

## Capstone Project Idea Template

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### What problem does the project try to solve?

This project will eliminate the abundant amount of terrible music that manages to persist in modern-day games. It will replace this music with more popular music from Spotify chosen by the game developers.

### How does it solve the problem?

Game developers typically have 3 options when it comes to putting music in their games.

1. Make an original soundtrack
  - a. These are incredibly expensive and time consuming
2. Pay royalties for popular copyrighted music
  - a. This is the most expensive option
3. Use royalty-free and copyright-free music
  - a. This music is wholly inadequate and often results in some terrible soundtracks

We are creating a 4th option for game developers

The ability for game devs to design their games and integrate popular music while passing the cost off to the users. Here is how it works.

Players must purchase a Spotify account and then sign into their Spotify account at the beginning of the game. The players then have access to all of Spotify's song libraries. Game devs design games with this in mind and have these songs change dynamically based on in-game events.

Our project is to implement this via the public Spotify API and create a simple prototype game to use this library and show how API calls can dynamically change the music based off of predetermined game events.

To be clear, this is different from playing Spotify in the background while playing a game. Our idea allows developers to use Spotify's music and decide ahead of time how

the music integrates with the game, and also how the music will respond to game events. All while passing the cost of this music off to the player (the purchase of their Spotify account).

Imagine you load up a Steam game and after quickly logging into your Spotify account, Thunderstruck by AC/DC is playing at the title screen, and then the popular songs from Spotify dynamically change based on in-game events.

**What technologies will be used?**

HTML, CSS, Javascript, node.js.

**What are the core features that will be implemented?**

A prototype game to show off how developers can design games while using popular music from Spotify.

A small “login with Spotify” GUI with 3 inputs that are for username, password, and a captcha. This will then be verified through Spotify’s public API.

Throughout the game, API calls will be made based on predetermined in-game events to change the music.

**Who is the target audience for this project?**

Game developers primarily, but this can also be integrated into TV shows, videos, movies, etc.

**Note:** We have submitted this idea on Spotify’s developer website and have been given permission for a non-commercial integration and usage of this idea. Commercial integration of this application is still pending and may take some time.