

Product Vision and Design

1. Using location, like country or school, would be a good way to filter the data. This would give the attendees opportunities to connect with other students from their country or school. This is especially useful for international students who may not know a lot of people and wish to connect with people that they can then possibly see back at home. However, both of those pieces of information are not included in the data given. Using the data given, it would be interesting to be able to filter the attendees by skills, since a major part of hackathons is working together, so if someone is stuck on something it would be helpful to quickly find someone who is skilled in that area to quickly ask them a question. I did not have enough time to actually implement this; I was planning on filtering based on skills in my application.

2. Designing a world map based on how many people are from each country would be a very interesting graphic for attendees to see where everyone came from that could be shown at the welcoming ceremonies. We could either display the data as colours (different colours mean different brackets of people, like a population density map), or since we also have access to latitude/longitude we could put a dot for each attendee on a world map corresponding to their lat/long. To make the map interactive, we could allow zooming and clicking on dots to see who is who, or a searching function that would zoom in on that person's dot with a popover displaying their profile information. We could also create a chat feature for attendees of Hack the North only. Like I discussed above, this would allow for more collaboration between attendees, which could allow for a more meaningful hackathon experience.

3. The profile data could be meaningfully extended to include their country of origin, so that we could implement the world map I discussed above, and including school so that attendees could connect with other people from their school. Also, having their team names, or other team members, would also allow us to build an application for the judges to write down their thoughts/remarks of each team as they give their presentation. This would help us know which teams actually presented at the end of the weekend, and if teams split off to create two separate teams.

4. Some useful performance metrics would include page load time, the time it takes to fetch the json, how long it takes to live search a given string. Page load time would be important since if the page loads extremely slowly, we may need to restructure the way we render the profiles, like I mention below, a paging feature that appears as infinite scroll would solve this, so that the page could render batches of profiles as the user scrolls, and it wouldn't have to render all the attendees at once. This is also known as lazy loading, which is essentially hidden pagination. The time it takes to fetch the json is also important since that is the main portion of our application. If this is very slow we may want to consider fetching the json in batches to make the application more user friendly. How long it takes to live search a given string is important, since if it is too slow a user may become frustrated and confused, thinking that the application has crashed when it is still searching through all the attendees. All of these performance metrics are important so that the user has a quick and meaningful experience on our application.

5. Since sponsors are businesses they are most interested in information about their ideal consumer. It would be beneficial to them to create a dynamic graphing application, so that they can choose what data they want to see. For example, if we had birthdays, sponsors could see the distribution of ages at the hackathon. Another interesting piece of data to collect from attendees that would be helpful for sponsors would be for the attendees to rank their top job placement choices out of the sponsors. This would allow sponsors to see how many attendees are interested in their company and how they stack up against their competition. This would allow them to later do some marketing research about why someone would want to work for company X as opposed to their company.

6. Some features that I wanted to include in my application but couldn't due to time constraints include:

- Clicking/Hovering over an attendee would open a modal/Bootstrap-like popover to display additional information, like phone number and email address
- Infinite scroll with hidden pages to load the data (aka as you scroll more of the data would render), this would cut down on render time and also be seamless to the user
- Same font style as the Hack the North official website

I did not have enough time to implement the search or filter abilities, but I set up the UI to show how I wanted it to appear. The search would preferably search by any criteria, and the skills filter would be a radio button, to allow for searching for someone with presentation skills AND android for example. If you have any questions about any of the decisions I made, please don't hesitate to send me an email!