Deliverable K: User guide

GNG 1103

Team A7

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Date Submitted: December 3, 2020
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2020

Abstract

This document outlines the process from start to finish for the creation of the front-end application for JAMZ delivery. Everything is organized in chronological order of the project to make it simple to follow for those seeking to reproduce the project. All steps and resources necessary are either included in this document or in a separate file on our maker repo page.

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Introduction:

JAMZ delivery is a drone delivery business that was created to provide a safe, reliable, and contactless means of ordering food amidst the Covid-19 pandemic. The project they assigned was to create a Front-end User Interface (UI) either for customers to interact with the business and order food, or for the restaurants partnered with JAMZ to advertise their food to customers.

This document outlines the design process used to create a website for the client. This group chose to create a front-end UI to connect the potential customers to the food delivery service that JAMZ offers.

Following the design process, this document discusses the needs identification, design criteria, the project plan, and the prototyping phases. During the prototyping phases, the website was created with the website builder Wix.

Needs Identification:

Problem statement:

The client requires an intuitive UI in which customers can order food from a variety of restaurants as well as track the live location of the drones. In addition to this, users will be able to create a personal account in order to store their information and receive live notifications for the status of their order.

Benchmarking:

Because there are no preexisting drone delivery businesses, companies with similar business models were used for benchmarking. The businesses that were benchmarked were: UberEats, Skip the Dishes, Door Dash, and Drone Delivery Canada. The technical aspect of the benchmarking was focused on important aspects of the websites such as their live tracking system, the ease of use, and the organization. As for the user benchmarking, the team looked into user reviews of both the businesses' websites as well as their service as a whole.

Specifications	**Door dash** [1]	**Uber Eats** [2] [3]	**Skip the Dishes** [4]	**Drone Delivery Canada** [5]
Colour Scheme	White and red	Black, green, yellow, and white	Orange and white	Black, white, red

FAQ page	Little customer support "FAQ" is the only source of support	FAQ and “Get help” section on the main page. “Help” only shows questions other people have had, no apparent way to contact company	FAQ as well as breaking down common problems and giving their solutions. Option to chat with support	Option to send the company an email for support.
Using Google Maps API & updates location periodically	The app gives updates when the order is confirmed, when it’s at the restaurant, and then tracks the delivery driver	Given order updates (ie food being prepared) and tracks location of driver	Giver order updates (ie food being prepared) and tracks location of driver (not live)	N/A
Sign up **Login** **Store personal information**	Option to sign up on front page, can also sign in with Apple, google, or Facebook accounts, but only Facebook on cell phones	Option to sign up on front page	Option to sign up on front page, can also sign in with Apple, google, or Facebook accounts	N/A
Straightforward Design	Entering address is the first option, followed by a list of restaurants and different food categories.	Entering address is the first option, followed by list of restaurants and different food categories	Entering address is the first option, followed by list of restaurants and different food categories	Has only a website, and social media accounts. No clear way of how to set up an account and order from them
Order Organization & Order Payment	Displays order, subtotal, tax and total with various payment options, promo codes, option to	Displays order, subtotal, tax and total with various payment options, promo code, schedule	Displays order, subtotal, tax and total with various payment options, promo code	N/A

	schedule delivery for another time, option to send order as a gift.	for another time, pickup option		
Variety of Restaurants	Large variety, grouped into categories Only can choose from one McDonalds (closest)	Large variety, grouped into categories Choose from multiple McDonalds within your vicinity	Large variety, grouped into categories	N/A
Accessibility for disabled people	Make a phone call.	Help blind or low-version people with iOS Voiceover and Android Talkback. Help deaf or hard of hearing people with assistive technology such as visible and vibrating alerts.	Help disabled people by using communicating ways that take into account their disability. Assistive technologies (e.g. Screen readers) and support persons are available. Customers are allowed to bring service animals.	
Customer Confirmation of Reception of Order	No confirmation of ownership of order/reception of order	No confirmation of ownership of order	No confirmation of ownership of order	N/A

Design criteria:

<u>Interpreted design criteria:</u>

Number	Priority	Need	Design Criteria
1	5	Live Tracking of the Delivery	Using Google Maps API,

			the app updates location with short interval
2	3	Customer Support / Feedback	FAQ page
3	5	Member Login and Information	Sign up Login Store personal information
4	4	Shopping Cart to pay for Food	Order organization Order payment
5	3	Variety of Restaurants	Restaurants show up in an intuitive layout
6	2	Colour Scheme	Aesthetically pleasing
7	4	Way for drone to confirm that the correct person is receiving the order	Customer confirmation of Reception of Order
8	4	Simple to use Easy to navigate through Clear and concise	Straightforward design

Functional requirements:

#	**Functional Requirements**	**Relation (=, < or >)**	**Value**	**Measure (Unit)**	**Verification**
1	Using Google Maps API	=	yes	N/A	test
2	FAQ page	>	10	Questions	test
3	Login and store personal information takes	<	1	Minute	test
4	Order organization Order payment	=	Yes	N/A	test

5	Restaurants show up in an intuitive layout	>	10	Restaurants	test
6	Customer Confirmation of Reception of Order	=	Yes	N/A	test
7	Straightforward Design	=	Yes	N/A	Client Feedback rates functionality
	Constraints				
8	updates location periodically	<	30	seconds	test

Non-functional requirements:

	Non-Functional Requirements				
1	Aesthetically pleasing colour scheme	=	Yes	N/A	Client Feedback rates

Project Plan:

Bill of Materials:

Material	**Explanation**	**Cost ($)**
Wix.com	Used to build the website	Free
Google API	Gave functionality to the maps on the website	Free
Corvid	Used to help implement certain functionality on the website	Free

Conceptual design:

A brainstorm session was organized, and many sketches of potential designs were created. It was decided that the website that the team created would have a home page with a sign in the area and a map, a browse restaurant page, and a checkout page. The majority of the sketched designs were similar to the benchmarked businesses.

Prototypes:

Wix is the website builder that was chosen to create the UI because it is simple to use and customizable. It provided a base template that was then edited to create the final product. Wix has functions to allow for adding photos, adding buttons, linking pages, creating a login, a checkout and more. As well, web developers may go into Corvid, a web development mode where they may write their own code. If this project were to be repeated, a different website developer would be chosen as Wix only allows for one editor at a time.

Testing plan:

For each prototype a round of user tests was conducted and feedback was received, as well, functional tests were done. The user tests were conducted by distributing a google form with a link to the website and various questions about the website. The questionnaires were distributed to potential users on platforms such as email, discord and text. The feedback was then compiled and analyzed, and the team determined which comments to implement. As for the functional test, after publishing each iteration of the website, the team then went onto the site to test the various functionalities. If they worked to the predetermined standards, they were deemed acceptable, otherwise the team would go back to edit the code and do another round of testing.

Please see Appendix I for links to the questionnaires, as well as screenshots of the results.

See Appendix 2 for images of the prototypes

Prototype 1:

The first prototype focused primarily on the aesthetics of the website. Simple functionality was added simply to be able to navigate through the website. For this iteration of the website, users were asked questions mostly about the aesthetics such as if they liked the colour scheme and if they had any suggestions regarding the looks of the website. The feedback questionnaire also included some questions about the basic functionality of the website such as was it easy to navigate between pages. Since this prototype focused mostly on the looks of the website, there were not many functionalities to test as part of a functional test other than the transitions between pages. After the functional testing it was concluded that the transitions worked but the order of the pages was not optimal.

Prototype 2:

The second prototype focused on implementing the important functions to the website such as restaurants, the search function, shopping cart, the login system, and more. For the second round of user testing, users were asked questions regarding the functionalities that were implemented such as “how easy was it to make an account?”. Users also had a section for suggestions on how to improve the user experience as a whole. While working on the prototype, a list of all the functionalities added during development was maintained. For functional tests the team then went through the list and tested each functionality one by one to ensure they worked to standards set prior to testing.

Prototype 3:

The third prototype was focused on improving functionality based on the test feedback received from the second prototype. The map API was activated on the front page, which allows the users pin their location. Dark mode was added and worked properly on the home page. One FAQ page is added. What’s more, there were several changes on the colour scheme on the website due to the feedback gotten from the from the google survey. During the test period of the third prototype, everything went well except the QR code generator on the checkout page due to being unable to find out the backend of it. Also, the map on the checkout page is not fully functional due to not connecting it to the backend to show the live location of the drone.

Conclusion: (Conclusion of the project and future plans)

In the end, the website created was both intuitive and simple for people of all ages and backgrounds. Since the feedback was sent to multiple Discord servers, a wide audience was able to test the website to ensure it met client expectations. Furthermore, the design criteria was followed very closely to make sure that the client needs were met and that nothing was forgotten. For the future of the website there are some things that need to be improved upon. Firstly, if JAMZ Delivery chooses this website, connecting the drone to the map for live tracking would be implemented. Although there is the code for the QR generator, it is not working at the moment and work with the clients is required to install functionality. Lastly, implementing the dark mode on every page would need to be necessary to add consistency on every page.

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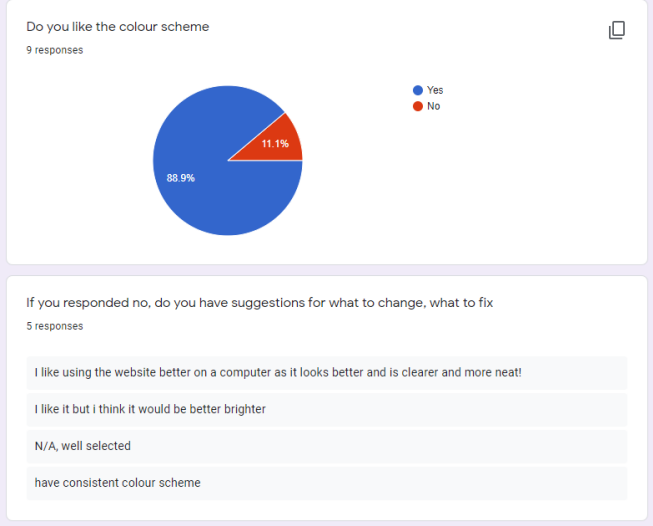
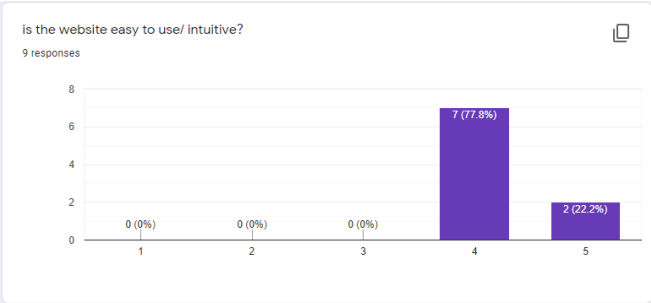
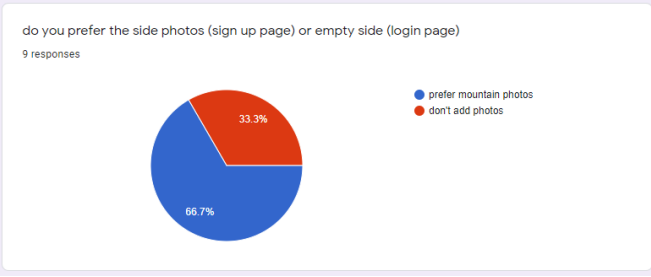
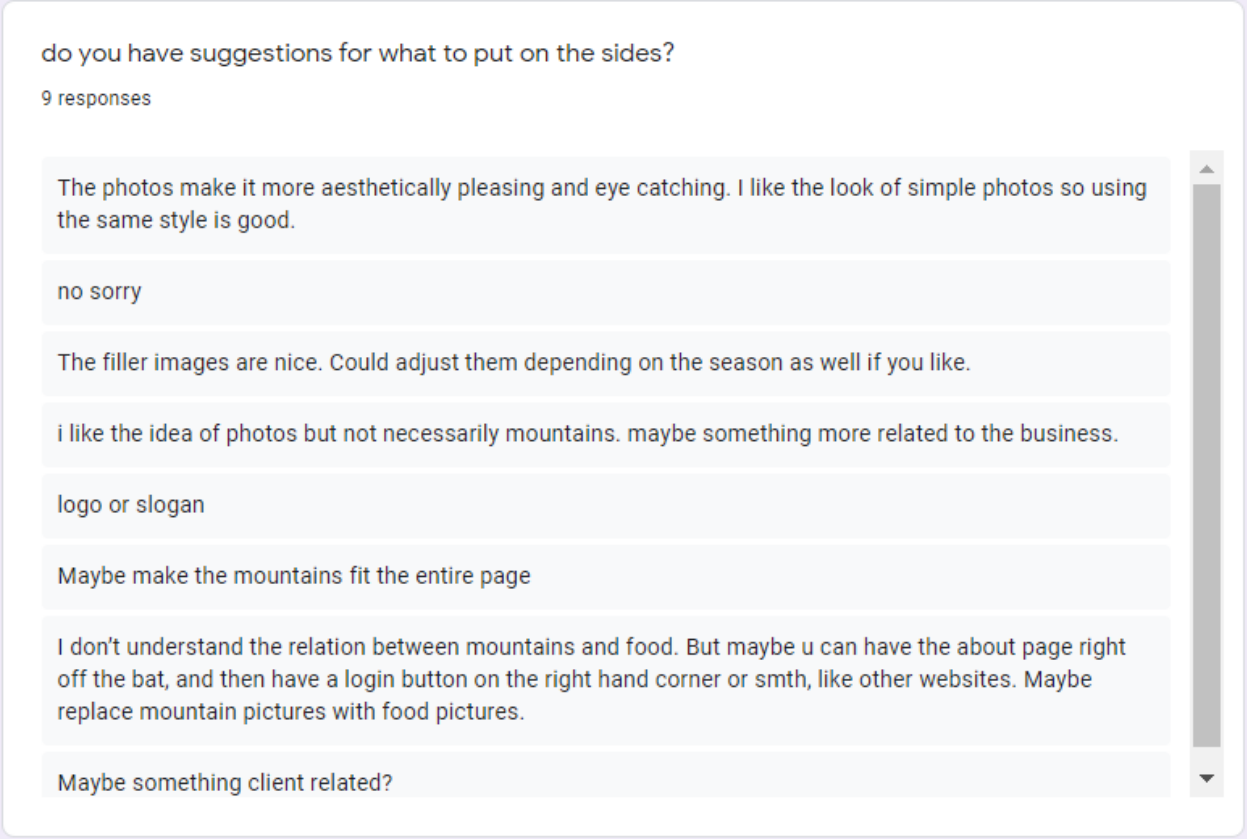
Appendix I:

Prototype I:
https://docs.google.com/forms/d/e/1FAIpQLSfsrLvo33N7vb3Dbp8ZgLmBVfaUALW25BFYCxLKlLTzcX2NLw/viewform?usp=sf_link









Do you have suggestions for how to improve usability of the website? What is missing, how can we improve it?

9 responses

I'm not sure if it's just not finished yet which is fine, but some areas of the website aren't filled out yet. You should add a description about what it is at the start, a little explanation about your company (maybe before the sign up information) just so people know what they are getting in to.

I tried to make an account but my it keeps saying i have to match the requested format, it would be better if you could outline the format. Also if you could split the food by reseraunt properly. Other than that it looks AMAZING!

I have noted that I liked having the mountain photo. However, it did not translate well to the mobile version of the website... may need to reconsider image sizing depending on how many mobile customers you expect to have

it's great! nothing i can think to add. only comment is that in the search bar the word restaurant is spelled wrong. (resturant)

Provide Username/Password requirements. Having the food panel scroll sideways both ways at first is confusing, since it feels like I am starting in the middle of the list (Have the list start on one side and end on the other, not infinite scroll). Some foods dont have an option to change the number of orders. Why are there two rows of foods, one scrollable, the other not?? Where are drinks, are they only available with combos?

The mobile version of the website is a little bit hard to use. To improve the website I would suggest making the home page look sleeker by potentially getting rid of the white space

It's looking good so far, very intuitive I understand where to go without really having to be explained anything. :)

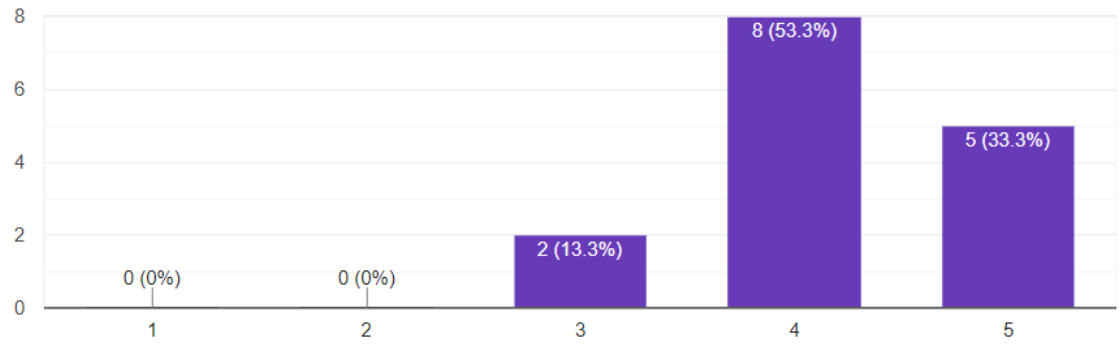
Certain boxes overlap other symbols like the social media ones (at least on mobile I didn't see it in computer)

Prototype II: https://docs.google.com/forms/d/e/1FAIpQLScpDTRBqBw4XIIofcPt-8RiM1hO5LiJBXwI6fDYL5OrvGNpiQ/viewform?usp=sf_link

:

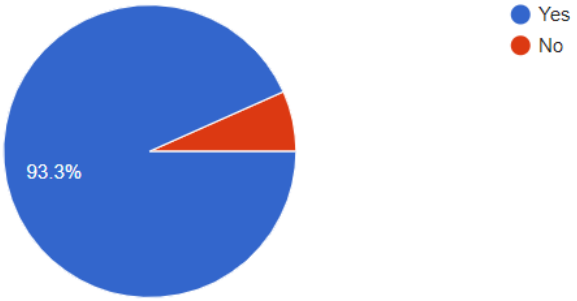
How easy is it to browse the restaurants or search for food items?

15 responses



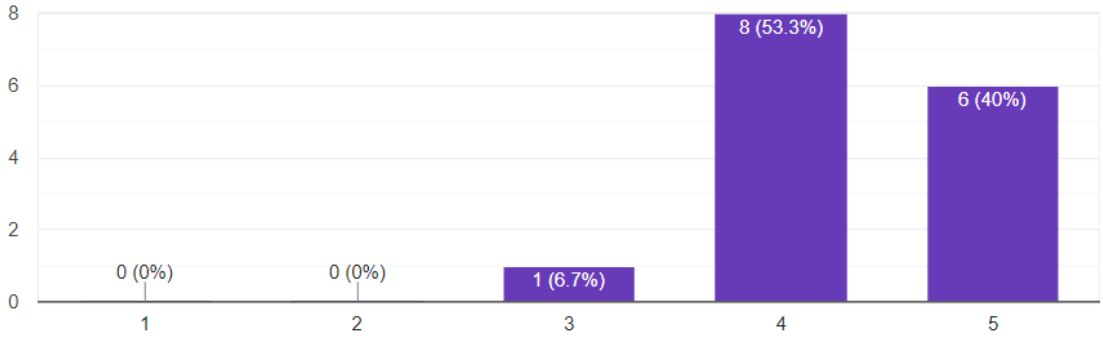
Was it easy to make an account, or find where to make an account?

15 responses



Is the layout easy to follow?

15 responses



Is the colour scheme easy to look at? Do you have any ideas on how to improve it

15 responses

Solid colour choices

Monotone colours look for aesthetic. Ie shades of blue or green

whatever yellow or green colour is the backdrop of the selection menus is a bit uncomfortable. IMO it should be similar to the colors used for the website name and whatnot

Maybe make the name pop a bit more

The colors are pleasing to the eyes but it looks a bit empty imo (Home Page)

Add some kinda distinction like a box/ other colour to differentiate on the website page between the background and the restaurant logos, ratings etc

There isnt enough content for the text box and map to be side-side, the text box should be above the map. Or, you could add a small text section above both of those detailing how to use the service, and what it does

it's good. maybe more muted colours but not necessary

nice colour palette

I think right now there is a good contrast of dark lettering on a light background, which is good. However, it would be nice if the colours complemented each other instead of clashing.

Yep there wasn't anything hard to read or follow due to colour.

Colour scheme is fine and not distracting, works well.

I think the colours are too varied. Also the header is too big

The colour scheme is nice, but maybe have brighter eye-catching colours?

Cyan on white is difficult to see esp with high brightness

Do you have suggestions for how to improve the User Experience?

16 responses

Not really

na

back button to go from food items back to restaurant page

no it looks great

Maybe add stuff on the Home page. Looks good overall tho, gj.

Pretty easy to navigate, maybe add a main homepage

Read previous

nope it looks good. good job!!

seems fine as it is

Perhaps provide suggestions for food items so people who are not sure what they want can be helped.

Since there is a limited number of restaurants available and I assume a limited area you deliver so maybe make your area of business more clear and make an easy access page where you can scroll through the restaurants rather than just searching.

The site doesn't allow you to create an account via google when using a safari browser

Instead of the menu pulling out the side maybe have it across the top ig that makes sense

Nope. Looks good.

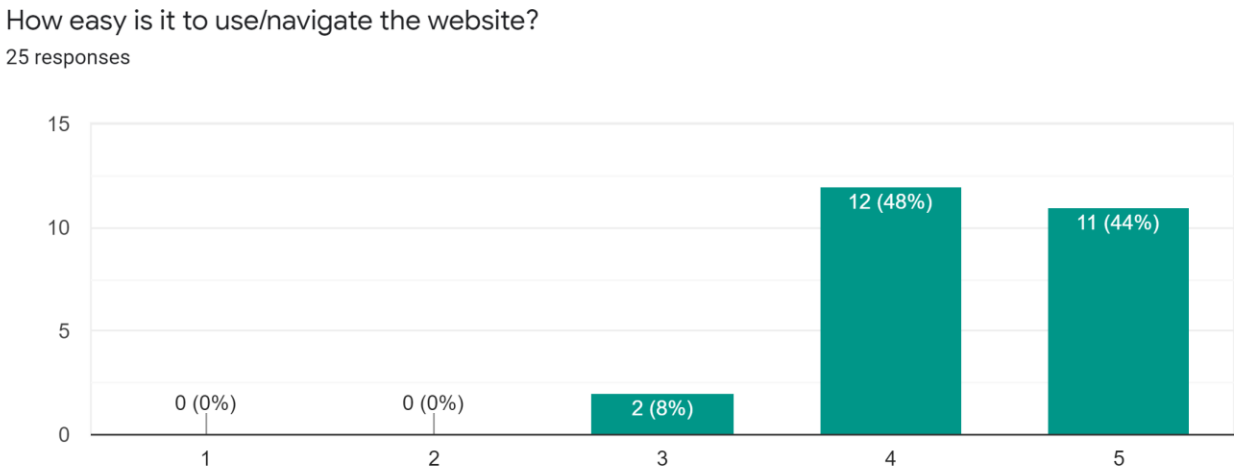
slightly bigger font

i know it's not totally done but when you browse restaurants you see the paragraph where there should be a description but you guys didn't do that so i would get rid of that. but other than that it's pretty good. you also don't have the address feature in. idk if you're gonna put that in or not but just a warning :) good jobs guys. it's actually very good.

For safety and simplicity reasons, it should not be necessary for a user to explicitly press a button saying that there is nothing near the drone after the order has been delivered. It should be an automated system for several reasons: it is simply easier, and the user has less things to worry about; if the user accidentally presses the button for whatever reason, they could get hurt depending on the circumstances; if the user does end up getting hurt, they can sue the company for a faulty system; having an automated system would ensure that the drone's status is always known and saved, allowing for the company to already know if there were any issues such as birds or trees.

Other than these mild details that don't technically have anything to do with the website itself, the rest seems fine.

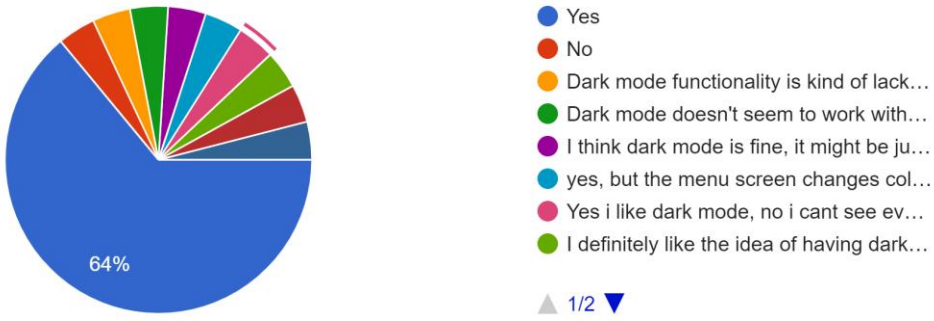
Prototype III:
https://docs.google.com/forms/d/e/1FAIpQLSdDeL24QVJwsWWVAy0Eo0TfI_gOqCme8pHDYXCv0S8YAr0Z7Q/viewform?usp=sf_link



1= very difficult 5=easy, Great love it!

Do you like the option of having dark mode? Can you still see everything?

25 responses

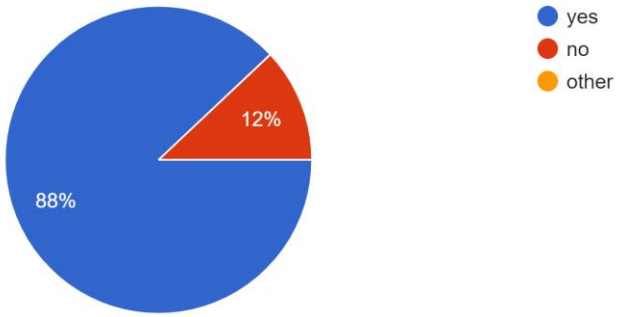


Do you like the option of having dark mode? Can you still see everything?

25 responses

Is the colour scheme consistent throughout the site?

25 responses

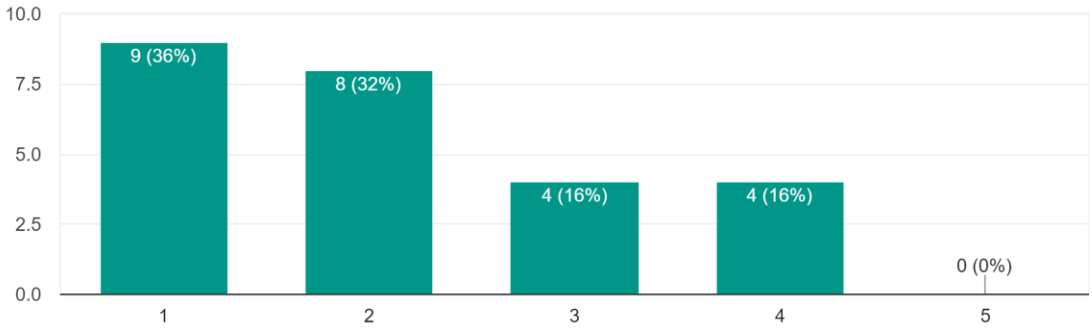


If you opened the website using your mobile device, was it alright to use?

21 responses

Does the speed of switching between pages deter you from using the site?

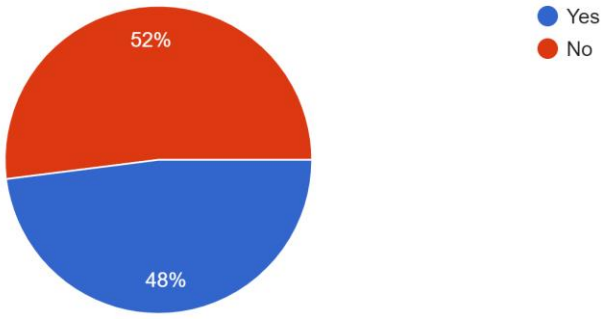
25 responses



1= it doesn’t affect my use 5=yes it is the worst

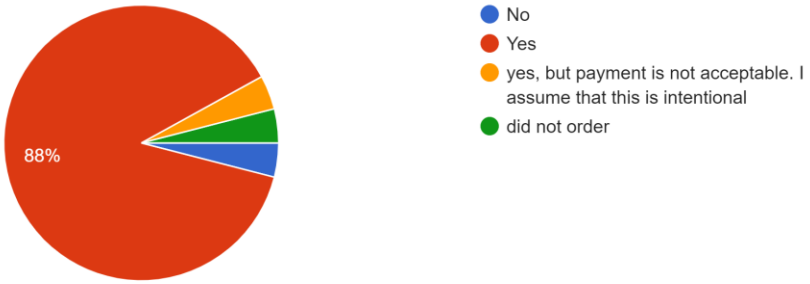
If your order went wrong, do you know what to do?

25 responses



Is it easy to order food from the website?

25 responses



Do you have any suggestion for how to improve the website?

13 responses

Increase the usability of the dark mode feature, enable it on the entire site not just on the "Enter your address page". Increase the speed between tab changes, after I get used to a site's layout I want to go to the next page I don't care about transitions.

If possible, make it change to dark mode according to the user's browser preferences. The font style could also be a little bit more professional, but overall the technical aspects of it are great.

Overall I think its great! , the colours give me subway vibes though. Nonetheless very easy to use, although I think the icons of the restaurants are kind of not that nice looking.

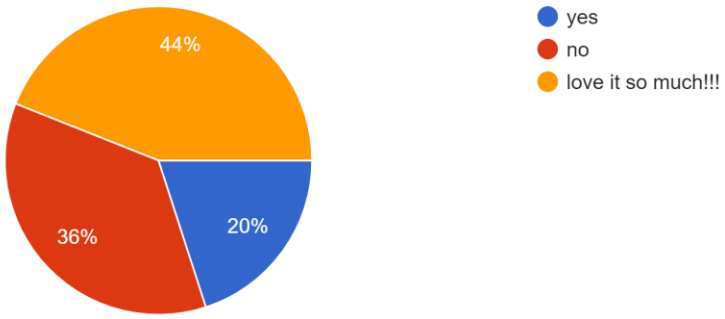
In the menu there are two sections that say to browse restaurants (I am using the website through my phone so that may be why) one of the sections actually lets you browse them but the other one sends you to the home page I think.

more consistency in darkmode, and a payment option

Don't have the restaurant search bar take up half the screen at all times on phone

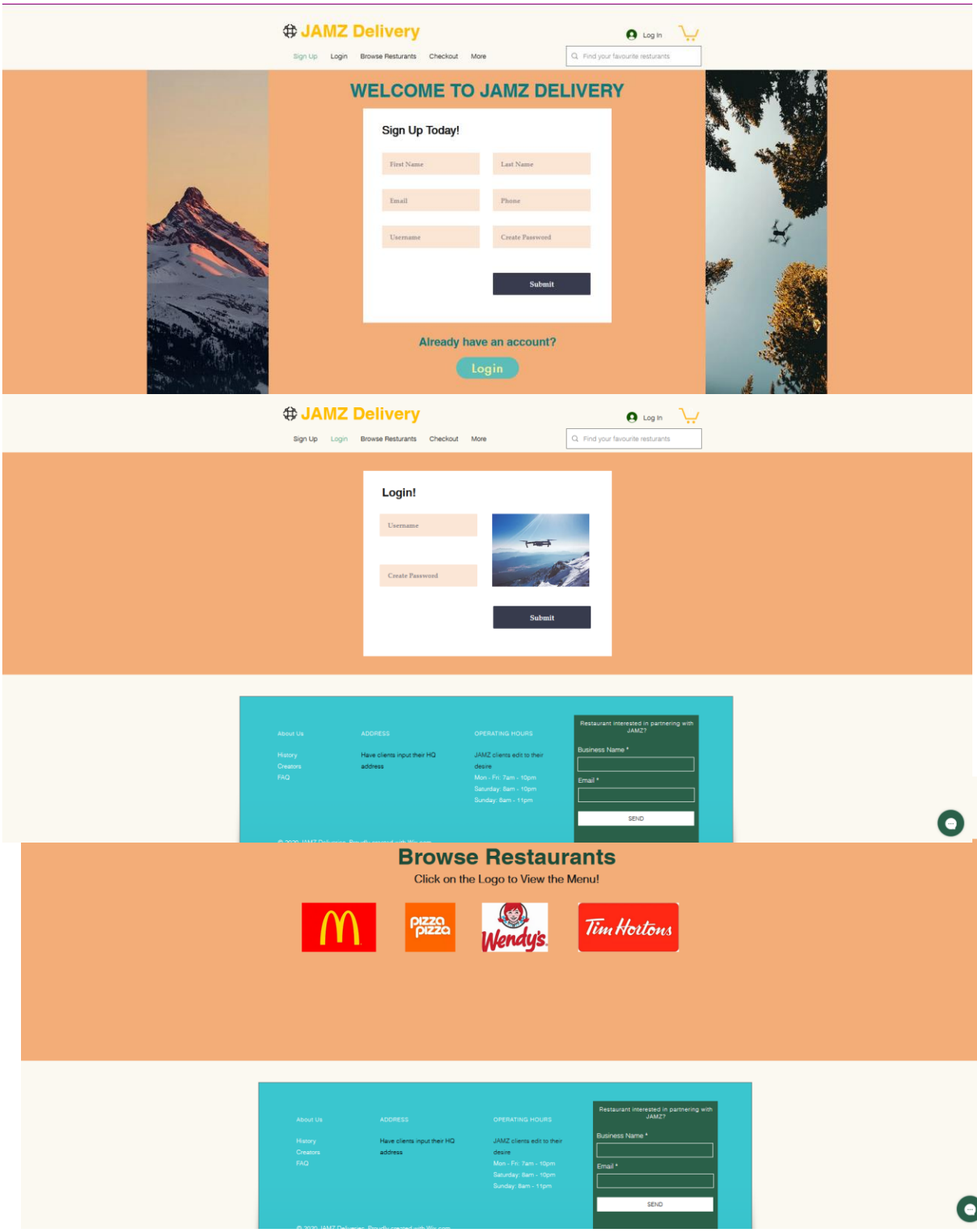
What do you think of the slogan, does it make it feel professional? (found below Jamz deliveries in header)

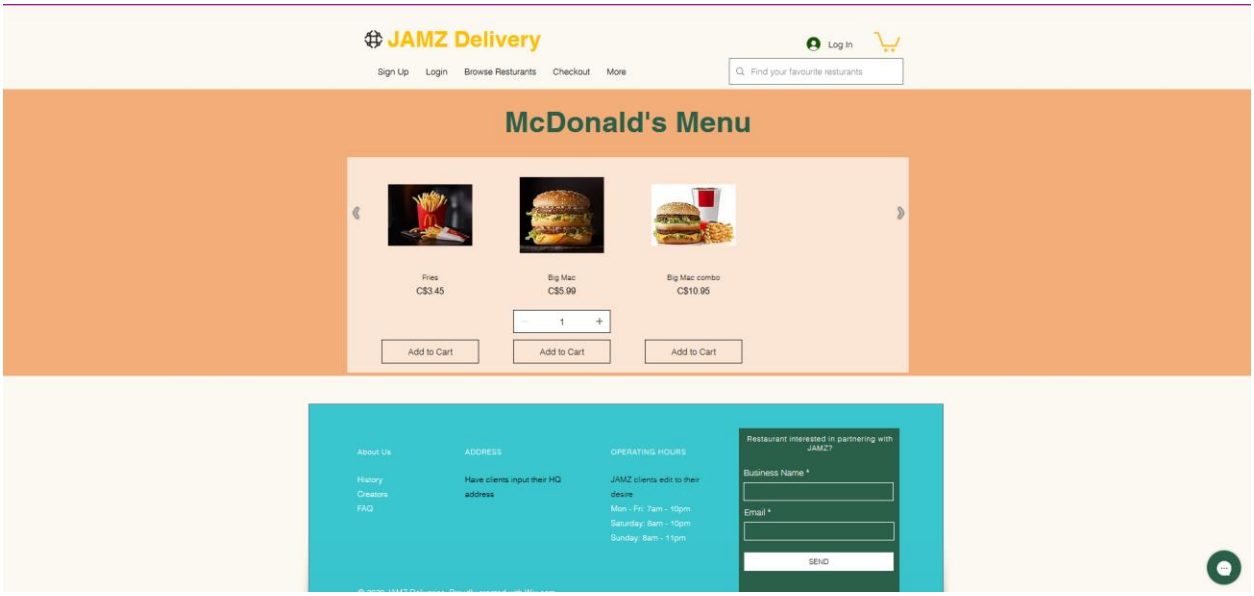
25 responses

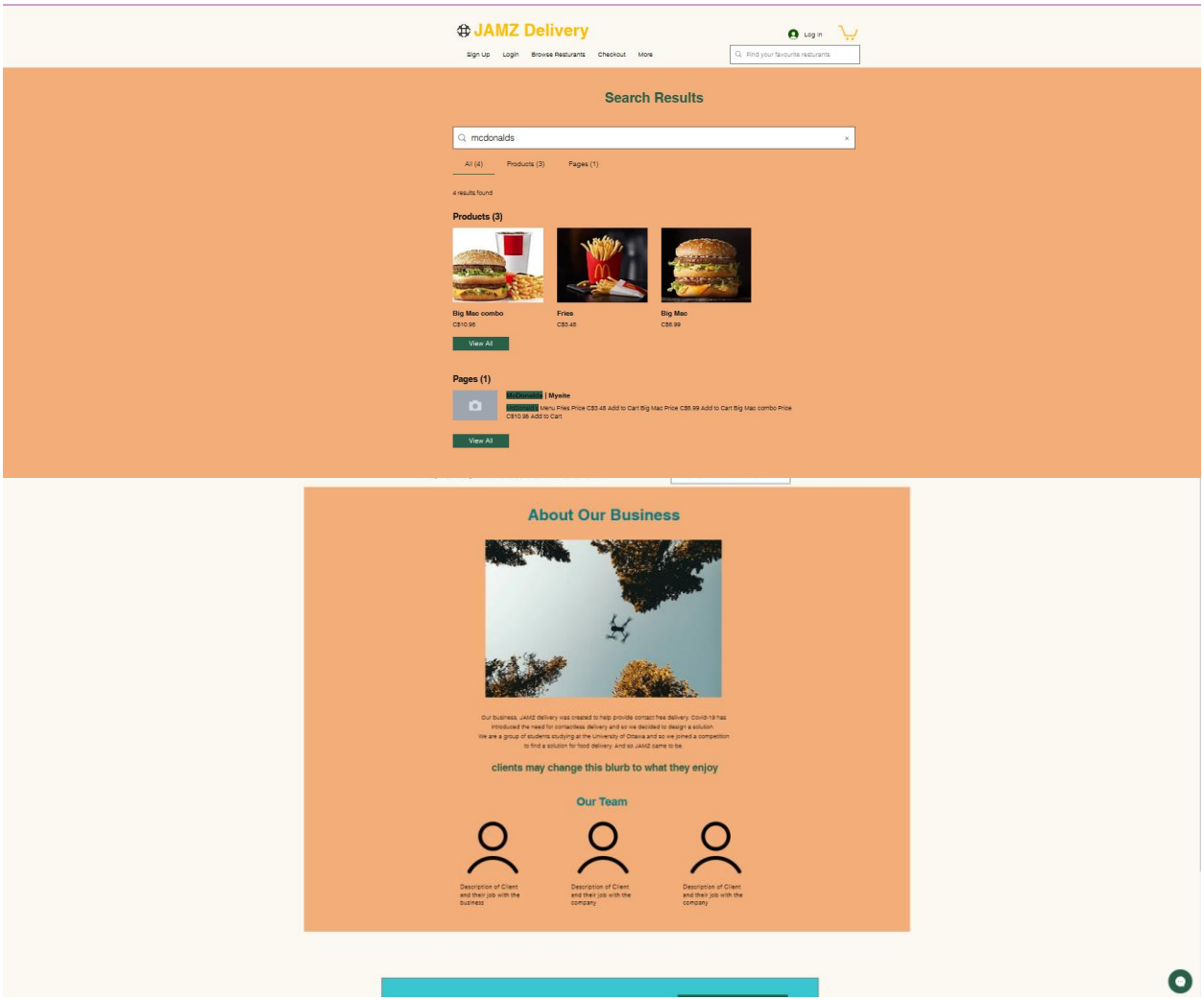


Appendix II:

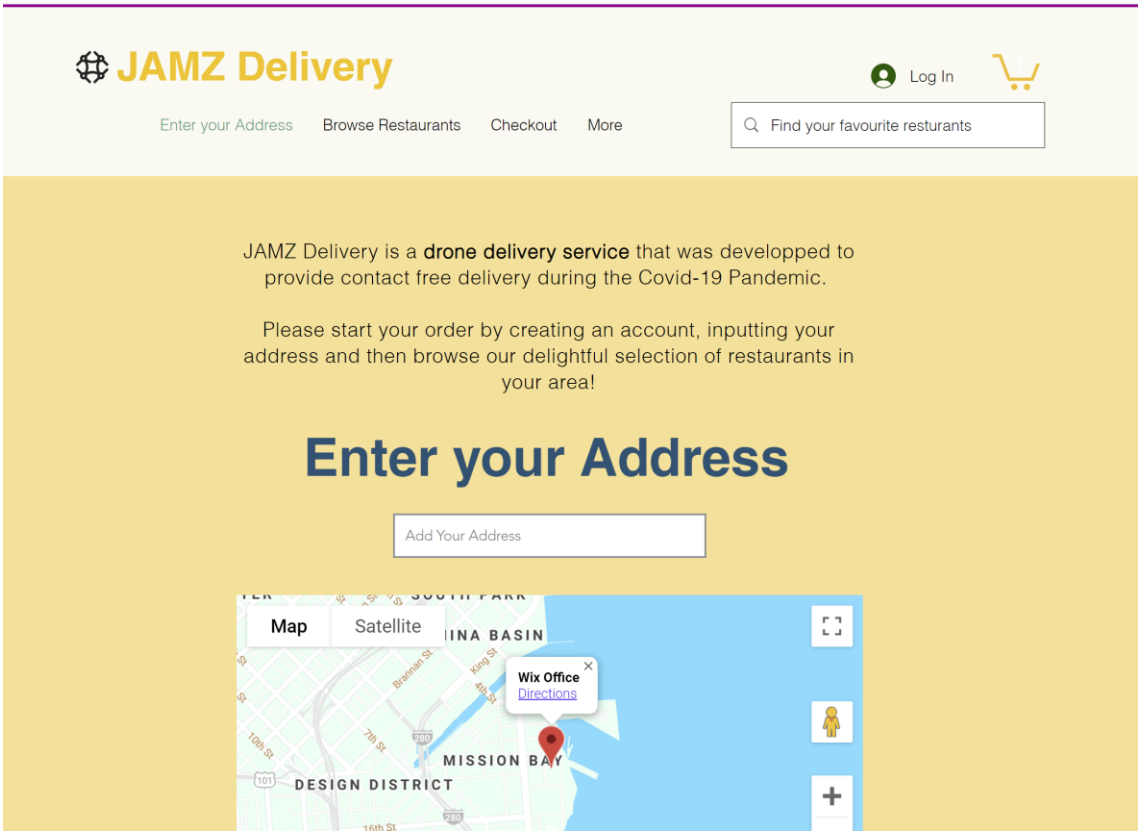
Prototype I :

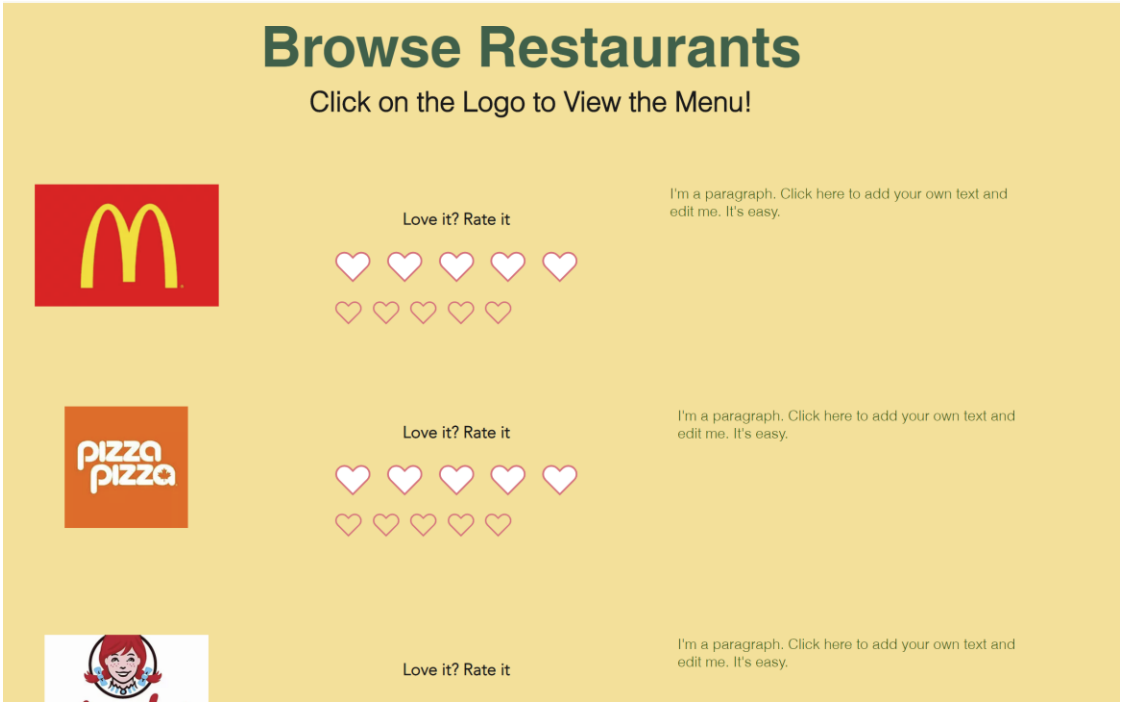



JAMZ Delivery
Sign Up
Login
Browse Resturants
Checkout
More
Log In
Find your favourite resturants
McDonald's Menu
Fries
C$3.45
Big Mac
C$5.99
Big Mac combo
C$10.95
Add to Cart
Add to Cart
Add to Cart
About Us
History
Creators
FAQ
ADDRESS
Have clients input their HQ address
OPERATING HOURS
JAMZ clients edit to their desire
Mon - Fri: 7am - 10pm
Saturday: 8am - 10pm
Sunday: 8am - 11pm
Restaurant interested in partnering with JAMZ?
Business Name *
Email *
SEND


JAMZ Delivery
Sign Up
Login
Browse Resturants
Checkout
More
Log In
Find your favourite resturants
Search Results
mcdonalds
All (4)
Products (3)
Pages (1)
4 results found
Products (3)
Big Mac combo
C$10.95
Fries
C$3.45
Big Mac
C$5.99
View All
Pages (1)
View All
About Our Business
clients may change this blurb to what they enjoy
Our Team
Description of Client and their job with the business
Description of Client and their job with the company
Description of Client and their job with the company

Prototype II :





Order Complete - Receive Barcode

The drone needs to scan this code in order for you to receive your order. There are three options for receiving your code

Send by Email | Print Code | Show on Screen

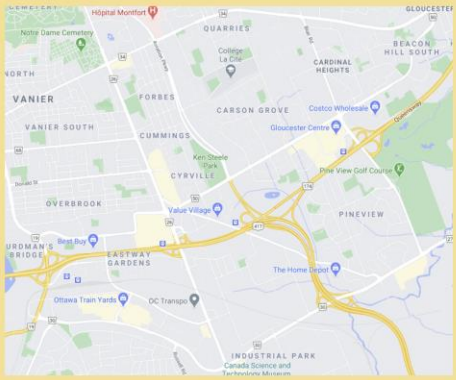
Order Received

Before Confirming Your Order, Please Confirm Your Pick-Up Location

Location

Please make sure that your pickup location has no wires or branches directly above it.

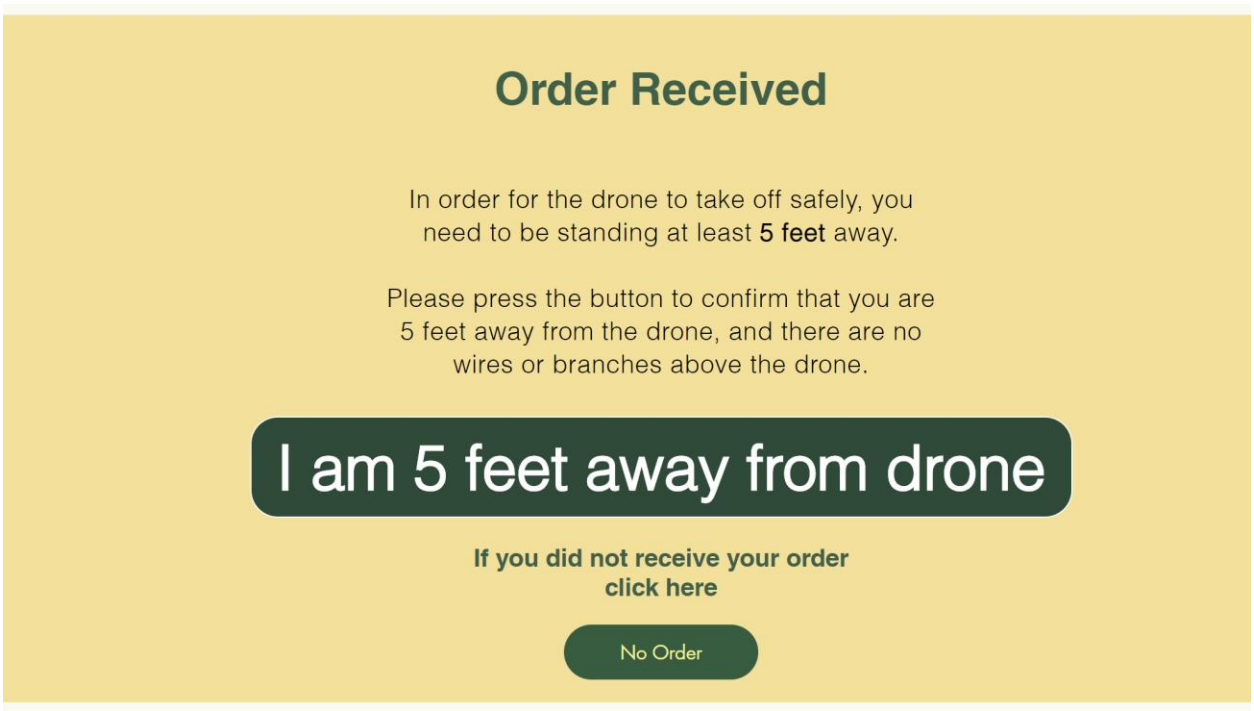
As well, when the drone is landing and taking off, please stand at least **5 feet** away from it to ensure your safety.

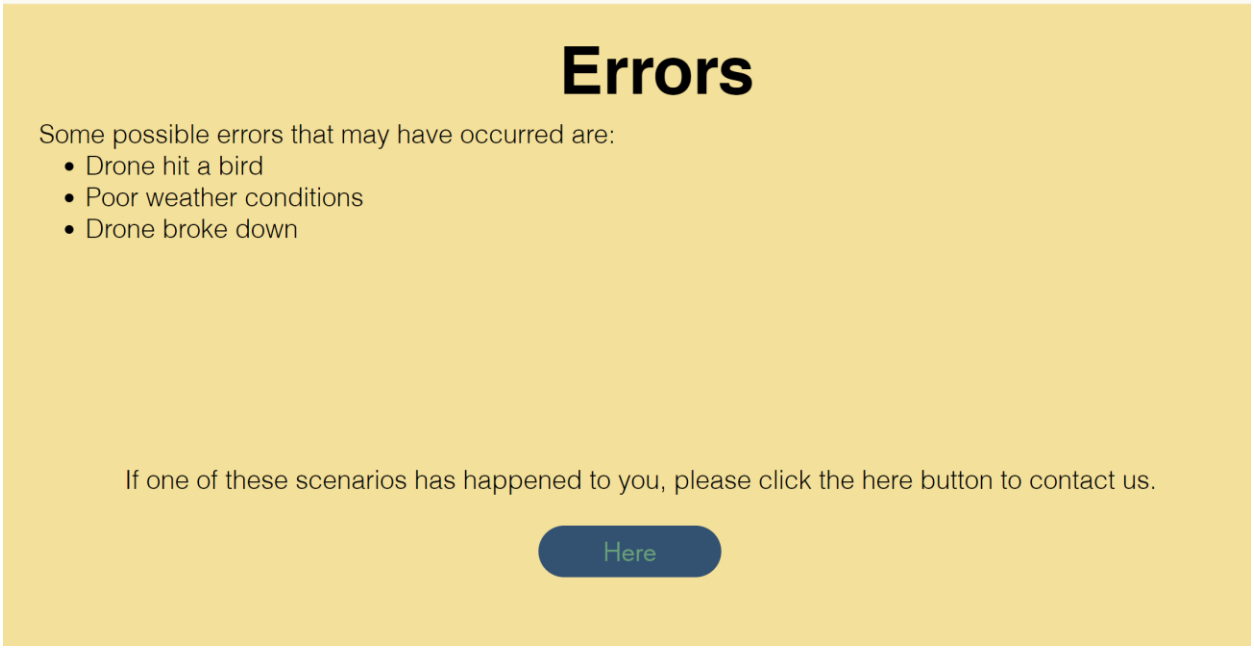


Frequently Asked Questions

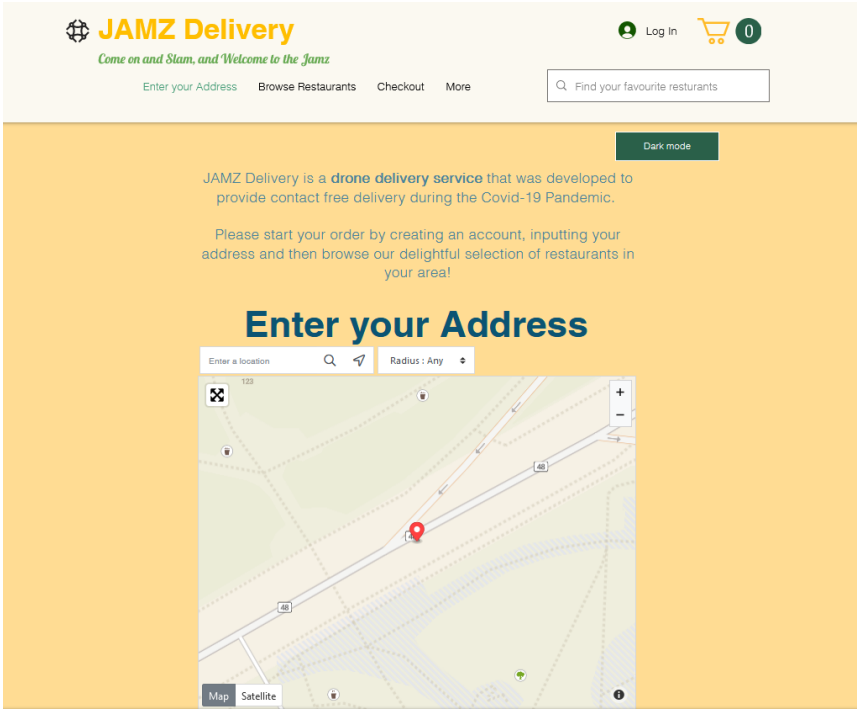
Frequently asked questions

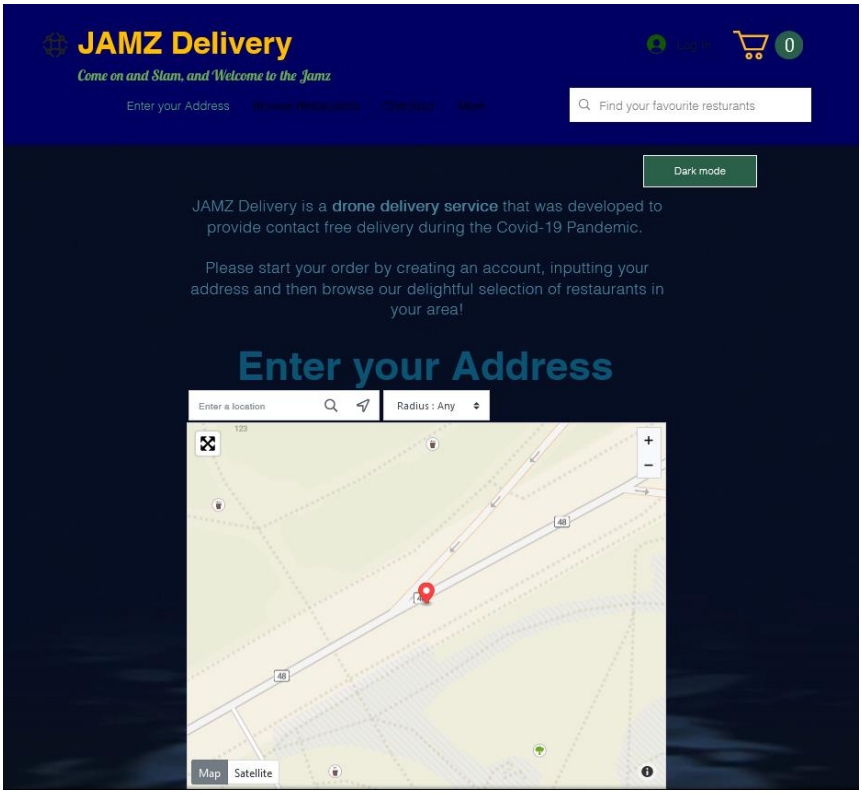
- How do I add a new question?
- Can I insert pictures in my FAQ?
- Can I insert a video in my FAQ?
- How do I edit or remove the "FAQ title"?





Prototype III:


JAMZ Delivery
Come on and Slam, and Welcome to the Jamz
Log In
0
Enter your Address
Browse Restaurants
Checkout
More
Find your favourite resturants
Dark mode
JAMZ Delivery is a drone delivery service that was developed to provide contact free delivery during the Covid-19 Pandemic.
Please start your order by creating an account, inputting your address and then browse our delightful selection of restaurants in your area!
Enter your Address
Enter a location
Radius : Any
Map
Satellite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Please start your order by creating an account, inputting your address and then browse our delightful selection of restaurants in your area!
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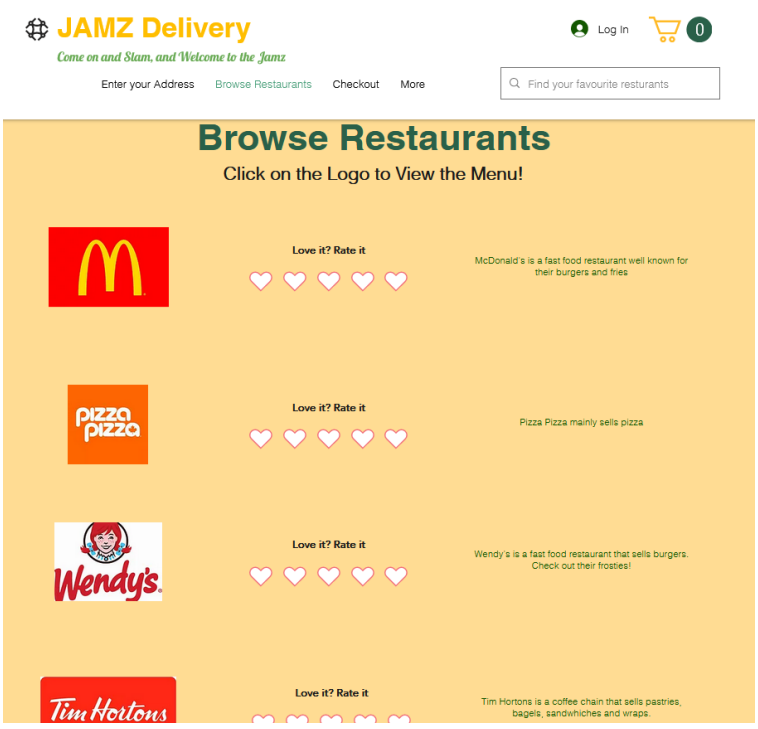
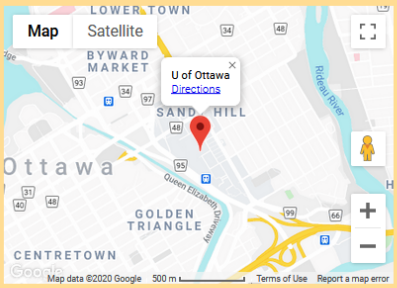

JAMZ Delivery
Come on and Slam, and Welcome to the Jamz
Log In
Enter your Address
Browse Restaurants
Checkout
More
Find your favourite resturants
Browse Restaurants
Click on the Logo to View the Menu!
Love it? Rate it
McDonald's is a fast food restaurant well known for their burgers and fries
Love it? Rate it
Pizza Pizza mainly sells pizza
Love it? Rate it
Wendy's is a fast food restaurant that sells burgers. Check out their frosties!
Love it? Rate it
Tim Hortons is a coffee chain that sells pastries, bagels, sandwhiches and wraps.

Before Confirming Your Order, Please Confirm Your Pick-Up Location

Location

Please make sure that your pickup location has no wires or branches directly above it.

As well, when the drone is landing and taking off, please stand at least **5 feet** away from it to ensure your safety.



Order Complete - Receive Barcode

The drone needs to scan this code in order for you to receive your order. There are three options for receiving your code

Send by Email | Print Code | Show on Screen

Order Received

If you did not receive your order click here

No Order

Order Received

In order for the drone to take off safely, you need to be standing at least **5 feet** away.

Please press the button to confirm that you are 5 feet away from the drone, and there are no wires or branches above the drone.

I am 5 feet away from drone

Errors

Some possible errors that may have occurred are:

- Drone hit a bird
- Poor weather conditions so drone can't fly
- Drone broke down
- Drone was stolen
- The restaurant is out of that food

If you haven't received your order, please click the "Here" button to contact us.

Here

Contact Us

Please give us feedback on how to improve our service!
Have questions? Send us an email.

Something went wrong with yout order? Contact us!

CONTACT

Tel: 123-456-7890
Email: info@mysite.com

ADDRESS

1234 jamz deliveries lane

OPENING HOURS

Mon - Fri: 7am - 10pm
Saturday: 8am - 10pm
Sunday: 8am - 11pm

First Name *

Last Name *

Email *

Subject

Type your message here... *

Submit

About Our Business

Our business, JAMZ delivery was created to help provide contact free delivery. Covid-19 has introduced the need for contactless delivery and so we decided to design a solution.
We are a group of students studying at the University of Ottawa and we joined a competition to find a solution for food delivery. And so JAMZ came to be.

Our Team

Mohammad Abu-Shabban

Amro Elsayed

Zainab Badawy

Jacob Steele

Logan Rodie

Munir Aljawahari

Piers Hancock

Jonathan Fan

Daniel Krohn-Anthony

Frequently Asked Questions

FAQ

What happens if there is bad weather

The drone is scanning a barcode, does that mean it is filming me?

I am worried about the drone hitting trees, birds, wires

What happens if I do not receive my order?

Sign Up

Already a member? Log In

Sign up with Facebook

Sign up with Google

or

Sign up with email