

Senior Design Individual Assessment

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Throughout the senior design process, my contributions were mainly to the user interface elements of the project. My goal was to focus on making the interface easy to use and intuitive so that the user would be able to identify features of our app almost immediately, and use them effectively to create playlists in our app. Based on our final product, I am confident in saying that many of the skills identified in the initial assessment from the fall were both utilized and improved throughout the course of this project. This includes software development workflows, organization of UI elements and components within react, as well as the use of data structures to manipulate data and display it on our interfaces.

On completion of our project, we successfully built a Spotify companion application that takes a Spotify user's recommendations and preference input to then generate a batch of songs for the user. The user can then swipe through the recommended songs and decide whether to add them to their current playlist or discard them. Once complete, the user can export the created playlist to Spotify and listen to it there. This final product was achieved through a react application that uses the Spotify API and gathers song metadata to make recommendations to the user. Throughout the project, I was able to build my competencies in UI design and working with react components, which I had not as much experience with before. I was able to successfully build the interface and make it user friendly, but this came with some obstacles in the form of learning how swipe controls work, adding drop zones for tiles, and fixing the alignment on columns during dragging so that the rest of the UI is not impacted. All these things took a lot of time to implement and fix so that they were working properly for the expo.

Our group certainly accomplished our goal, which was to build a functional Spotify companion application in time for the expo. Additionally, much was learned about group work and coordination, especially in the context of software development. Task delegation and completion by the deadlines was something that took our group some getting used to, but once we eased into the workflow, we began to increase our efficiency and ability to work together as a team. Almost all aspects of teamwork in the design and planning processes were successful, however the only one that took some time to improve on was navigation of obstacles as our group has to adapt to help other members with less time.

I believe my efforts in the project compare well with that of my teammates, especially since the application does not work effectively without a user interface. Each team member had an important and pivotal part of the application to work on, and with good work from each of us,

the result was achieved. I believe that Austin Schoster deserves some special recognition though as he helped structure our backend elements and worked on making the brains of the application function. This helped the rest of the project progress much smoother and helped reduce panic over time as the expo deadline closed in on our team.