

Hack the North 2017 Mobile Challenge

Introduction

On the Hack the North mobile platform team, you will be responsible for helping us build the main event app, as well as potentially any other mobile products relating to the hackathon. This includes writing, testing, and delivering code, weighing in on features we add, discussing roadmap, critiquing UI/UX design, and more -- whatever we need to get done to deliver an epic mobile experience. You can help in whatever areas you'd like!

This small challenge will help us determine 1) how you work, including your ability to integrate with open source and platform APIs, and 2) how you think about your work (product vision).

Email aleem@hackthenorth.com if you have any questions :)

The Challenge - Build a Mobile App

Create an iOS/Android app that displays (fake) Hack the North attendee profile data in a list, with the ability to tap on a user in the list to view their full profile. You will deliver the application to us in source code format. Evaluation will be reading your code and using your app that we will build locally.

Data

We have 1200+ fake user profiles complete with geographic information and skills listings located at <https://htn-interviews.firebaseio.com/users.json>. The JSON schema is:

```
{
  "name":<string>,
  "picture":<string>,
  "company":<string>,
  "email":<string>,
  "phone":<string>,
  "latitude":<float>,
  "longitude":<float>,
  "skills":[
    {
      "name":<string>,
      "rating":<float>
    }
  ]
}
```

Notes:

1. Skills with the same name can appear in the list. I.e. someone might have {"Android",1} and {"Android, 5} in their skills.

Application Specification

The following is the base specification for your application. Get as far as you can in the given timeframe.

1. App must be built using native iOS/Android SDKs
2. Have the ability to tap on an entry in the list, and show a detailed view of the user profile
3. Display the data in a list, sorted alphabetically by name
4. UI will be based on provided mockups, refer to the bottom of the document

Important Considerations

1. Is the base specification implemented?
2. Have you used appropriate networking, JSON, etc. libraries in retrieving data from Firebase?
3. Is the UI performant? For the list, is scrolling smooth despite loading images from the network?
4. Does your UI accurately represent the provided mockups?

Other Notes

If you are a beginner or have never implemented an app before, get as far as you can using the internet as a resource for learning. We are especially interested in motivated beginners so do your best and we will evaluate you based on your experience!

If you are experienced and implement the above spec quickly, feel free to make improvements as you see fit, or show us that you can do something really cool with the data. Especially so if the improvements you implement are part of a larger vision for your application as a product for hackathon attendees (see below).

Product Vision & Design

Treat your new application as a product for hackathon attendees, and think about the following questions. You will deliver these thoughts in a conversation with us. Evaluation will be in your ability to articulate your ideas:

Good: "Filtering the data by _____ would be sweet because when hackers/sponsors are _____, they'll need to know about all the _____ quickly."

Bad: "I thought it'd be nice to be able to filter the data by _____."

This should be a relatively passive activity; we're interested in your ideas, not in an essay or detailed plan. You may want to take notes if any of these questions aren't enough of a trigger for remembering your thoughts. Finally, note that these important questions mirror what the Hack the North team will be asking in the coming weeks as we plan for the real Hack the North mobile product.

1. What are some good ways to filter the given data?
2. What useful features could we build with the given data?
3. How could the profile data be meaningfully extended? For example, "Having access to their github handle would let us pull their code down into our app, which we could use to..."
4. What are some useful performance metrics for this application and why?
5. Could this data be useful for building any features / products for sponsors of Hack the North?
6. < Other thoughts you may have; not limited to answering the previous questions >

Mockups

Note: The provided mockups are based on iOS, if you're building an Android app feel free to make changes as appropriate to better fit the Android platform :)

