**Availity’s Fullstack Homework Assignment**

We highly recommend that you use one of the free source code management platforms (GitHub, GitLab or BitBucket) when storing your code. Once you are ready for us to look at your answers, send us the link to your code. If you have any questions about the homework, please do not hesitate to ask.

1. Tell me about your proudest professional achievement. It can also be a personal or school project.

My proudest moment was passing the Security+ Certification on my first attempt. This is my proudest moment because I was taking the exam with a coworker that is very passionate about security. He unfortunately didn’t pass the exam. After the exam, he and I were discussing it and he was furious declaring that the exam was nonsense and that he deserved to pass the exam.

My second would be getting my first job at Imagine One. I was very proud of getting this job because when I graduated from college I had a Nuclear Engineer degree and not a Computer Science degree. I was very excited about getting this job because my supervisor, at the time, took a chance that I would succeed. This lead to where I am today.

1. Tell me about something you have read recently that you would recommend and why. (Can be a Github Repo, Article, Blog, Book, etc)

This isn’t a recent article, written in July 14 2019, but it’s a very good crash course into Angular. The article informs the readers on the commands to create an Angular CLI project, create a component, and a service. I always refer back to this article every now and then when I forget a basic concept for example what was the command to create a project: ng new <app-name> or what was the command to generate a component: ng g c <component-name>. The article is link here: <https://medium.com/@xavidramirez/angular-cli-fullstack-nodejs-express-mongoose-part-1-978ea0e3da4d>

I also have a recommendation to not read article, video, or the API in reference to ArcGIS, an API for map. ArcGIS is an excellent alternate to Google Maps; however its documentation is horrendous. It’s not just my opinion that their documentation is terrible but also my co-workers who interact with the API. This is a common theme between languages: JavaScript, Java, and Python. Your time is better used looking through a forum about how to resolve a certain issue. The most common response from the developers is “you can do this with insert class name; here’s a link to the API.” The users have a better solution than the developers do.

1. How would you explain what Availity does to your grandmother?

Availity is a software company that allows for companies to make informed decisions about what health care options to give to their employees. So what this means, Availity allows for companies to choose the best healthcare options for their employees.

1. Coding exercise: You are tasked to write a checker that validates the parentheses of a LISP code. Write a program (in Java or JavaScript) which takes in a string as an input and returns true if all the parentheses in the string are properly closed and nested.
2. Coding exercise: For frontend engineer: Healthcare providers request to be part of the Availity system. Using a modern JavaScript framework (React preferred, or Vue or Angular), create a registration user interface so healthcare providers can electronically join Availity. The following data points should be collected:

* First Name
* Last Name
* NPI number
* Business Address
* Telephone Number
* Email address

1. Coding exercise: Availity receives enrollment files from various benefits management and enrollment solutions (I.e. HR platforms, payroll platforms).  Most of these files are typically in EDI format.  However, there are some files in CSV format.  For the files in CSV format, write a program that will read the content of the file and separate enrollees by insurance company in its own file. Additionally, sort the contents of each file by last and first name (ascending).  Lastly, if there are duplicate User Ids for the same Insurance Company, then only the record with the highest version should be included. The following data points are included in the file:

* User Id (string)
* First Name (string)
* Last Name (string)
* Version (integer)
* Insurance Company (string)

Again, please let us know if you have any questions. Thanks!

-Availity Team