

Overview: Over the past weekend, I participated in LadyHacks, a women's only Hackathon event. During the event I worked on building the new N3rd St website. My role was to list and map N3rd St. tech companies in a way that is easily viewable on the website. This experience gave me the idea to use the CesiumJS API to map out the companies. Given the time constraints of the hackathon, I first built a mockup and refactored that code using the CesiumJS API the next day. Below is breakdown of my project's data and components, challenges I faced during development, and future steps I would take to improve it.

Project Data and Components:

1. **Company Database:** A spreadsheet that includes all of the company entities and associated information. This file is used for project planning and organization. It has no effect on the HTML markup or JS.
2. **Company Information:** Each company's entry in the spreadsheet contains the company name, physical address, longitude and latitude coordinates, company description, logo, and website information.
3. **Unique Entry ID:** Each company entry in the spreadsheet is assigned a unique ID, which can be called by functions within the JS to plot points/pins of the same or even varying colors on a CesiumJS generated map.
4. **N3rd St Representation:** N3rd St is given its own unique entry with visual representation on the map to highlight that "N3RD Street is defined more by an identity and a set of values than a geography" and more importantly not all of the N3rd St. companies listed are located directly along North 3rd St.
5. **HTML:** The HTML markup lists the company entities as buttons that can be added to the map. When any button is selected the unique ID of the associated company is passed to the JS .onclick function and the map flies to the location the company pin as well as displaying a company description box.

Challenges: One challenge of my approach is dealing with scaling out this project to encompass all N3rd St associated companies. In particular, some are clumped together in a small geographical area and some are even in the same building making mapping their location precisely more difficult.

Another limitation of this approach is that it is inefficient to add the company as an entity in a database and also update the list in the HTML markup. Like any hard coded value these entries may suffer from transcription errors leading to a broken key value pair and therefore bad mapping experience.

Next Steps: The first step to improve this project would be to incorporate the rest of the N3rd St companies currently to the company spreadsheet and HTML markup to complete the visual representation of N3rd St on the website.

Incorporating a JSON file and template would better compartmentalize the data and make it more dynamic. As the list of companies grows, the list with all of the necessary information would be updated within the JSON file. The JSON template would process that data and JSON functions defined within the Javascript files and would automatically update

the HTML markup and map. Using the N3rd St website templating format, as new companies are updated in the JSON file, the list in the HTML markup is also updated thus lowering the risk of human error.