GatorEats Project Documentation

Course: CSC 648-848 - Software Development (Spring 2023)

Milestone 1

By: Team 7

Github: https://github.com/CSC-648-SFSU/csc648-03-sp23-team07.git

Team Members:

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Executive Summary

GatorEats is an online platform that connects food-selling establishments with San Francisco State University supporters. By offering culinary services customized for the campus and student life, this service is intended to improve the SFSU experience. Everyone with an SFSU email account, including students, employees, and faculty, can access GatorEats. GatorEats can assist small and large businesses in San Francisco in reaching more clients by offering this service.

GatorEats is a revolutionary food delivery app that provides a convenient way for users to order food from various local restaurants. Clients can have their food delivered to one of the numerous drop-off locations or dorm rooms on campus. To simplify things for users with limited availability during the day, GatorEats also gives users the choice of their favorite delivery time. Customers can effortlessly use the app and place orders for their preferred meals thanks to GatorEats' user-friendly interface. Customers have the freedom to select from a variety of cuisines thanks to the app's extensive range of options from numerous eateries. Also, GatorEats collaborates with neighborhood eateries to provide consumers unique specials and discounts, allowing them to taste new foods while saving money.

With its unique delivery service to particular areas, GatorEats distinguishes itself further and gives clients a hassle-free delivery experience. By offering everyone a quick, dependable, and practical service, we hope to change the food delivery sector. We are confident that our app will establish itself as a go-to resource for SFSU students, employees, and teachers who yearn for good cuisine without the bother.

Our team is a startup of five San Francisco Computer Science students. Together, we are a combination of talented front-end, back-end developer, quality assurance, and GitHub master spearheaded by a team lead.We are proficient in JavaScript and BootStrap. Our team is passionate about creating solutions that make a positive impact on people's lives, and we believe that GatorEats has the potential to do just that. Being students, we understand the unique challenges and needs of the college community, and we're excited to provide a service that caters specifically to those needs.

Personae

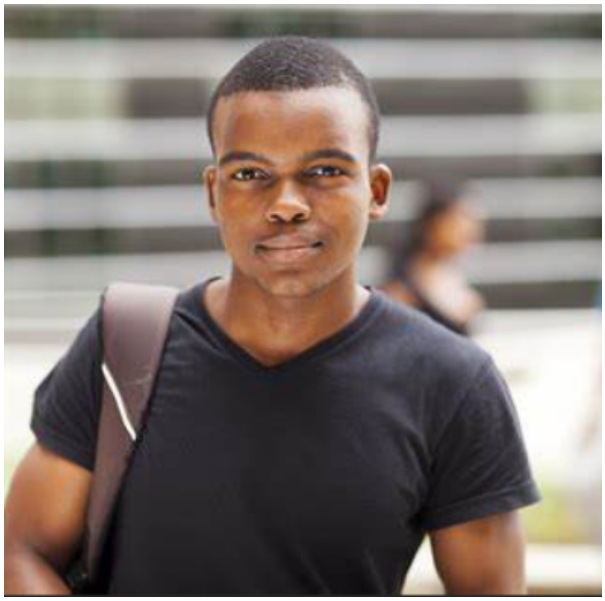
Role: Faculty

- Name: Maria Gabriela
- Age: 46
- Occupation: Professor
- Location: San Francisco
- Skills: Somewhat tech-savvy
- Personality: Serious; Cares about students
- Goals: Wants to be able to eat different but quick and convenient food
- Pain points: Sick of eating the same thing every day for convenience; Finds time between classes better spent grading and helping students

[https://atlasvein.com/content/uploads/2017/08/iStock-519665166.jpg]

Role: Student

- Name: Zaki Willis
- Age: 23
- Occupation: Computer Science Student
- Location: San Francisco
- Skills: Very familiar with the latest technology and apps
- Personality: Outgoing, likes to try new things
- Goals: He wants to be able to grab and order food while working on his assignments quickly.
- Pain Points: He is always busy working on his assignments and has no time to line up or go to restaurants to grab lunch before his classes start.



["image: Freepik.com". This cover has been designed using assets from Freepik.com]

Role:Driver

- Name: Joe Adams
- Age: 23
- Occupation: Delivery Driver (SFSU student)
- Location: San Francisco
- Skills: Familiar with the SFSU campus and using delivery apps
- Personality: Outgoing, hard-working, and respectful
- Goals: Making money while delivering orders correctly, respectfully, and on time.
- Pain point: Joe is a student so he might not be available to work everyday

[image src: flyertalk.com]

Role: Restaurant Owner

- Name: Reah Acharya
- Age: 30
- Occupation: Restaurant Owner
- Location: San Francisco
- Skills: Familiar with restaurants and technology
- Personality: Outgoing, hard-working, and respectful
- Goals: She wants to do her business with SFSU students and faculty.
- Pain Point: Running a restaurant can be a time-consuming task, and Reah may struggle to find the time to manage her restaurant's online presence effectively.

[image src: “istock.com”]

Role: Admin

- Name: Bruce Meyers
- Age: 34
- Occupation: Admin of GatorEats
- Location: San Francisco
- Skills: Tech Savvy
- Personality: Serious, Thorough, and on time
- Goals: To not be fired from GatorEats and approve of or reject restaurants in a timely manner
- Pain Point: As the sole admin of GatorEats, Bruce may struggle to keep up with the volume of restaurant registrations and approvals.

[image src: negativespace - https://negativespace.co/concentration-work-laptop-man/]

Use Cases

1. Staff Direct Delivery

Maria is an English professor at San Francisco State who teaches in the Humanities building. She has a busy schedule, teaching full days four days a week with only a short lunch break that doubles as her office hours. She is tired of her usual ham and mayonnaise sandwich but finds it difficult to leave the building due to her workload. One day, she learns about a new web app that delivers food directly to SFSU students and faculty. She goes to the website and looks at the available restaurants in the area. She decides on a Thai restaurant and orders pad thai and a drink. She is prompted to sign up for an account at the checkout and chooses to pay with her Gator card. She then reconfirms her order and total and is directed to a thank you page with a picture of the delivery person and their name. Some time later, her food is delivered to her office.

2. Student Pickup Delivery

Zaki is a senior undergraduate student at San Francisco State University studying Computer Science. Despite his outgoing personality, he finds very little time to try out new restaurants in the area due to the heavy workload he is currently taking for the semester. Usually, he likes to go out of campus and try to eat at new restaurants, but he finds himself going to the same cafe on campus because he no longer has time to go out. He spends most of his time inside the library trying to finish his assignments, and by the time he ends, it is almost time for his next class. He learns that a delivery app exclusively delivers to SFSU students and faculty. He uses the app and decides to grab food from a nearby cafe that he has not yet eaten before and order a sandwich with an iced latte. Before paying, he is given the option to either sign in to the app using an account or to sign up. He chooses to sign up, makes an account, and then proceeds to enter his gator card information, along with his name. Before confirming his order, he also chooses the J. Paul Leonard Library as the delivery location. After 30 minutes, he receives a notification that the delivery person is outside the library. He then leaves the library to meet with the delivery person and receives his order.

3. Driver App Usage

Joe is an undergrad student at San Francisco State University (SFSU). Recently Joe has been looking for a job to make some money on the side. He heard about GatorEats and decided to apply for it. Joe applied for a delivery driver position and he found the process was very simple. When filling the application Joe had to provide information such as valid driving license, valid insurance, and a car registration. After the application, Joe had to wait a few days for his application to be accepted. Joe goes through a short onboarding process that informs him on food delivery best-practices and COVID-19 safe handling processes. Joe has been working for GatorEats. As a student at SFSU, Joe is very familiar with the campus and the restaurants around it. This allows Joe to deliver food very efficiently and on time. Joe finds working for GatorEats very fun and flexible; he can work whenever he is free from classes and homework. GatorEats allowed Joe to make extra money while pursuing his studies at SFSU.

4. Restaurant Registration

Reah owned a cozy restaurant specializing in authentic Indian cuisine, a big hit among San Francisco State University (SFSU) students. Reah has been in the restaurant business for over a decade and was well aware of the importance of having a solid online presence to attract new customers and retain loyal ones. One day, Reah stumbled upon GatorEats, an online platform connecting local restaurants with the SFSU community's hungry customers. Without hesitation, she registered her restaurant on the platform and took her business to the next level. The registration process was simple, and within minutes, Reah provided all the necessary information about her restaurant, including the menu, hours of operation, and location. After submitting her application, Reah received a message saying that her restaurant would be approved within 24 hours by the GatorEats admin before being listed on the platform. Once her restaurant is approved, Reah can manage it online by logging into her GatorEats account. From there, she can update her restaurant's menu, hours of operation, location, and contact information as needed. She can also add photos of new dishes or specials to entice customers.

5. Admin App Usage

Bruce Meyers is a newly hired admin at GatorEats. His job is to review and approve restaurants asking to be listed on the GatorEats website. He has been told he has already been registered on the site and has to login in with his provided username and password. He heads to the GatorEats website and logs in as an admin. Immediately he sees a list of all the restaurants he needs to approve. There are two. He clicks on the first and reviews the content. He is shown a restaurant picture, the owner's name, a short description, and a menu. He checks that nothing is fabricated or missing and approves the restaurant at the bottom. He returns to the list of restaurants needing approval and clicks on the remaining restaurant. He finds it is missing a menu and prices so he rejects the restaurant application. The owner is notified of the problem and is encouraged to reapply with all the necessary information.

Data Glossary and Descriptions

Unregistered User: Any user that utilizes the service shall be considered an unregistered user. They shall view available restaurants and photos. Does not need to login or register.
Registered User: A general user that has registered shall be considered a registered user,. They must log in to access their account. A registered user shall opt into becoming delivery driver or restaurant account, or remain as just a registered user. An admin shall be required to register an account. Faculty, staff and students must register using their sfsu.edu email or mail.sfsu.edu email.
Admin Role: An admin account shall be a registered user. The only registered user that shall have access to approve restaurants and uploaded photos.
Driver Role: A registered user that shall have access to a customer's request. They are responsible for the delivery and completion of a request.
Restaurant Account: A general user that shall create a restaurant account. A restaurant account can build a restaurant within their account, and manage their information.
Order History: Registered users shall be able to view all their past orders. Restaurants shall be able to view all orders made to their restaurant by the customers.
Order: An entity that contains a Registered user's order information including the restaurant that the order was made from, the cost, the delivery driver delivering the order, the date the order was placed, the date/time the order was completed, and an orderlist.
OrderList: A list that contains MenuItems. The orderlist is linked to an order.
Menu: A list that contains menuitems for a restaurant. The menu is linked to a restaurant
Menu Item: A menu item would be linked to a menu, which is in turn linked to a restaurant. It would contain food options, descriptions, prices, keywords has a link to a photo
Photo: Photos that are uploaded by a Business account. Photos shall have a relevant name and can be viewed by any user. Shall be approved by the admin before being viewed by other general users
Restaurant: A restaurant shall be a registered account. They shall submit a name while registering. They shall have at least one location and at least one phone number. They shall be able to submit relevant photos and menu of their restaurant
Category: Restaurants owners will be able to link their restaurant to categories. This would allow for users to search through the list of restaurants based on categories.
Pick up point: Coordinates on GoogleMaps for general meetup points between a customer and a delivery driver
Building: Buildings located on SFSU Campus. These building shall contain rooms
Room: Rooms located within SFSU buildings. These rooms shall serve as a point for delivery for drivers.

Initial List of Functional Requirements

1. Unregistered User
    1.1. An unregistered user shall be able to register for an account
    1.2. An unregistered user shall be able to browse the restaurants
    1.3. An unregistered user shall be able to search using food categories or cuisines
    1.4. An unregistered user shall be able to sort by delivery time and price
2. Registered User
    2.1. A registered user shall be able to log into their account
    2.2. A registered user shall be able remain as a customer
    2.3. A registered user shall have valid email address (sfsu.edu or mail.sfsu.edu) and a password
    2.4. A registered user shall be able to reset their password
    2.5. A registered user shall be able to order food
    2.6. A registered user shall inherit all functionality of unregistered user
    2.7. A registered user shall choose the location where the food will be dropped off
    2.8. A registered user shall have a payment method
3. Restaurant Account
    3.1. A restaurant account shall be able to register their account
    3.2. A restaurant account shall be able to view orders
    3.3. A restaurant account shall upload many photos of their dishes
    3.4. A restaurant account shall be able to set the prices for their dishes
    3.5. A restaurant account shall be able to accept food requests
    3.6. A restaurant account shall be able to add or delete items from their menu
    3.7. A restaurant account shall be able to add a phone number
    3.8. A restaurant account shall be able to add one or more addresses
    3.9. A restaurant account shall link itself to up to three chose categories
4. Admin
    4.1. An admin shall be the only user that shall approve restaurants
    4.2. An admin shall be able to approve uploaded photos by restaurant owners
    4.3. An admin shall be able to delete users
5. Driver
    5.1. A driver shall be able to register as delivery driver
    5.2. A driver shall be able to receive delivery order
    5.3. A driver shall be able to view the map of the school
    5.4. A driver shall be able to set the time they are available to deliver
    5.5. A driver shall turn their availability status of or off
6. Payment Method
    6.1. A payment method shall be linked to the customer’s gator pass.

7. Order
    7.1. An order shall have the time the order was placed, the restaurant name, the estimated time of arrival, the price, the food that was ordered and a SFSU map where the order shall be delivered.
8. Order List
    8.1. An order list shall contain menu items and a map where the order shall be delivered to.
9. Menu
    9.1. A menu shall have one or more food option, description and the price
    9.2. A menu shall have one or more relevant pictures
10. Photo
    10.1. A photo shall have a relevant name
    10.2. A photo shall be approved by an admin
    10.3. A photo shall be viewable by any general user after approval
11. Category
    11.1. A category shall be linked to zero to many restaurants
    11.2. A category shall allow for a user to filter their searches for a restaurant
12. Pickup Point
    12.1. A pickup point shall have a name
    12.2. A pickup point shall have a coordinate points or a building name and a room number
    12.3. A pickup point shall be a point on the SFSU map that would be used for meetup/dropoff of delivery
13. Rooms
    13.1. A room is a pickup point with a building name

Non-Functional Requirements

1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0
2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of two major browsers
3. All or selected application functions shall render well on mobile devices
4. Data shall be stored in the database on the team's deployment server.
5. No more than 50 concurrent users shall be accessing the application at any time
6. Privacy of users shall be protected
7. The language used shall be English (no localization needed)
8. Application shall be very easy to use and intuitive
9. Application shall follow established architecture patterns
10. Application code and its repository shall be easy to inspect and maintain
11. Google analytics shall be used
12. No email clients shall be allowed. Interested users can only message to sellers via in-site messaging. One round of messaging (from user to seller) is enough for this application
13. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated in UI.
14. Site security: basic best practices shall be applied (as covered in the class) for main data items
15. Media formats shall be standard as used in the market today
16. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development
17. The application UI (WWW and mobile) shall prominently display the following exact text on all pages "*SFSU Software Engineering Project CSC 648-848, Spring 2023. For Demonstration Only*" at the top of the WWW page nav bar. (Important so as to not confuse this with a real application).

Competitive Analysis

✔✖

	UberEats	Doordash	Grubhub	GatorEats
Filters (cuisines/food type)	✔	✔	✔	✔
Delivery Specification	✔	✔	✔	✔
Recommendations	✔	✔	✔	✔
SFSU Delivery/Pickup Points ***	✖	✖	✖	✔
SFSU Discounts ***	✖	✖	✖	✔

GatorEats is a niche market that targets SFSU students, staff, and faculty specifically by providing a tailored food delivery service that caters to their unique needs. It ensures quick delivery as the food will come from nearby and local restaurants. While the app is targeting first and foremost direct delivery to members of SFSU in various buildings and rooms on campus, the app also provides pickup points that will be well known or well traveled places for SFSU members to easily find and safely pickup their order from. Another unique point is that every member that is registered with an SFSU email, will get discounts from local restaurants to both promote local business as well as encourage users to stay on our app.

High-Level System Architecture and Technologies Used

Stack (SERN)--------

- Server Host: Amazon AWS
- Operating System: Ubuntu Server 22.04.1 LTS
- Database: mySQL Workbench
- Web Server Framework: Express.js
- Front End Framework: React.js
- Client-Side Runtime Environment: Node.js
- Server-Side Language: JavaScript

Additional Technologies

- IDE: VS Code
- Front End Library: Bootstrap

Team and Roles

Student Name	Student Email	GitHub Username	Role
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Emily Huang	ehuang10@sfsu.edu	emhuang3	Front-End Lead
Melisa Sever	bsever@sfsu.edu	melisa48	QA/Documentation
Eunice Borres	eborres@sfsu.edu	eunmdb	Back-End Lead
Juan David Liang Liao	jliangliao@sfsu.edu	JDLiang100	GitHub Master

Checklist

Task	Status	Description
So far all team members are engaged and attending team sessions when required	DONE/OK	
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	DONE/OK	
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	
Use of any GenAI tool like ChatGPT: say if you used ChatGPT or like and how and for what segment of Milestone 1 (brief paragraph). As per class policy: this is allowed as a help BUT you cannot copy and paste its output and claim it is your own text, you need to put it in quotes or modify it, and only for short sentences You also are responsible for accuracy of your submission, so any ChatGPT content needs to be checked by you	DONE/OK	The second paragraph of the executive summary was supplemented with the use of ChatGPT.