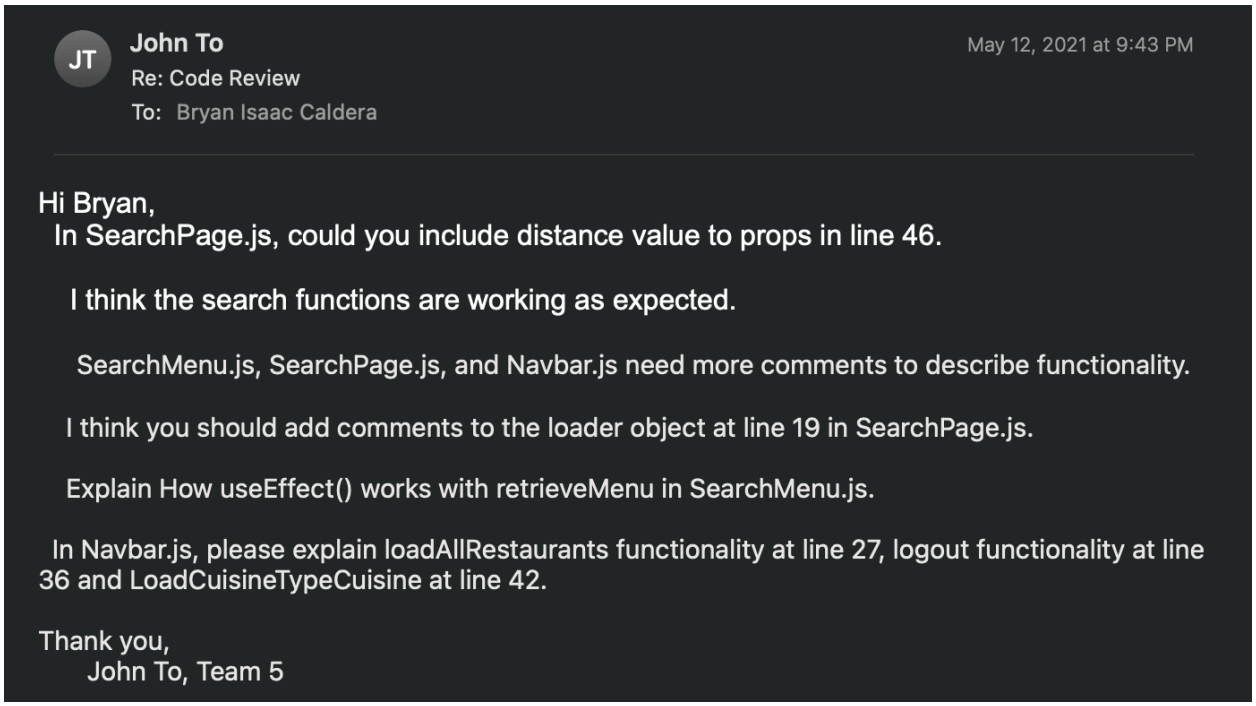


BC **Bryan Isaac Caldera** May 12, 2021 at 8:13 PM
Code Review
To: John To

Dear John,

I have finished workin on the search feature of our website. I was hoping you could review my code. Feel free to leave comments on SearchMenu.js, SearchPage.js, and Navbar.js, where code relating to search can be found.

Best,
Bryan Caldera, Team 5



JT **John To** May 12, 2021 at 9:43 PM
Re: Code Review
To: Bryan Isaac Caldera

Hi Bryan,
In SearchPage.js, could you include distance value to props in line 46.

I think the search functions are working as expected.

SearchMenu.js, SearchPage.js, and Navbar.js need more comments to describe functionality.

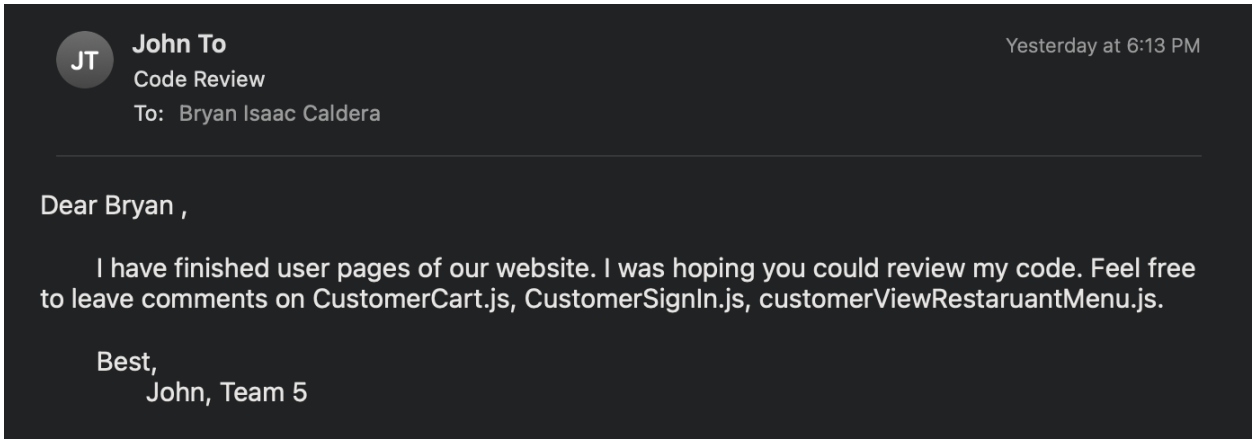
I think you should add comments to the loader object at line 19 in SearchPage.js.

Explain How useEffect() works with retrieveMenu in SearchMenu.js.

In Navbar.js, please explain loadAllRestaurants functionality at line 27, logout functionality at line 36 and LoadCuisineTypeCuisine at line 42.

Thank you,
John To, Team 5

Bryan reviewing John:

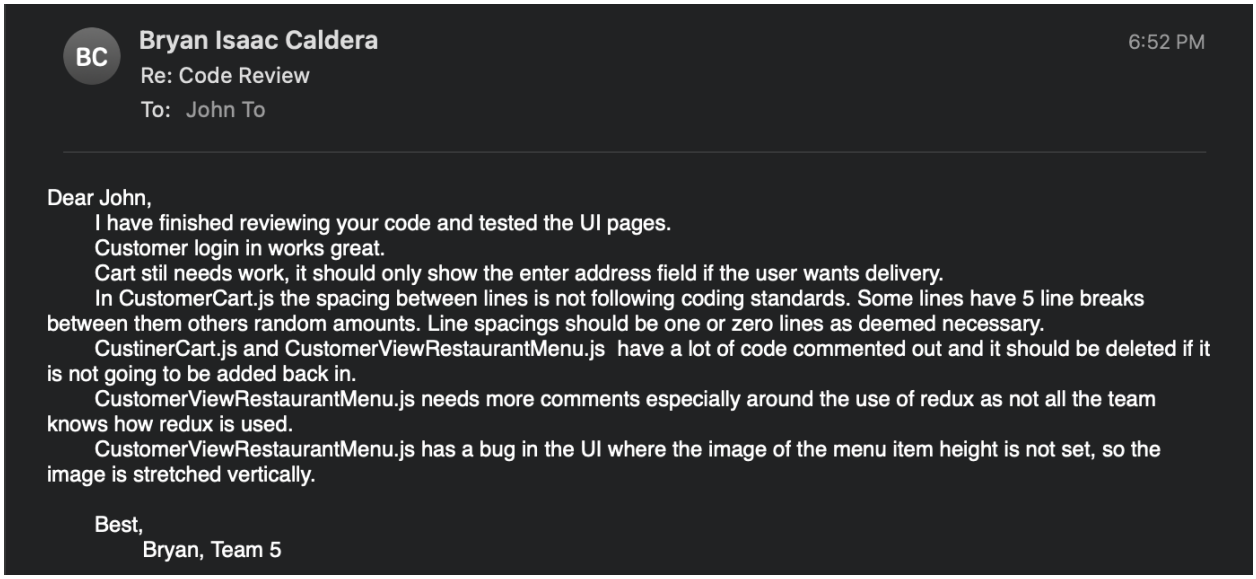


JT **John To** Yesterday at 6:13 PM
Code Review
To: Bryan Isaac Caldera

Dear Bryan ,

I have finished user pages of our website. I was hoping you could review my code. Feel free to leave comments on CustomerCart.js, CustomerSignIn.js, customerViewRestaruantMenu.js.

Best,
John, Team 5



BC **Bryan Isaac Caldera** 6:52 PM
Re: Code Review
To: John To

Dear John,
I have finished reviewing your code and tested the UI pages.
Customer login in works great.
Cart stil needs work, it should only show the enter address field if the user wants delivery.
In CustomerCart.js the spacing between lines is not following coding standards. Some lines have 5 line breaks between them others random amounts. Line spacings should be one or zero lines as deemed necessary.
CustinerCart.js and CustomerViewRestaurantMenu.js have a lot of code commented out and it should be deleted if it is not going to be added back in.
CustomerViewRestaurantMenu.js needs more comments especially around the use of redux as not all the team knows how redux is used.
CustomerViewRestaurantMenu.js has a bug in the UI where the image of the menu item height is not set, so the image is stretched vertically.

Best,
Bryan, Team 5

## 5. Self-check on Best Practices for Security

a.

| Asset to be Protected | Types of possible/expected attacks | Strategy to mitigate/protect the asset |
|---|---|---|
| User passwords | Database leak | Passwords are hashed in the database, at no point will passwords be visible as plain text |
| SFSU only | Users not from SFSU try to register | Ensure user's input email string contains the correct domain name. |

| | | |
|---|---|---|
| User attack into database | SQL code injection | Backend SQL calls use escaping variables |
| Search bar | Code injection | We limit search to only 40 characters |
| Complete user record | Password cracking | Ensure each password has min 8 characters, at least one letter and one number. |
| Restaurant Info | User tries to access restaurant's information | Only allow restaurant owners access to their information. |
| Images | Database leak | Images are kept safe in cloudinary. |

## 6. Self-Check:Adherence to original Non-functional specs

| | |
|---|---|
| Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0. Application delivery shall be from chosen cloud server | ON TRACK |
| Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of two major browsers | DONE |
| All or selected application functions must render well on mobile devices (specifics to be developed in consultation with users e.g. Petkovic) | DONE |
| Ordering and delivery of food shall be allowed only for SFSU students, staff and | DONE |

| | |
|---|---|
| faculty | |
| Data shall be stored in the database on the team's deployment cloud server. | DONE |
| No more than 50 concurrent users shall be accessing the application at any time | DONE |
| Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users. | DONE |
| The language used shall be English (no localization needed) | DONE |
| Application shall be very easy to use and intuitive | DONE |
| Application should follow established architecture patterns | DONE |
| Application code and its repository shall be easy to inspect and maintain | DONE |
| Google analytics shall be used | DONE |
| No e-mail clients shall be allowed. | DONE |
| Pay functionality, if any (e.g. paying for goods and services) shall not be | DONE |

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| implemented nor<br>simulated in UI. | |
| Site security: basic best practices shall be applied (as covered in the class) for main data<br>items | DONE |
| Application shall be media rich (images, maps etc.). Media formats shall be standard as used<br>in the market today | DONE |
| Modern SE processes and practices shall be used as specified in the class, including<br>collaborative and continuous SW development | DONE |
| The application UI (WWW and mobile) shall prominently display the following exact text on all pages *"SFSU Software Engineering Project CSC 648-848, Spring 2021 For Demonstration Only"* at the top of the WWW page. (Important so as to not confuse this with a real application). | ON TRACK |