RAMEN HOUSE

Restaurant Website Project Report

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1. Introduction

Restaurants around the United States have been implementing user-friendly interface designs on their website to maintain their sales and enhance their customers' user experience. Over a hundred restaurant websites, nearly 77% of diners check restaurant websites before visiting, and up to 44% of visit the website to decide to order takeout or delivery. Using HTML, CSS, and Script to develop a website helps restaurants share information, food pictures, menus, prices, and locations to customers. It helps restaurants create their brands as well as boost sales.

1.1. Objective

This site is to inform customers about the products sold by Ramen House, while allowing for customers to communicate to the store through online services. Here, customers should be able to find where we are located and how to contact us, as well as what is on our menu. If they like what they see, they would also be able to make reservations to come to Ramen House and eat.
The objective of our project is to design the website and organization of website information and improve user experience and user satisfaction in the restaurant. We will achieve this by creating sales features, and implementing a user system, and adding quality to the restaurant system. Outed Website: Building a professional website with a menu and sales features.

- Sales features: Implementing online orders and reservations.
- User Interface: Improving the user interface will make the website more welcoming and allow customers to take orders and find information.
- Quality of Life: Quality of life changes such as progress updates via email and product recommendations help to keep the ordering experience positive and stress-free.

1.2. Project Scope

- Create the homepage for the restaurant system and add information including the bio, history, location, and contact information.
- Build the professional menus with images and prices.
- Implement the purchase function to assist in sales including check-out and view orders.
- Create a user-friendly front end and overall make the website easier to navigate.

1.3. Benefits and Goals

Some of the benefits would be to increase transaction amounts, manage restaurant operations, give customers the ability to actively track their order with live updates and notifications, and give information about the type of restaurant, menu, and location.

1.4. Competitors

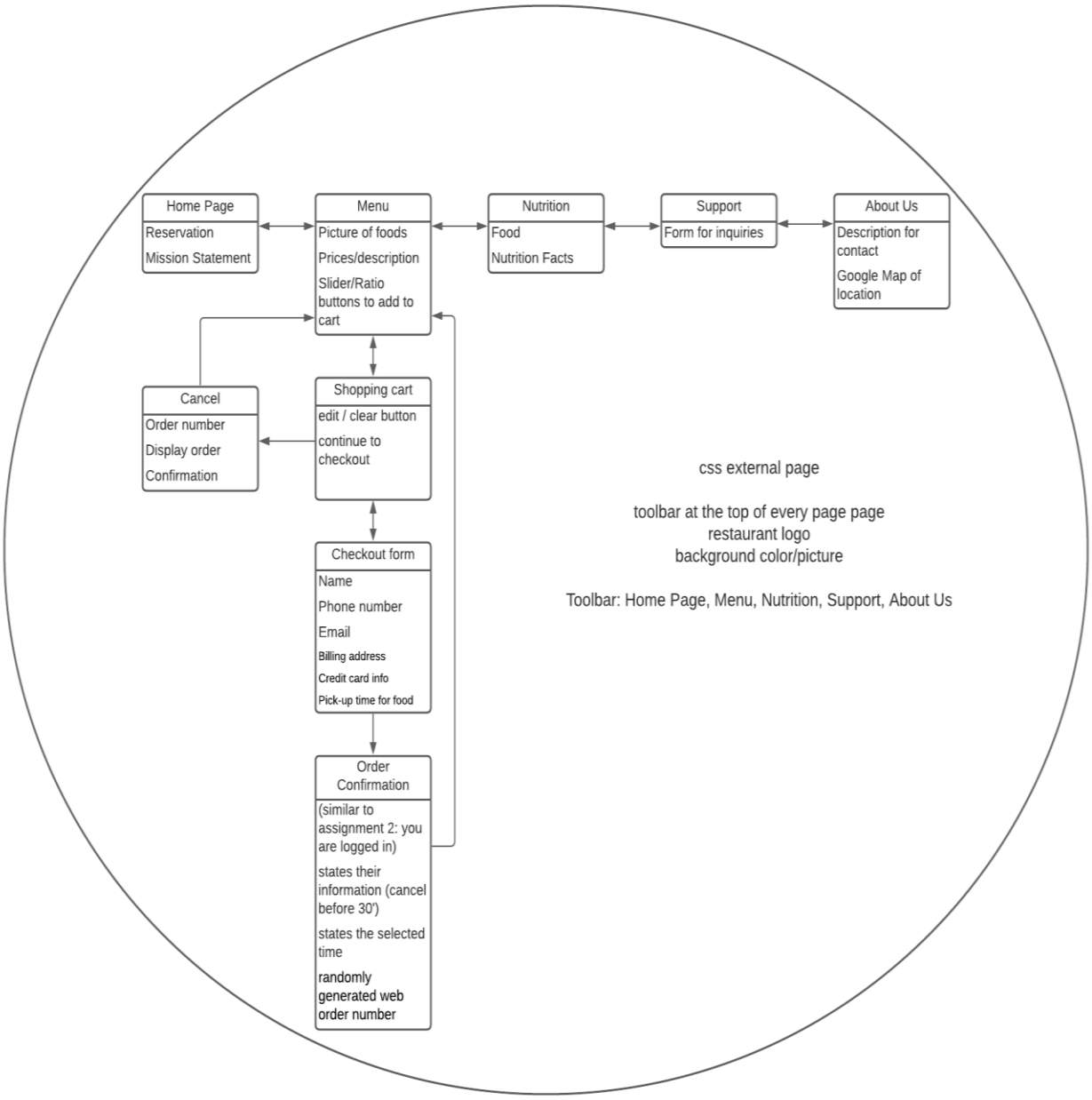
Some competitors that may Ramen House may see is Kumako Ramen and Ozu Kitchen, as they are near SJSU. However, customers will be drawn into how easy it is to use Ramen House's website. How pleasing it is to look at and easy it is to navigate around. They would also be drawn in by the pictures of our food as well as our reservation button which would ensure there would be no wait time upon their arrival.

2. Requirement Analysis

The web application will allow customers to search for items using menu categories (i.e., appetizers, main course, desserts, and drinks). Customers can order food and drinks on the e-menu. Customers can also request special orders (add and no option). Customers can request to pay online or pay in-store. Our system will send confirmation emails/pages once the order/reservation is completed.

3. Architecture:

3.1. Sitemap:



4. Design Document

4.1. Backend Server

4.1.1. Network & Web Tier

Ramen House uses the “Network and Web Tier” to handle requests from customers and the Ramen House system through the use of HTML, Javascript, JSON plays an important role in

cloud architecture as it serves as a division between the frontend and backend services. The use of a Firebase real-time also condenses the backend services into a single-entry point. The “Network & Web Tier” relates to the website in that it allows the customer information to be sent to multiple microservices (support and reservation) which is essential for the website server to compute new data efficiently.

4.1.2. Database Tier

Ramen House uses Firebase to save the users’ information when they enter reservation/support requests into their system. The Firebase Realtime Database is a cloud-hosted NoSQL database that lets you store and sync data between your users in real-time.

4.2. User Interface and User Experience

4.2.1. Wireframe

The Ramen House team uses Lucidcharts to develop a wireframe. Wireframes are an effective tool for collecting and presenting functionality, navigation, and contents of a website. It helps Ramen House decide which features are wanted on the website and which elements are needed. Annotations or notes attached to elements or widgets on the wireframes help communication-specific functions.

4.2.2. Mockup

By using Lucidchart, Ramen House creates mid-to-high-fidelity statistical pictures of web design that aim to demonstrate the fonts, icons, color schemes, navigation, images, and content layout. Mockups allow the Ramen House team to focus on the overall appearance of web design with respect to website architecture and functionality. Based on mockup designs, Ramen House is able to test a website's functionality using an interactive prototype to promote an amazing user experience.

4.2.3. Prototype

The Ramen House website is implemented by HTML, CSS, Bootstrap, CDN and JavaScript for designing web pages. The main design and styles are created in CSS with support from BootstrapCDN and JavaScript.

4.2.3.1. Typography

Big Shoulder of Google Fonts imported into CSS which is general font types and styles for Ramen House websites. Size text will be changed to suit each page and content. Letter space is implemented as default in normal. Ramen

Website's text is implemented in the center, and some is designed in the absolute form.

4.2.3.2. Content Layout

Ramen House's web content is displayed on a webspace with Z-Layout. It helps create a visual hierarchy that users are likely to follow, making it a perfect layout option for post landing page design. The top horizontal line includes the main navigation of the home page, menu, nutrition, support, and about us to attract users. The diagonal line displays the main contents of each page. The bottom horizontal line highlights the call to action at some points (reservation, support, purchase, etc..) and displays information about the Ramen House restaurant.

4.2.3.3. White Space

Applying white space in grey or white colors is to strike a perfect balance in the web design. It helps websites avoid overloaded or bar web pages.

4.2.3.4. Color Scheme

The color scheme is designed in dark and light colors. Ramen House applies the text color contrast and alternative for each page. The main colors are black and white, grey and black make a website more visible, especially if you want to draw your audience toward your content.

4.2.3.5. Media

Ramen House implements the images (jpg and jpeg) which helps emphasize with customers, and explain what Ramen House's products are. With high quality images, Ramen House's pages are more visually appealing.

4.2.3.6. User Navigation Visual

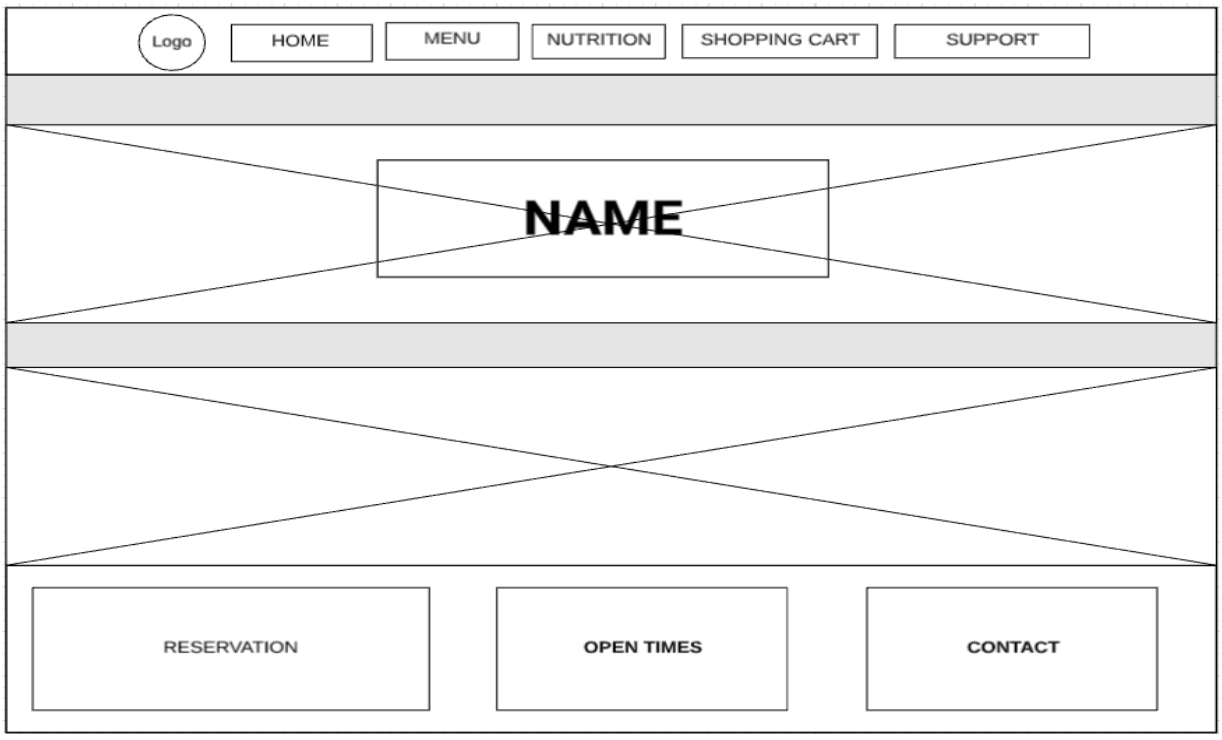
- Standard Horizontal Menu (Plain Navigation)
- Call to action button (CTA)
- Hide Navigation (Reservation)
- Navigation affect traffic (Restaurant's Location)
- Navigation affects conversions. (Reservation and Support Form)
- Hover Effective Navigation (Header's Selection and Reservation)

4.3. Ramen House Design

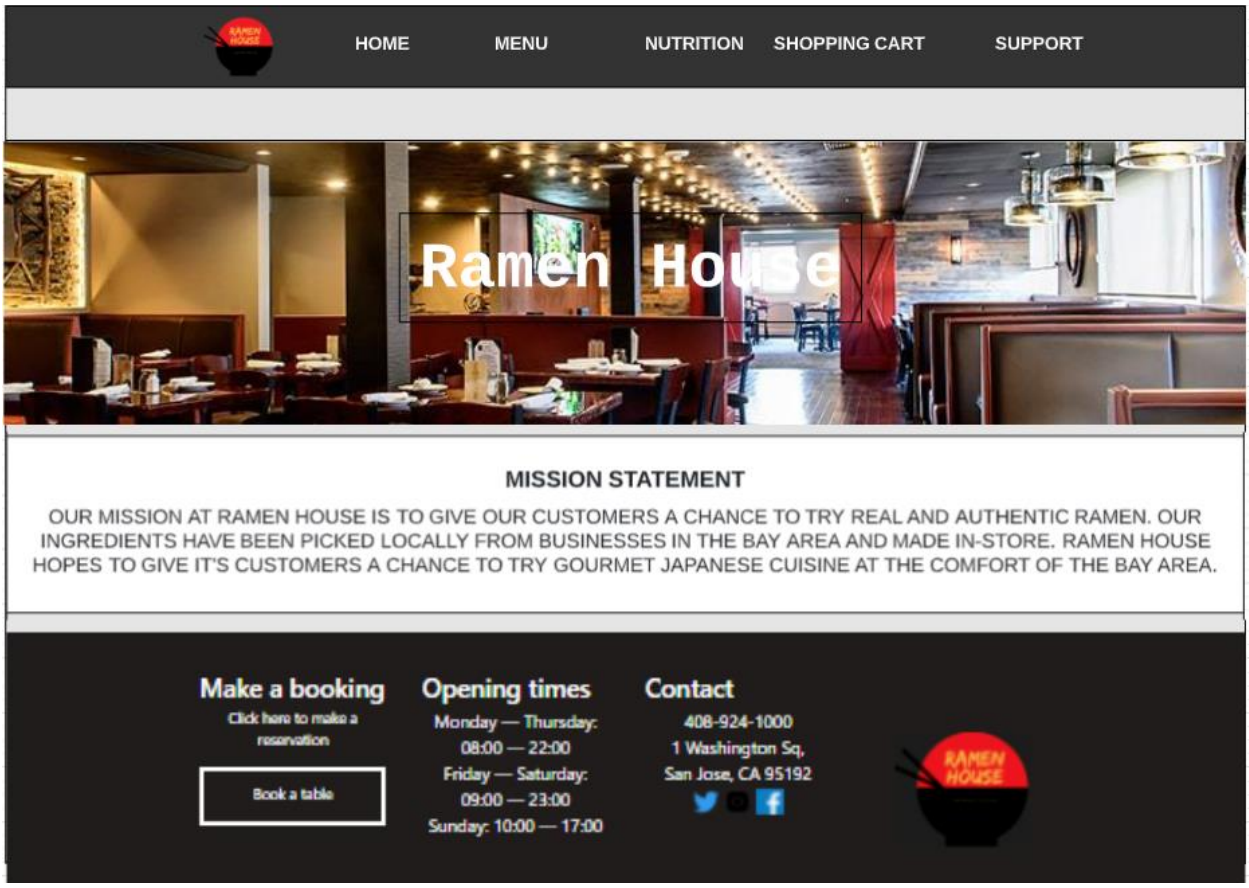
4.3.1. Homepage

The goal of the homepage is to pique the interest of visitors and prompt them to delve deeper into the pages of your website. The homepage introduces the Ramen House mission, open times and contact information. Also, it displays the CTA of book table buttons that helps visitors link the reservation page to fill the form. Ramen House applies Bootstrap 4 to the raised button with hover effect in CSS and HTML. When the visitor clicks a reservation button, it will change the color background of the buttons.

- **Wireframe**



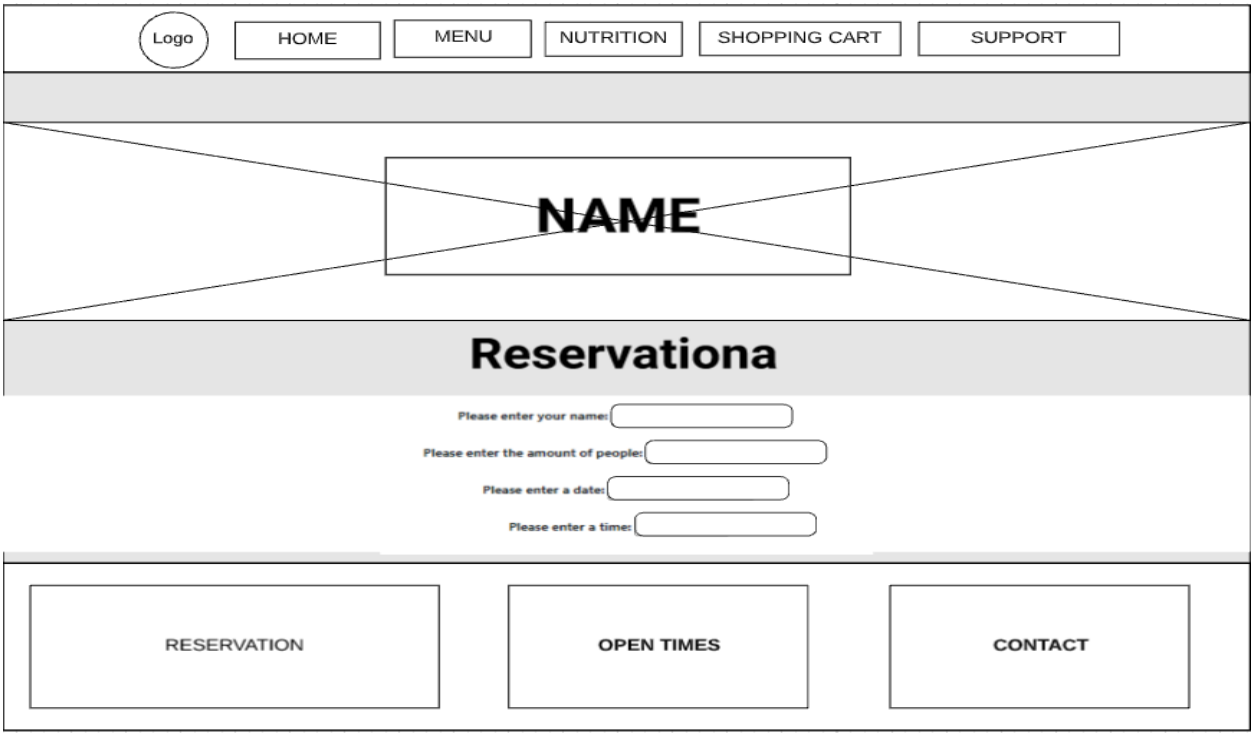
- **Mockup**


HOME
MENU
NUTRITION
SHOPPING CART
SUPPORT
Ramen House
MISSION STATEMENT
OUR MISSION AT RAMEN HOUSE IS TO GIVE OUR CUSTOMERS A CHANCE TO TRY REAL AND AUTHENTIC RAMEN. OUR INGREDIENTS HAVE BEEN PICKED LOCALLY FROM BUSINESSES IN THE BAY AREA AND MADE IN-STORE. RAMEN HOUSE HOPES TO GIVE IT'S CUSTOMERS A CHANCE TO TRY GOURMET JAPANESE CUISINE AT THE COMFORT OF THE BAY AREA.
Make a booking
Click here to make a reservation
Book a table
Opening times
Monday — Thursday:
08:00 — 22:00
Friday — Saturday:
09:00 — 23:00
Sunday: 10:00 — 17:00
Contact
408-924-1000
1 Washington Sq,
San Jose, CA 95192

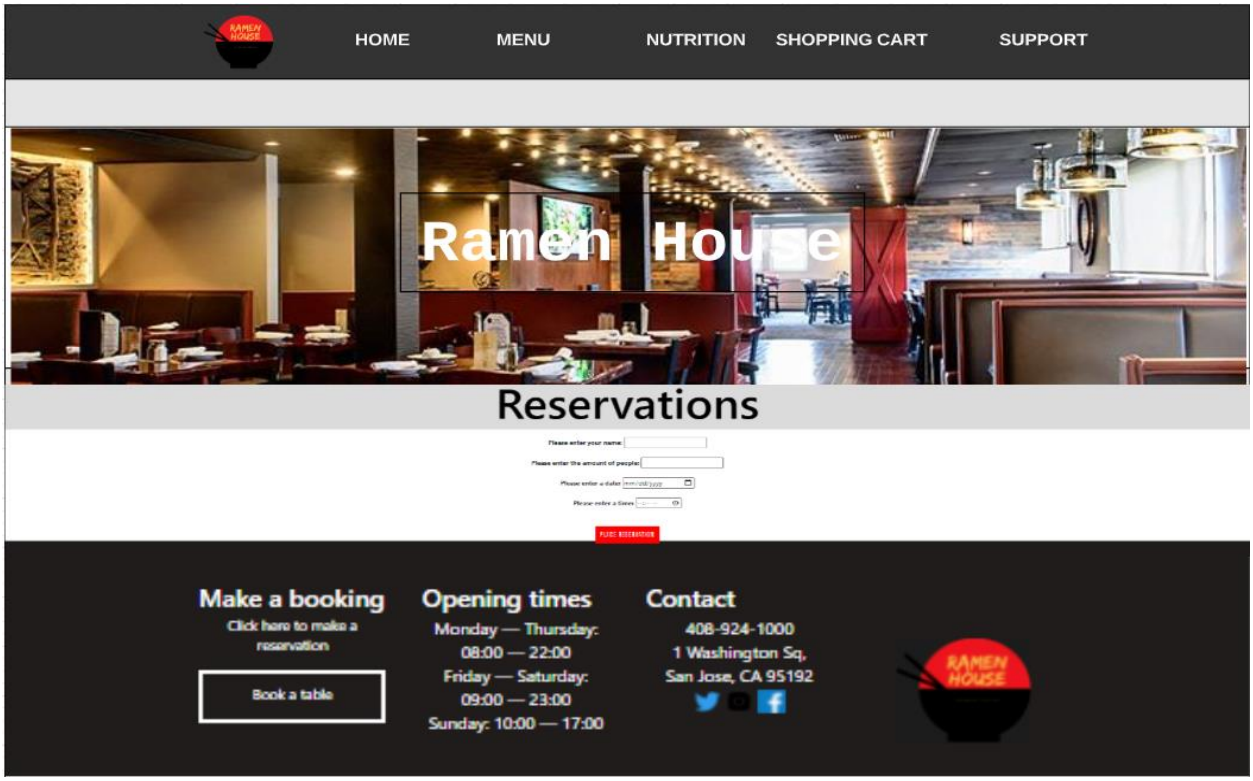
- **User Interface**

4.4. Reservation

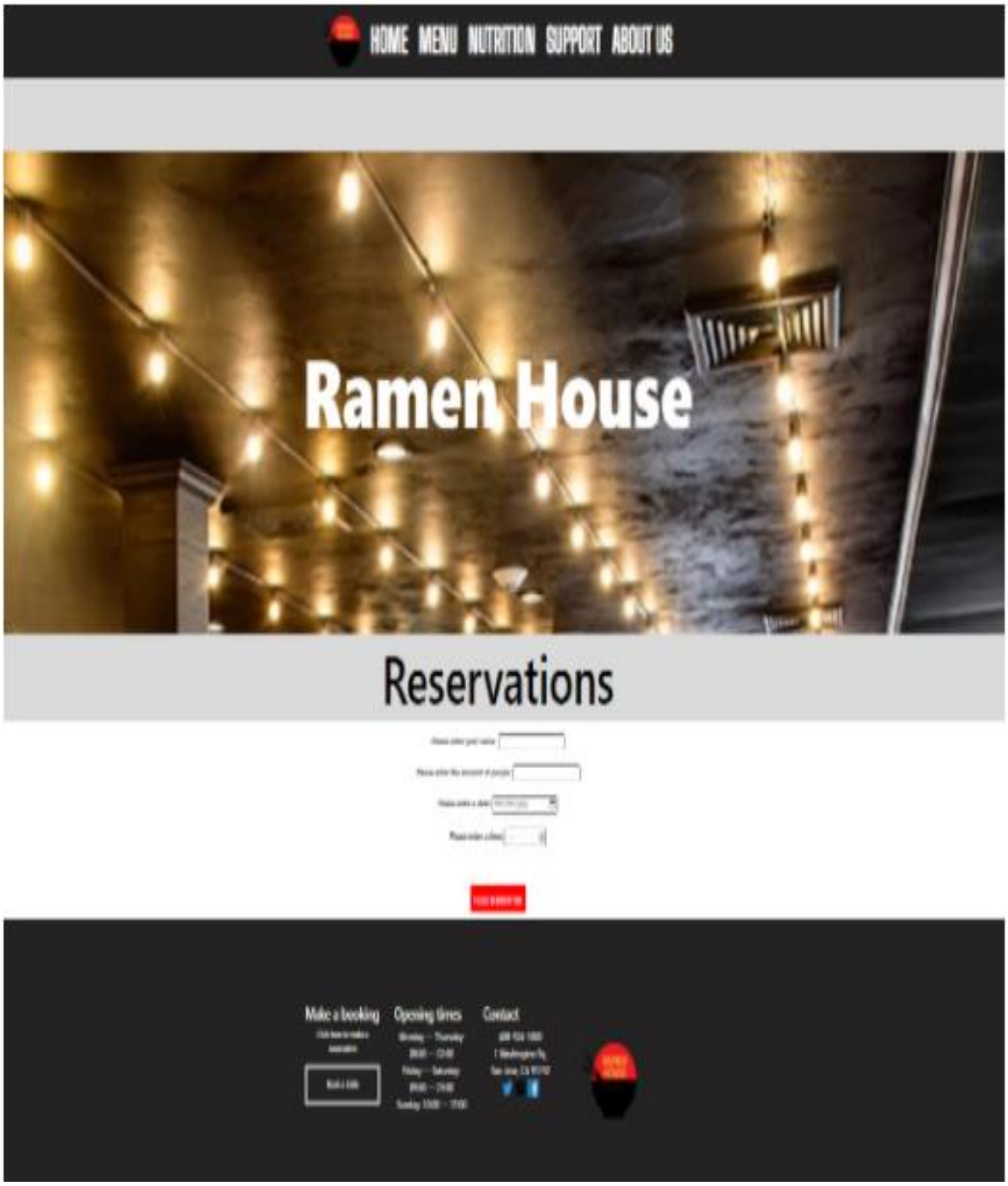
- **Wireframe**



- **Mockup**



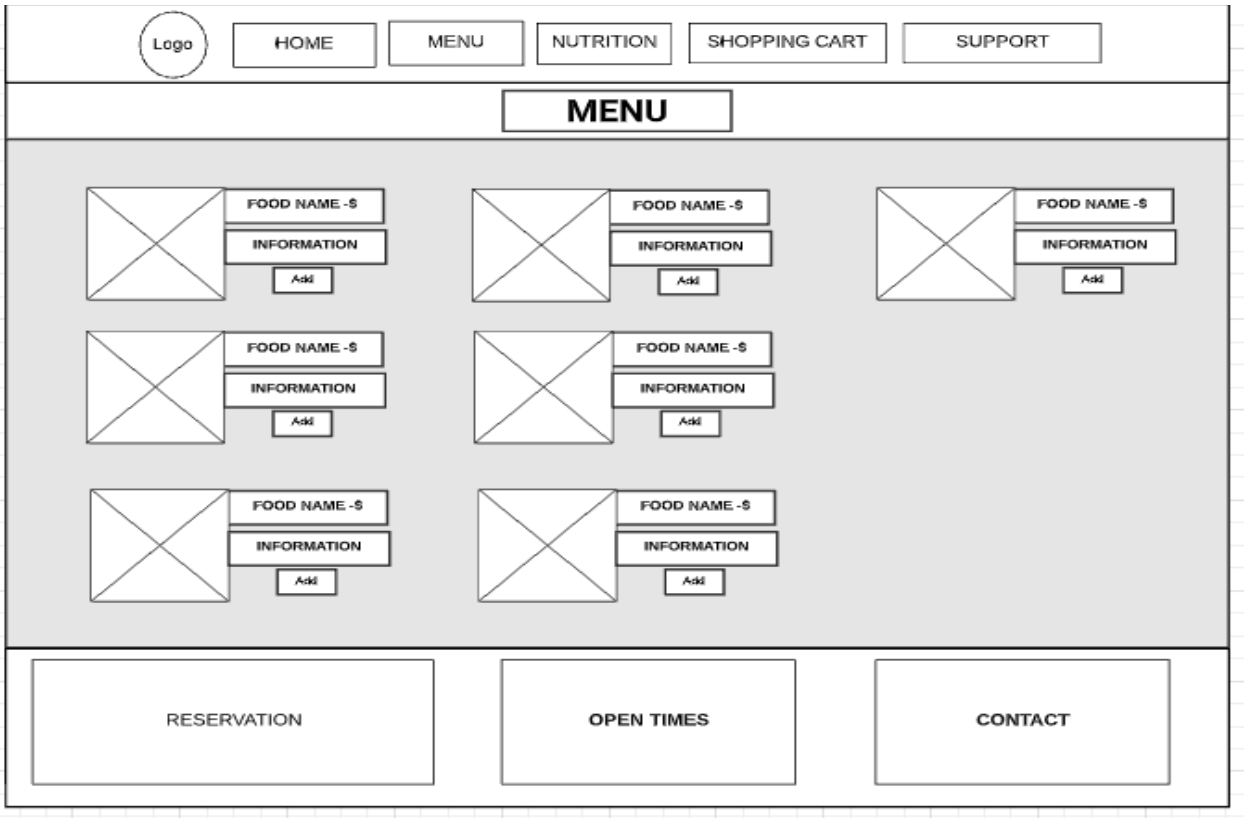
- **User Interface**



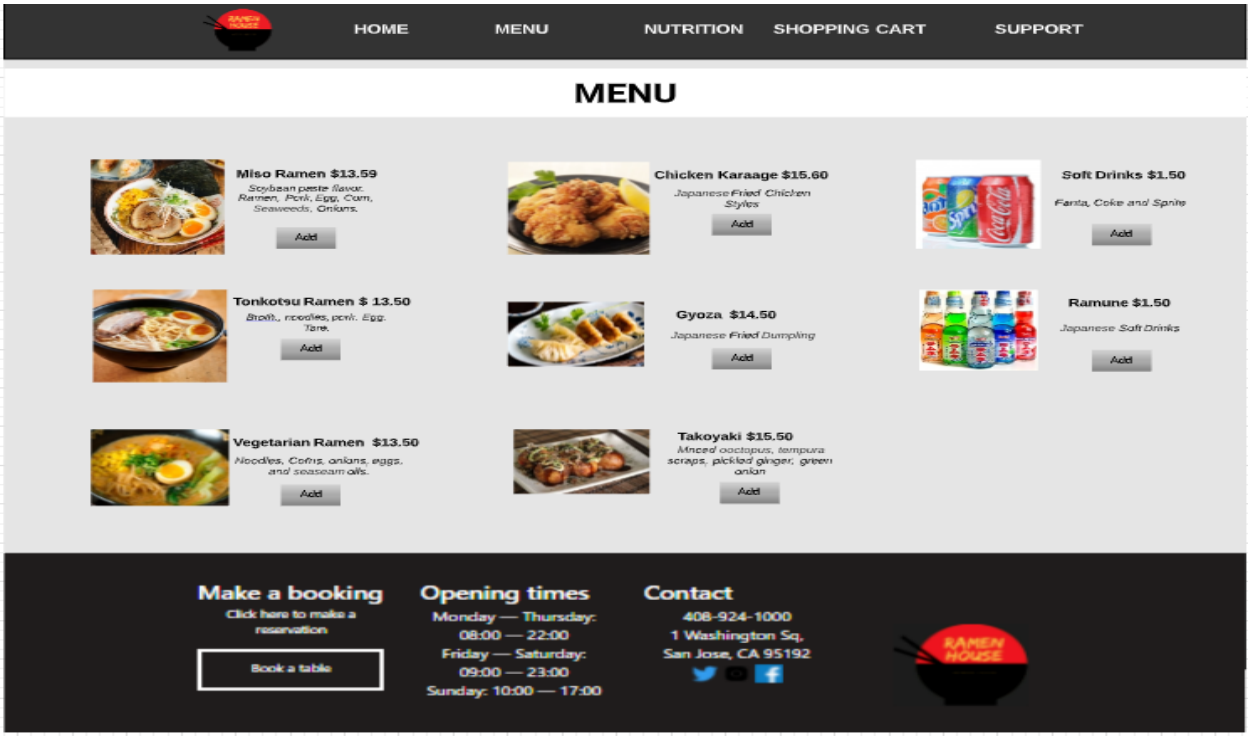
4.5. Menu

The menu page consists of 12 items to order. The 12 items are categorized into 4 sections: appetizers, ramen, drinks, and desserts. They are displayed in the column class which helps customers can product's item, prices and add buttons.

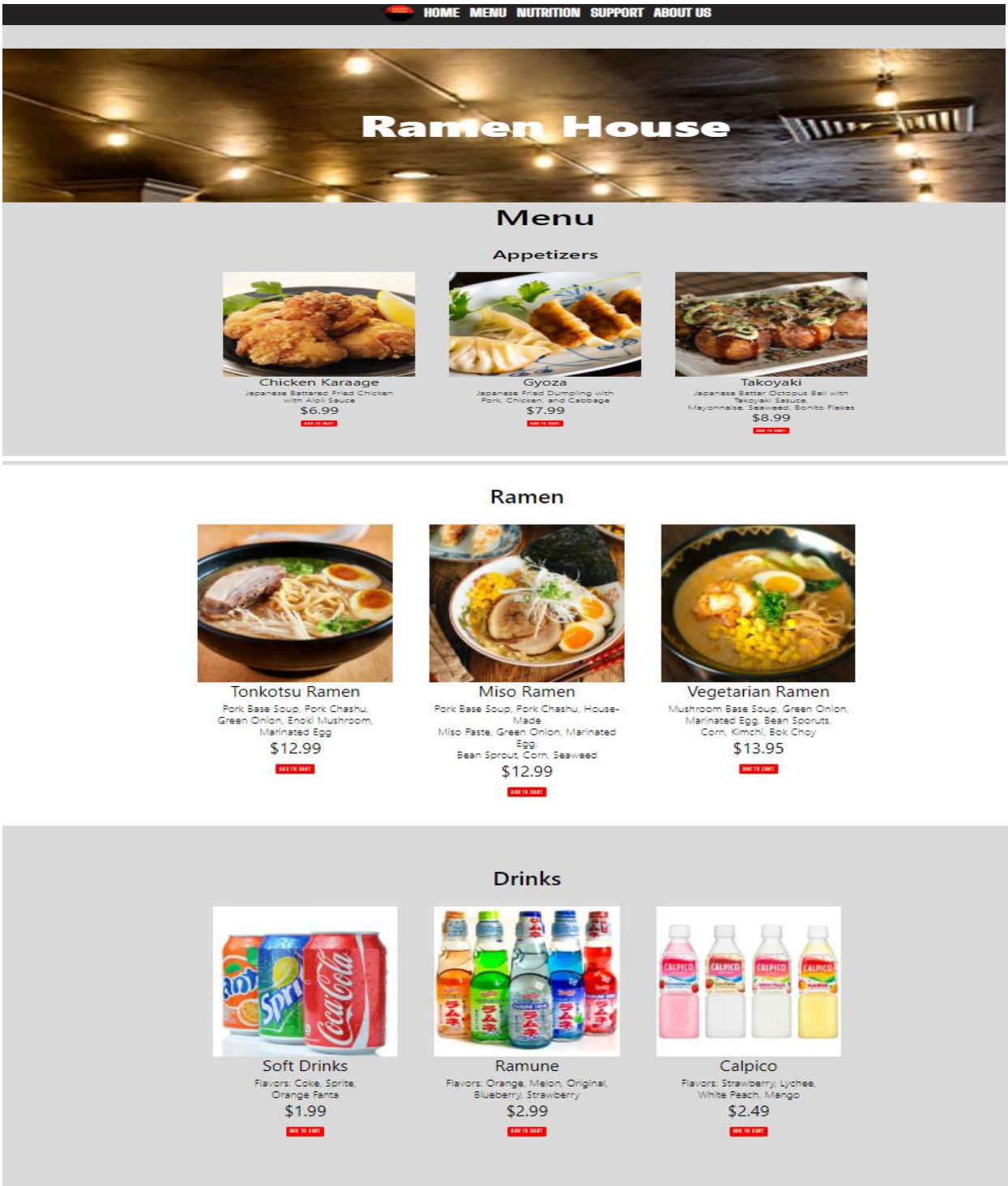
- **Wireframe**

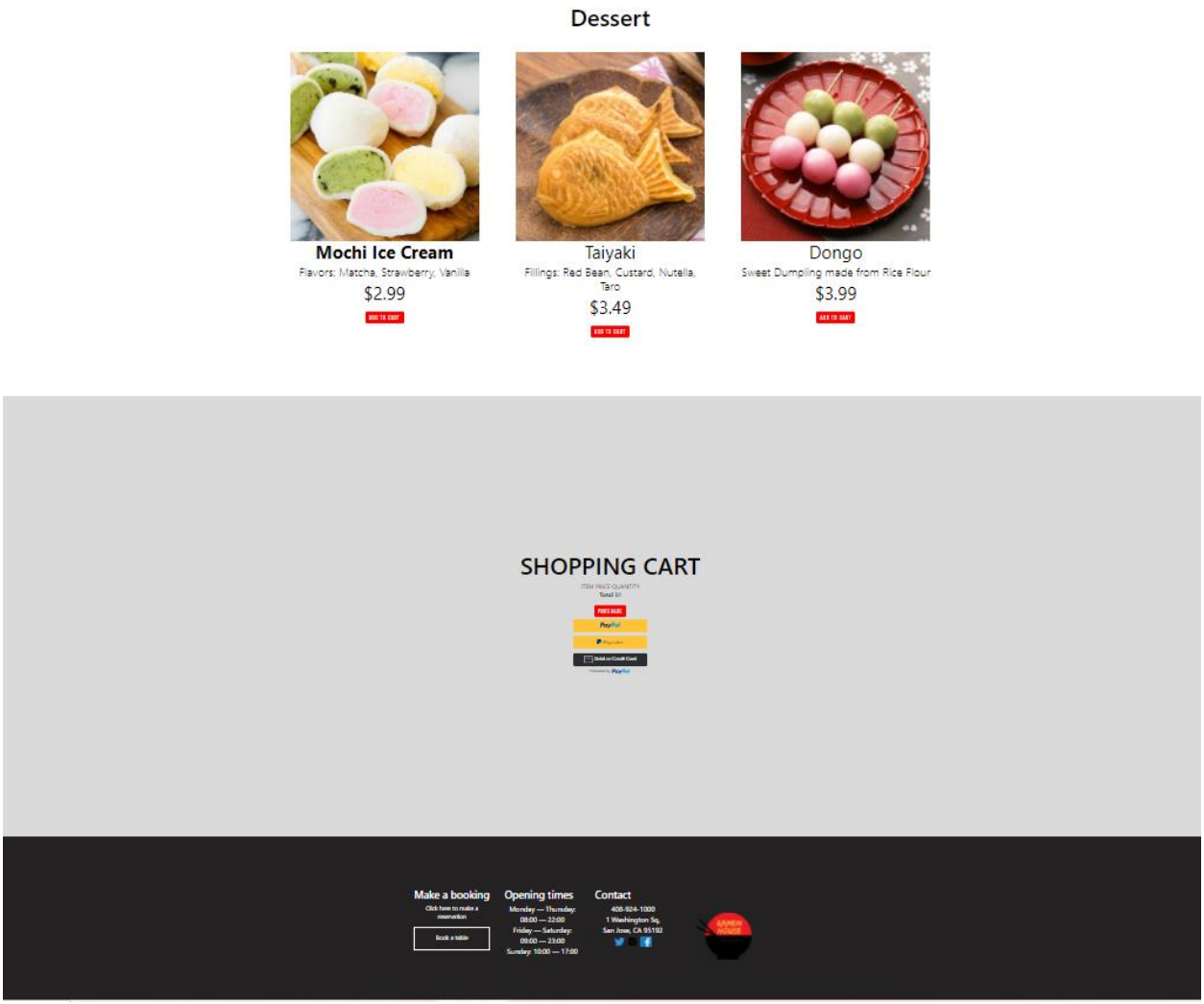


- **Mockup**



- **User Interface:**

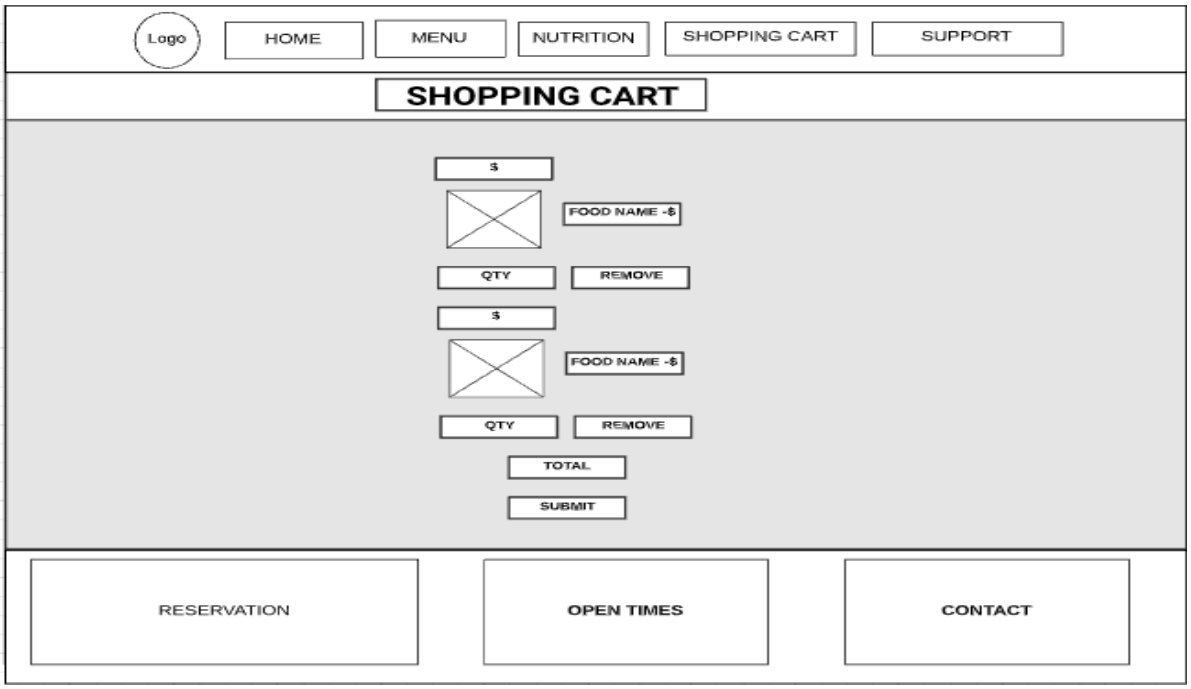




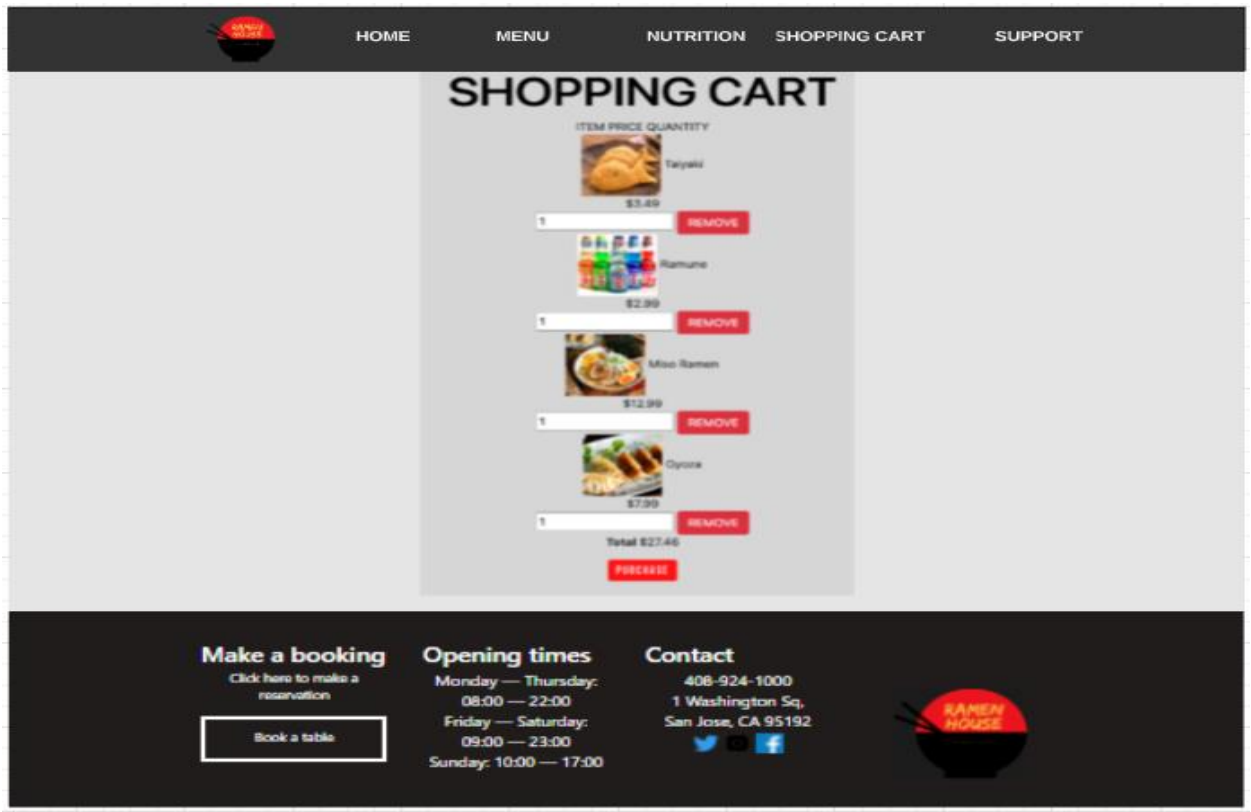
4.6. Shopping Cart

To the right is a mockup of the shopping cart. This shopping cart will be at the bottom of the menu page. With this section, a user can view what is currently added to their cart, add/remove quantity to a specific item, and purchase the order. The total will update in accordance to what is in the shopping cart.

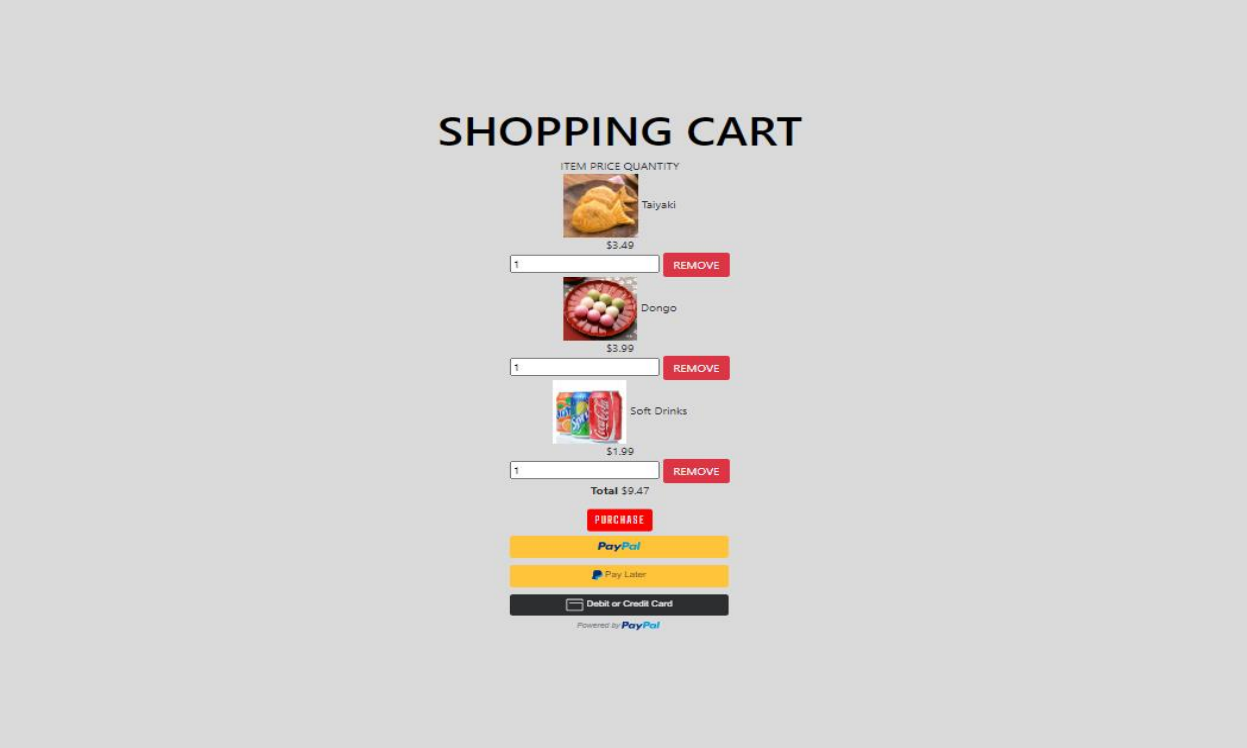
- **Wireframe**



- **Mockup**

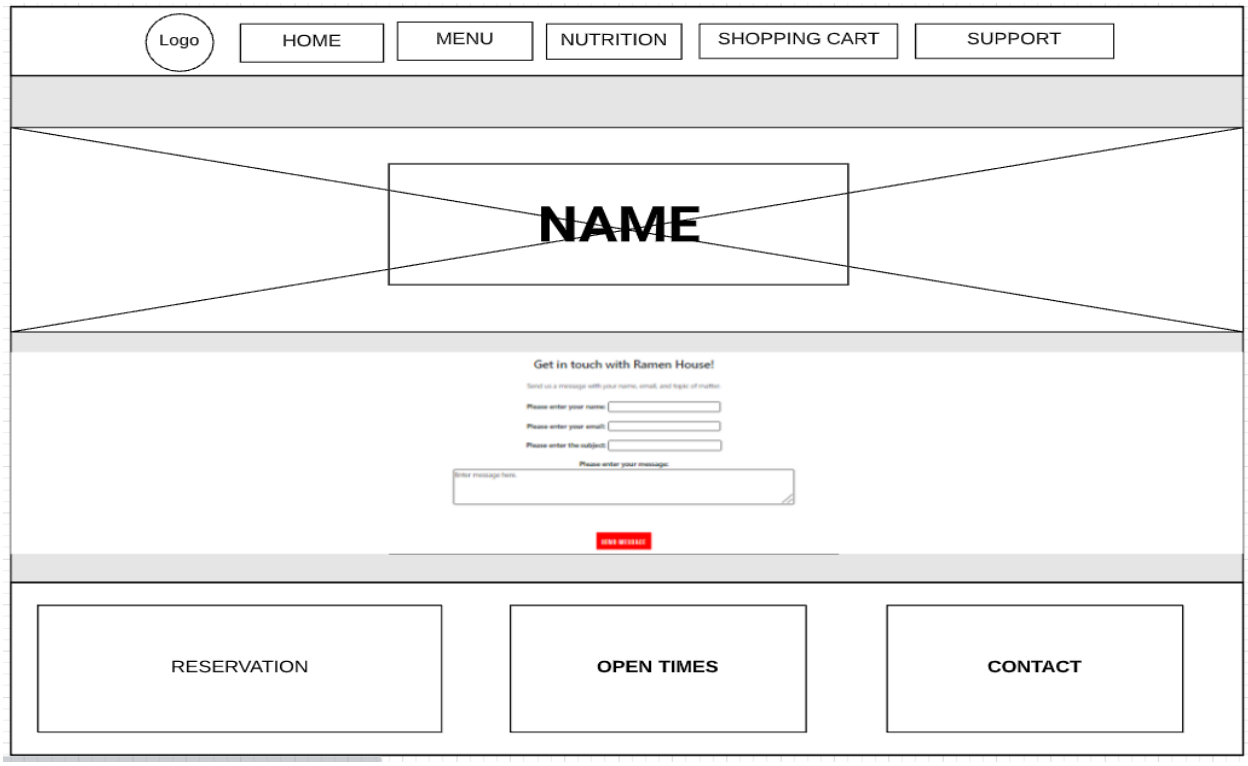


- **User Interface**

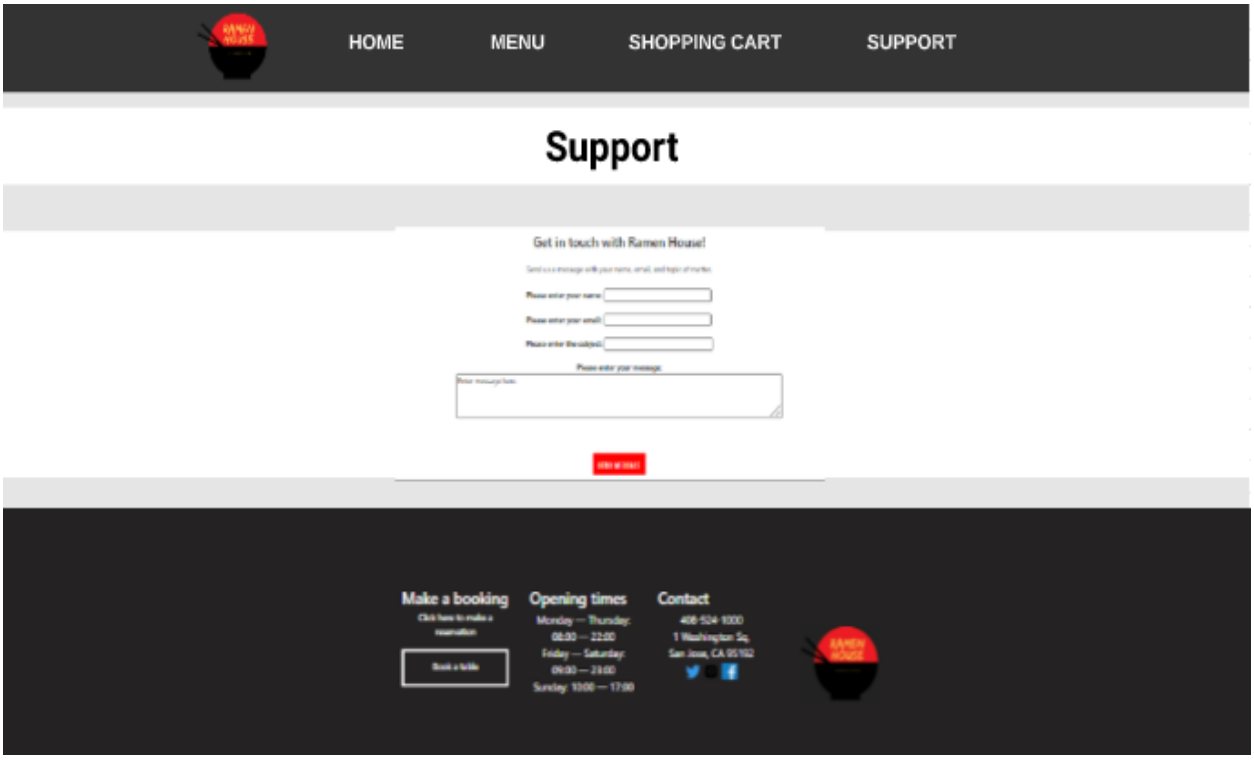


4.7. Support Page

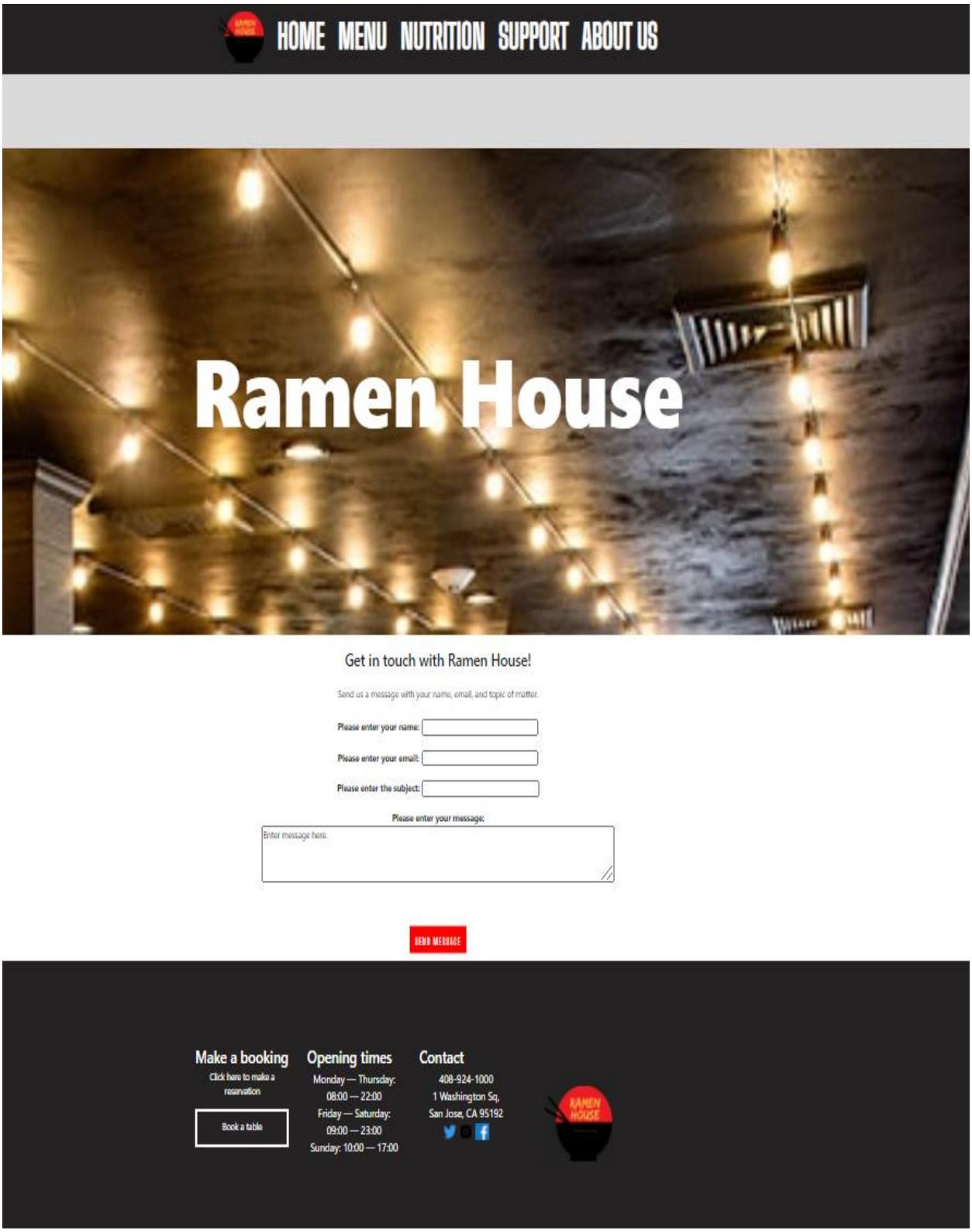
- **Wireframe**



- **Mockup**

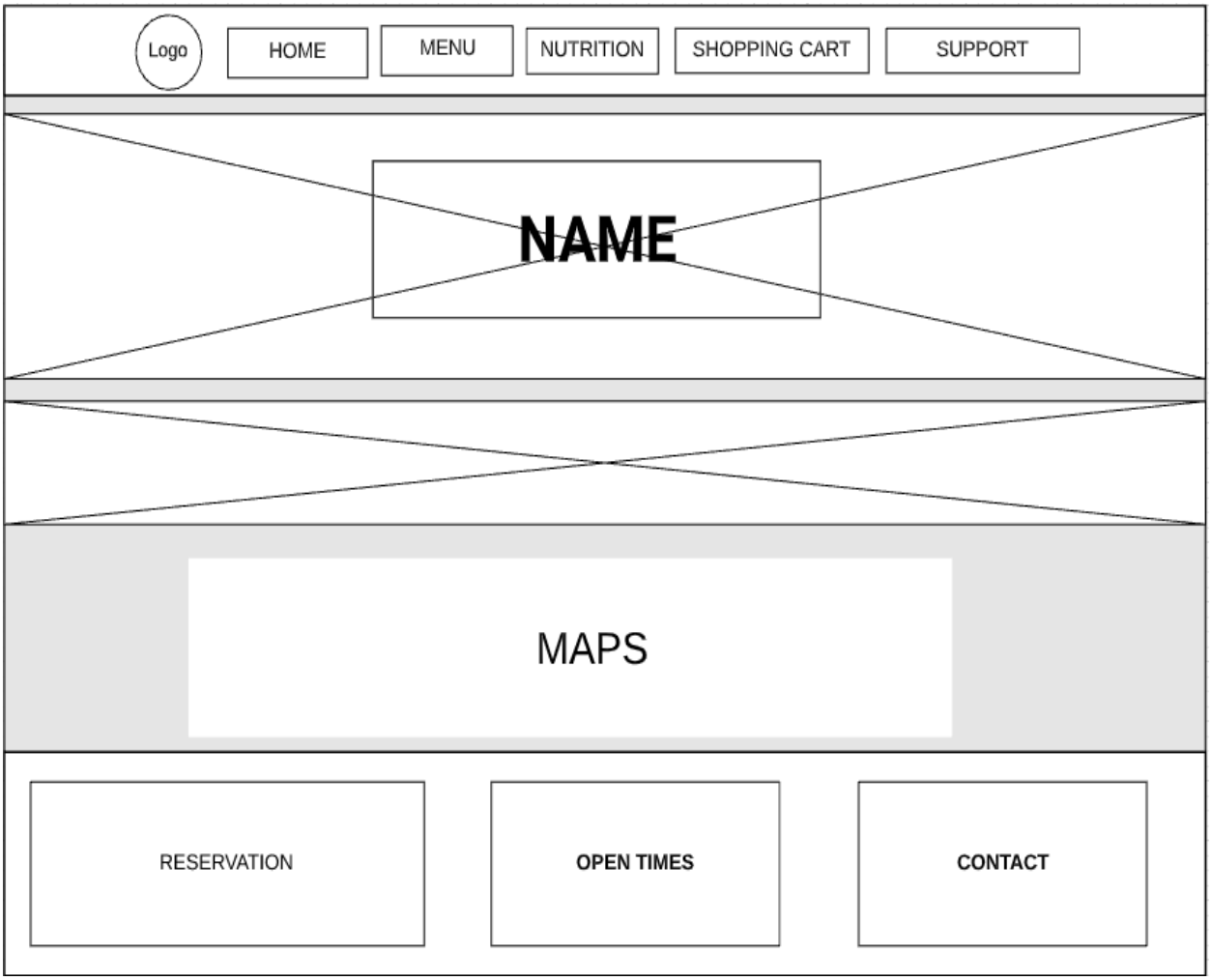


- **User Interface**

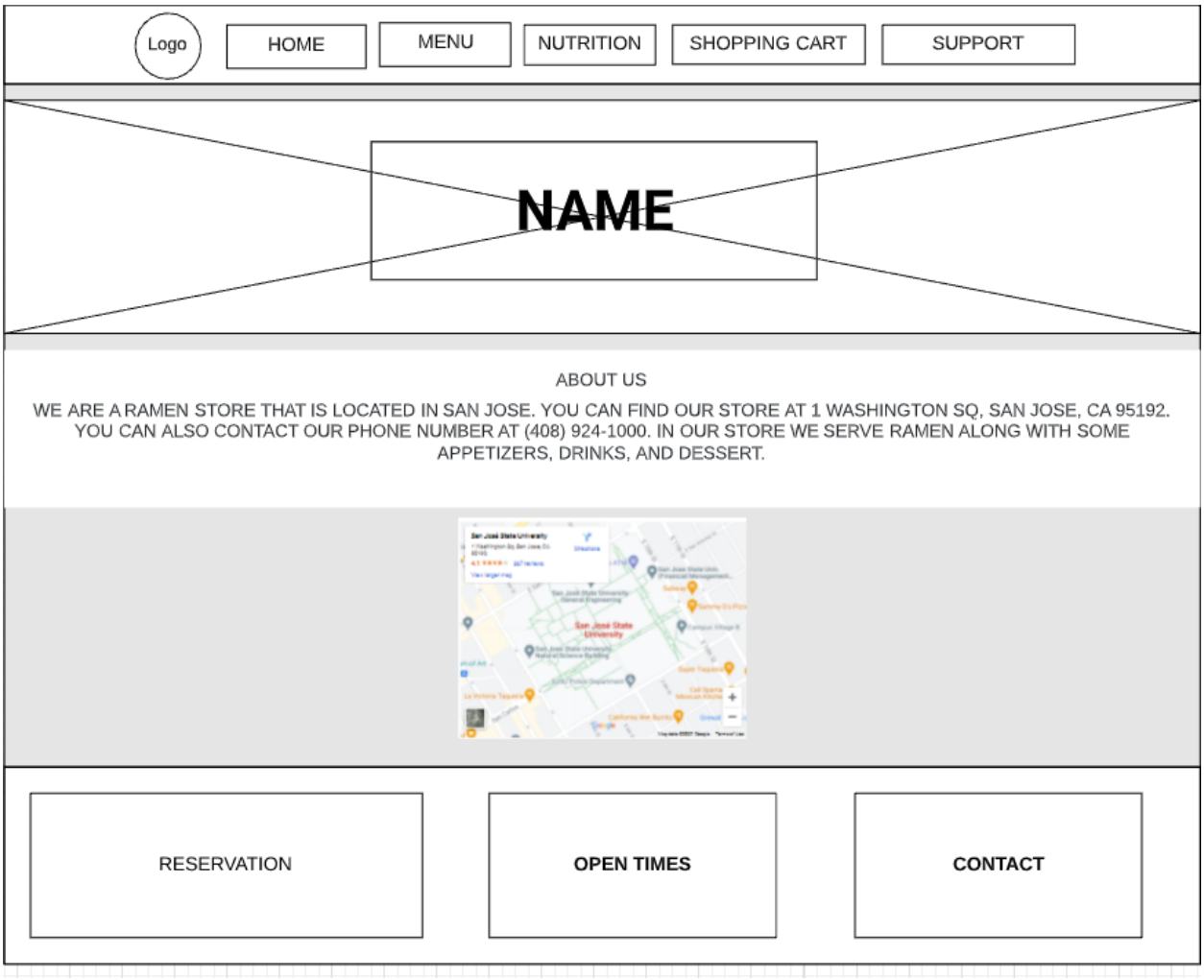


4.8. About us

- **Wireframe**



- **Mockup**


Logo
HOME
MENU
NUTRITION
SHOPPING CART
SUPPORT
NAME
ABOUT US
WE ARE A RAMEN STORE THAT IS LOCATED IN SAN JOSE. YOU CAN FIND OUR STORE AT 1 WASHINGTON SQ, SAN JOSE, CA 95192. YOU CAN ALSO CONTACT OUR PHONE NUMBER AT (408) 924-1000. IN OUR STORE WE SERVE RAMEN ALONG WITH SOME APPETIZERS, DRINKS, AND DESSERT.
RESERVATION
OPEN TIMES
CONTACT

- **User Interface**

5. Technologies used

5.1. Software

- Zoom - web conferencing
- Google Drive - cloud database
- Visual Studio Code - HTML configuration platform
- Google Chrome - web browser
- HTML code
- Javascript code
- Cascading Style Sheets
- Lucid charts

5.2. Hardware

We are using some hardware to launch and test our prototype:

- Desktop
- Laptop
- Smartphone

6. Test & Launch

6.1. Launch:

Upon launching our website you will be placed within the homepage. The home page has a navbar with three options, the options being the home page, menu, and support. On the homepage there will be a button that allows you to make a reservation. If you click “book a table”, it will take you to a reservation page where you enter your name, the amount of people in the party, the date, and the time. Once you finish filling it out, it will ask you to confirm, then it will give you a message for your reservation. When clicking on the menu in the navbar, it will take you to what is being served from Ramen House and you can order online. It comes with 12 different items and when you click add, it will send it to the shopping cart. The Support button on the navbar will give you information about how to contact Ramen House. At the bottom of each page, there is a reservation button, the hours Ramen House is open, and the location of the store.

6.2. Test:

To verify the validity and reliability of our site, our group members created a new document in our shared folder labeled “update” with the current date. We made sure to not delete previous versions of our code. Our previous versions were our contingency plan to mitigate risks and data loss.

After uploading the new version, team members will download the new version and test the code to make sure there were no errors. If there were errors, our group members would be able to edit and re-upload a new version.

7. Demo

https://github.com/thlu1902/RamenHouseWebProject.git

8. Project Plan

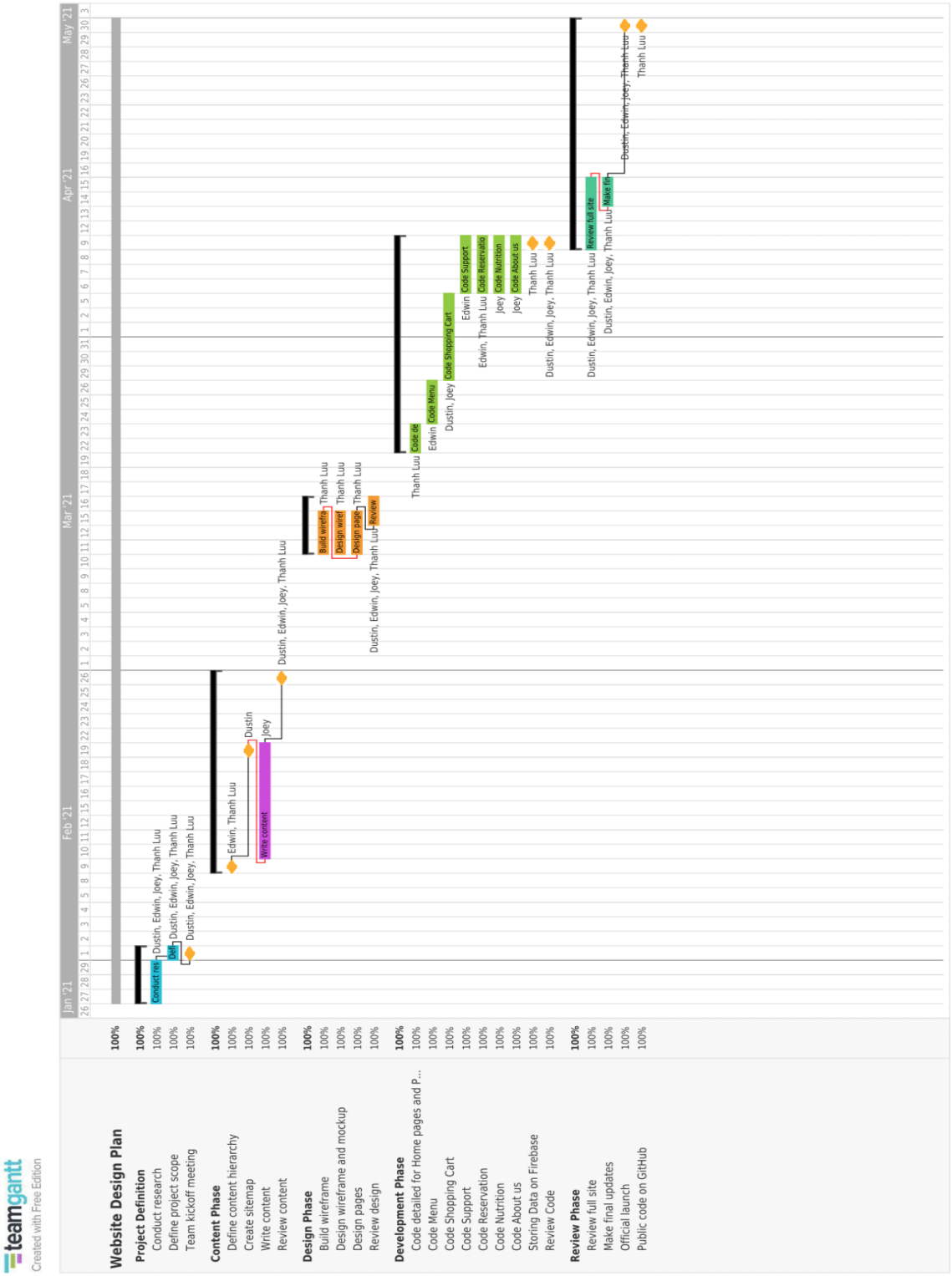
8.1. Task Sheet:

Phase	Deliverables	Contribution	Activities	Duration	Actual
Initiation Lead by Dustin Le	Meeting & Project Overview	All members	Introductory Meeting. Decided on two topics, and the Team leader confirmed developing Restaurant Website by Professor.	Start date: 1/27 End date: 2/10	Start date: 1/27 End date: 1/28
Introductory Meeting and Planning Lead by Dustin Le	Define the Scope and Boundaries	All member	We clarified needs, conceptualized possible solution(s), documented project baseline, and estimated required resources. The team met and confirmed the information to get the expectation of the projects, draft charter, and approval by our stakeholders. Checked and ensured that the project is completed within the specified deadline.	Start date: 1/27 End date: 2/1	Start date: 1/27 End date: 2/1
	Gantt Chart	Thanh Luu			
Content Phase Lead by Joey Hoang	Define content hierarchy	Edwin Tu	Identified hierarchy contents based on benefits and goals. Created the sitemap (home page, menu, about, check-out)	Start date: 2/2	Start date: 2/9
	Create Sitemap	Dustin Le			

	Write Content	Joey Hoang		End date: 2/26	End date: 2/26
	Review content	All members			
Design Phase Lead by Thanh Luu	Build Wireframe	Thanh Luu	We created schematic design includes more stylistic and visual UI details to present a realistic model of what the final page will look like.	Start date: 2/27 End date: 3/16	Start date: 2/27 End date: 3/16
	Design Pages	Thanh Luu			
	Review design	Dustin Le Edwin Tu			
Development and Test Phase Lead by Edwin Tu	Code general for web pages	Dustin Le	Built code (CSS, HTML, Script), databases, interface, user interface and logics. Checked and ensured that the project is completed within the specific dealline and gets deliverable without any flaws. Regularly check and test the code and UI for functionality, usability, and performance testing.	Start date: 3/17 End date: 4/9	Start date: 3/17 End date: 4/9
	Code stylistic of the webpages.	Thanh Luu			
	Code Menu pages (insert photos, prices)	Edwin Tu			
	Code Check out function and pages	Joey Hoang, Dustin Le			
	Test and review code	Dustin Le			
Review Phase Lead by Dustin Le	Review full site	All members	All members checked the outed website, and provided feedback, and made the update. Adjusted the color and the size.	Start date: 4/10 End date: 4/28	Start date: 4/28 End date: 4/28
	Make a final Update	All members			

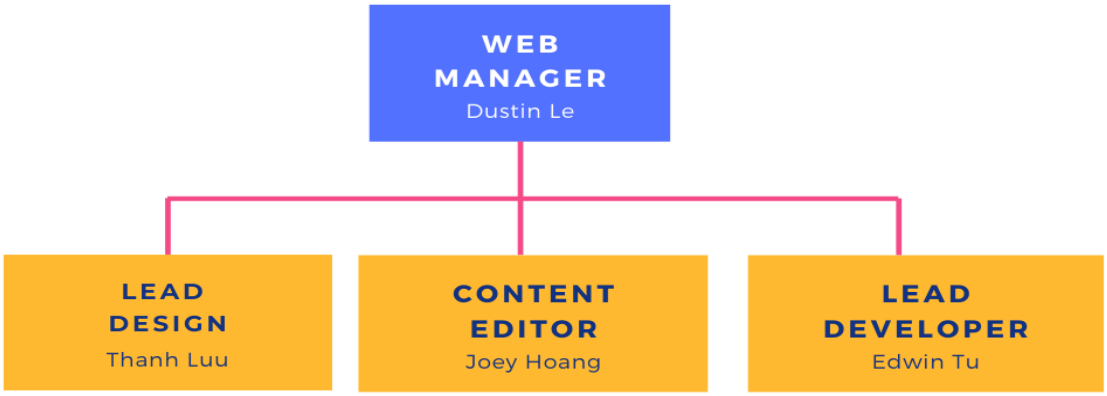
	Official Launch	All members			

8.2. Gantt chart for the project



8.3. Project organization diagram

This is our project organization diagram, Dustin was our web manager. He was basically in charge of directing orders and helped us out whenever we needed to. Thanh was the lead designer. Thanh created the initial CSS page where everyone built off of it. She was the one that created all of the mock designs and created how the website would look. Joey was the content editor. He was the one that looked over everyone's code to make sure everything was right and if there were any bugs or mistakes, he would change them. Joey worked alongside me as I was the lead developer. We both worked together to write out the code for the website. Everyone wrote some code for the website, so everyone had an equal amount of work and contribution to this project. Some specifics are Dustin worked on the Menu page with the help of Joey, Edwin worked on the Support page, and Thanh worked on the css as well as implemented the firebase database into our website.



8.4 Meeting Schedule

Our group had a meeting every week on Wednesday right after class. It started at 12:00 and ended around 1:30. Before the meeting, we all discussed what we completed since the last meeting and what we are currently working on. After that, we would each show each other and go through what we had completed and if any help were needed.

9. Key takeaways / Lessons Learned

Some of the key takeaways that our group went through is the amount of work that is needed to go into creating a website. We were able to understand the amount of work that was needed and understand the concepts taught in class to be able to put this into action. For example, the firebase database we did not know exactly how to do it until we were taught in class. We were also taught how to create a website layout and how to create it to look pleasing to whoever viewed the website. Another key takeaway that will help is that not only is coding the hard part, but also finding the right time that fits everyone's schedule was a little difficult, but we were able to make it happen. Overall, we learned a lot and were able to use everything we learned in class to make Ramen House.

10. Conclusion

In conclusion, everybody contributed equally to making the Ramen House website. Our navbar at the top of the page makes it easy to navigate through the website. Our menu page has pictures that make it easier for customers to see what food they will be getting from Ramen House and each page has Ramen House's information at the bottom. This website makes it more convenient for the store and it is beneficial to have an online presence.