MIDWAYZ

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Comp 424

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12 December 2016

Table of Contents

Abstract and Project Narrative

The core design of MidWayz is to provide its users with a simple solution to find a convenient location for both users to meet that is directly between them. It uses the two entered points and then returns them the calculated midpoint and then will populate their map with locations that are nearby the midpoint.

The basics of our web app start with our main page. On this page the user's eyes are drawn to enter their addresses in the two boxes. Then the calculate midpoint button is clearly colored so that the user knows to click it after they entered their address.

The goal for MidWayz was to make our own version of an app Andrew works on. www.midwayzapp.com is the homepage for the startup. The main goal is to help people meet up and save time. In its current form, the mobile app lets two people meet up and gives them a location that is in the middle in terms of time.

So we wanted to make a minimalist version of that because the current app feels over cluttered. We wanted to make a simple and easy way for people to meet up for coffee or to eat.

Team Member Contributions

Andrew Dyer

- Chose the colors for the site
- Typeface
- Customized the Map's CSS
- Logo
- Presentation

Tim Boex

- JS for the text autocomplete
- JS for the geocoding of addresses
- Majority HTML/CSS to turn designs into web.

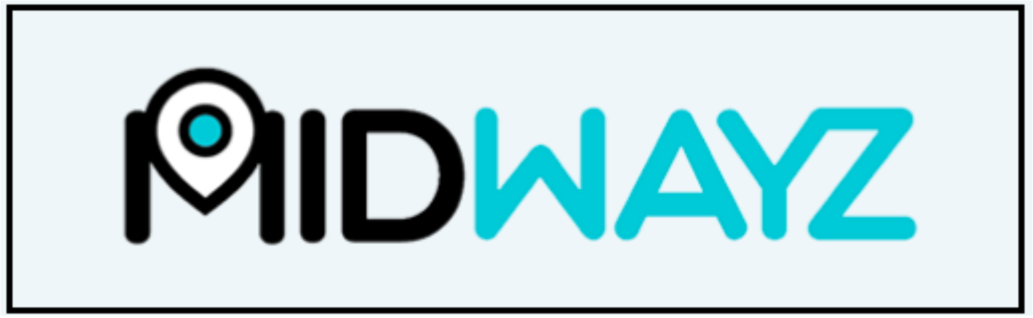
Together

- JS for local restaurants.
- Simple Midpoint Trigonometry for finding the midpoint between two coordinate pairs.
- This document

In general we were very happy with our teamwork and would say that it was a 50-50 effort. There was no point where either of us worked alone, we peer programmed the entire project while yelling at each other.

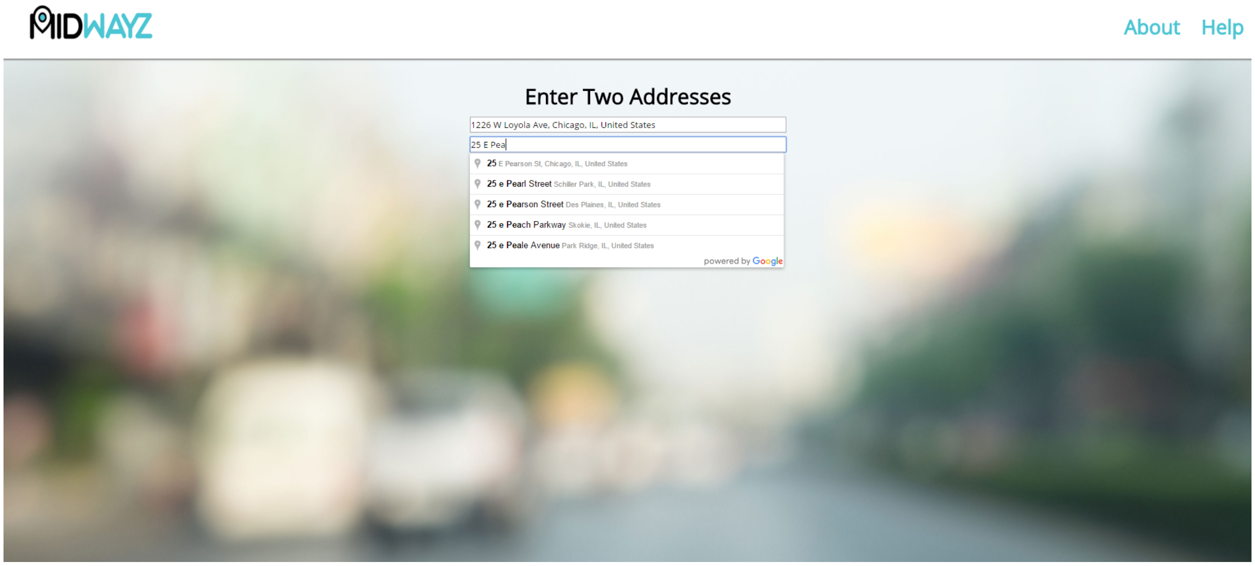
Design Specifications.

Coming from the Mobile App, Andrew had already designed the look and feel of our app.



The Final Logo conveys the brand and function with a map pin in the center of the M along with a name that conveys the function of the app.

Splash



Enter Two Addresses

1226 W Loyola Ave, Chicago, IL, United States

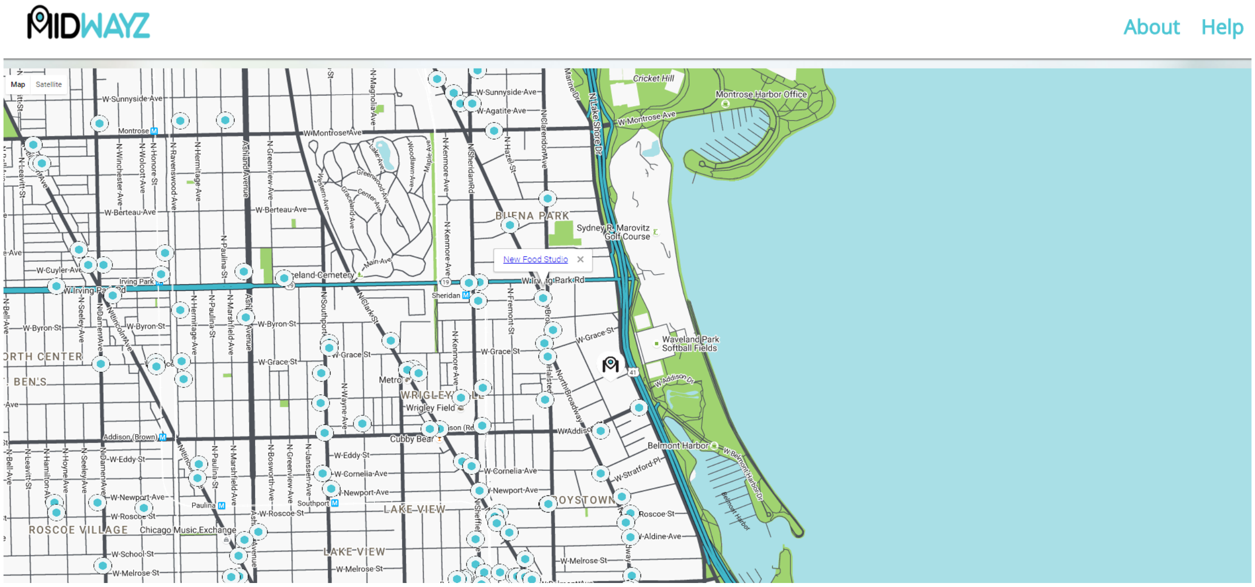
25 E Pea

- 25 E Pearson St, Chicago, IL, United States
- 25 e Pearl Street Schiller Park, IL, United States
- 25 e Pearson Street Des Plaines, IL, United States
- 25 e Peach Parkway Skokie, IL, United States
- 25 e Peale Avenue Park Ridge, IL, United States

powered by Google

We wanted simple and intuitive design, with tons of free space. We really loved this out of focus street photo to capture the theme of travel, while still providing complimentary colors to our brand scheme as well as be visually interesting.

Map



The goal with the map was to find complimentary colors to our brand scheme, as well as to insert our logo at the center. So if it were screen shot, it would be recognizable as a MidWayz map.

Design Considerations

As mentioned, MidWayz (www.midwayzapp.com) is a mobile startup app Andrew works for, so a lot of the heavily lifting in terms of design consideration have been done. So the concept was already in our mind and it seemed like a fun challenge to transfer it over to JS and trim underused functionality.

So our goal was to make a minimalist page, where one can put in two locations and find a meeting place in the middle. We didn't feel it was necessary to oversaturate our page with too much fluff, fearing that it would take away from the utility of our web app.

Regarding DEV Week, in our opinion, we did not bring enough to the table to get a full peer review. However, what we did get was overwhelmingly positive with regards to what we did have. With that in mind, we kept at it.

We wanted to maintain high affordance with consistent design that would be intuitive to any person who had ever used Google maps.

Software Architecture/Testing and Iterative Design

1. Our interaction pattern has 2 main stages. The first stage begins with the user entering an address into our text boxes. Then all that they need to do is hit the button to do the geolocating. Behind the scenes when the user is entering addresses into the text boxes our code is making asynchronous calls to the Google API. When the button is clicked in populates the map onto the page and adds in the midpoint. Then it adds in the locations near the calculated midpoint.
2. The UI is very consistent across the pages. Our back-end has also been thoroughly tested to make sure that it works in extreme scenarios. The only limiting factor that we have run into is the daily amount of API calls that we are able to make.
3. Our platform greatly benefits from deferred calls. It used to crash if we tried to geolocate before the API finished loading because our code had no way to wait for it to load.
4. Our information structure goes from the user entering their addresses to that being converted into a geolocation. This geolocation is then converted into our algorithm, which outputs a midpoint.

Restrictions and Limitations

Andrew is doing an Independent study to make a python flask based API that does everything our app does. When passed a Get request with between 2 to 5 coordinate pairs it returns the midpoint in terms of travel time, and local restaurants and meet up places from yelp.

We wanted to implement that, but realized it would take away from the challenge of the current project, otherwise our JS would be about 15 lines. It also currently isn't in a "ready to ship" state. We plan on implementing it as soon as the API is done for our portfolio's sake.

Google's API on its cheap tier was also very hamstringing. Often we found that the API would hang when we called it too many times in a short period. We also aren't really happy with how Google Maps was displaying our custom POI marker. It kept coming out grainy with weird artifacts around the edges, no matter the image size, format etc.

Conclusion

We both enjoyed working on this project and are very happy with the result. There was no time where we felt overwhelmed, but there was some frustration. We hope you enjoy our project and can give us some great feedback on our design.