

Spring Self Assessment Essay

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Senior Design 2

My individual contributions to this project varied across discipline and caliber, as did all of the members of the team. Somedays I was a project manager and others a software engineer. As arguably the largest architect of the project I handled a lot of the initial designs and planning for what was to come of this project, of course not possible in the slightest without the opinions, inputs, and hard work from the rest of my teammates. Near the beginning of this semester we had a massive pivot to make in terms of what data to use in order to create an accurate prediction of music. As much of the data we thought we would have access to we no longer did. This made have a massive pivot in the backend design and also the frontend as well as our intelligent data analysis techniques. My individual contributions to the product were that of; I started creating the first parsing functionality along with my teammate Justin. We architected most of the data pulling and cleaning from the spotify api of getting a users top songs to our genre distribution measures. This was probably close to 20 hours of work at least. The next large section I contributed to was the frontend. With the help of Seamus Collins, I implemented the dashboard component, specifically the radar chart and playlist displays were created by Seamus. I created the user landing page and derived the idea for a radar chart as well as created the polar area charts and hosted the site.

As far as technical abilities I built I would certainly say my python got a lot better as well as my navigation of data sources and idea of what it means to extract transform and load. Creating these data pipelines and parsing out what was necessary and what needed to go where could be sort of abstract at times if I did not have a good idea of the shape of my data. We used nested dictionaries which prove to be very esoteric when holding a lot of complex data. But this allowed for fast traversal and parsing. Also I would say this gave me a better idea of what it means to be fullstack as I was building the parser and front end. Eventually the front end connected to the database via some calls and so I really had a full view of the data from inception to display. Some non technical abilities I refined would certainly be the pivot we had to take with not getting the data we wanted initially and having to keep our cool and work through some other solution. That along with a the friendly rallying of a team when it was needed.

In regards to team accomplishments, clearly our app stands to show what we accomplished. Truly none of this would be possible without my team and their efforts, intelligence, and great work ethic. I have worked with all these team members before and knew they would be an exceptional group and we work very well together. All of us are very responsible and are able to take accountability and put out good code. Some of the minor difficulties we ran into were scheduling issues and maintaining a decently organized code

repository. Since we are all very busy finding a time to meet each week would sort of vary and there were a number of conflict issues. All work would always end up done but sometimes it was just brief meetings or hard to organize. The code repository was sometimes a total mess and a couple times we spent probably hours merging conflicts and debugging issues due to merges which was totally avoidable and a great learning experience in way organizing 4 peoples code merges is so important.

I would say work was evenly spread across all members. All members were very responsive to emails texts and discord messages and all were also aware of upcoming deadlines. From the beginning of this project it was aware it was a great project for 4 people to do just because of the nature of the project and the needed modules of it. We needed A front end a database, a parser and a machine learning portion for recommendation. This made it possible for us to diversify work. We all did do a lot of overlap into multiple disciplines but the bridging was nice for us to understand what the others were doing. All three of my teammates, Seamus Collins, Noah Falanga and Justin Tiche deserve special recognition for the fact that they are just incredible software developers and teammates. If any of them wanted to work together in the future I would easily drop whatever I am doing to help them with a project.