Capstone Idea Outline

(<https://full-time.learnhowtoprogram.com/react/functional-programming-with-javascript/functional-programming-with-javascript-independent-project>)

**Capstone Idea: Spotify Side-Scroller**

The Spotify Side-Scroller (name pending revision) is a game that imports your Spotify library or Spotify recommendations to automatically create levels using sound visualizations. The intended style of the levels is to mimic some of the visualizations in versions of Windows Media Player.

**Required Prompt Questions**

* Who is this program built for?
  + This game is designed for anyone who wants a fun and interactive way to visualize their music. However, the game could also potentially target a competitive gaming audience in the same way that games such as [Beatsaber](https://beatsaber.com/) (another game synced to music) have done.
* What is the purpose of the program?
  + The program will auto-generate side-scroller levels based on music visualizations.
* What is your end goal for this program?
  + The end goal for the program is to have a fully functioning game that allows users to connect their Spotify libraries in order to generate levels.
* Are there any roadblocks or issues you foresee with building this program?
  + I will need to figure out how to make a side-scroller game using a web programming language. Since we have not covered the C# section in the coursework at the time of writing, I am unclear if the C# we’re learning will relate to mobile, web, or desktop development (or all of the above).
  + Learning about OAuth APIs. I have some experience with them from my IT background, but would need to do some research on them in relation to coding.
  + Animating the visualizations may be a challenge. While I haven’t looked into the Web Audio API much, it doesn’t seem like this should be a hard task, but I may be wrong.
* If you were asked to begin working on this program now what would you start with?
  + If asked to start on this project now, my first step would be to research the ease/functionality of using JS vs C# for building a side-scroller based on language capabilities and knowledge acquired up to this point.   
    After doing this, I would develop a project plan.