Congratulations on making it to your final capstone project! Prior to this, you created three applications completely from scratch, two of which were fully functioning front-end web applications. This is a truly impressive milestone.

As you may have realized at this point, there are two essential skills to being proficient in any language or technology. The first is the technical ability to use that technology's syntax and paradigms to implement specific functionality. After completing the previous two projects, you have clearly demonstrated mastery of that skillset.

The second essential skill is the ability to break down a technical problem into potential implementations and lay out a clear implementation game plan. For any new feature, a strong development team will lay out what a new piece of functionality should do and how it will be implemented. This ensures that all essential [use cases](https://en.wikipedia.org/wiki/Use_case) and [edge cases](https://en.wikipedia.org/wiki/Edge_case) are addressed. It additionally ensures that the technical implementation of the feature will work as intended and sets up the app for future success.

You'll notice that we have been offering to do some of that work for you in the form of project steps. If you haven't been using our project steps, then you've clearly mastered this skillset as well! Whether or not you have, though, we want to ensure you get ample practice in developing these technical design skills.

In this project, you will select a feature that you think should be added to your Jammming app. You will use this [technical design document template](https://docs.google.com/document/d/1QIBjLcNH5t7FrPwuC7jNnhE1JPmwskdB7U7z0OSeDsU/edit?usp=sharing) to lay out all of the necessary functionality of this feature, how the feature should be implemented, and why you chose that specific approach. This is an essential step in the development process, so we encourage you to think carefully and thoroughly about your feature and implementation as you work on this project. **Note**: You will not need to implement this feature to complete this project (though doing so is a great way to test out your design and develop your React skills).

[Here is an example of a technical design document](https://docs.google.com/document/d/1bHEQvYYAwSpAkdpv7hp8eu-iMnvqYVS4UffCLKvaKGg/edit?usp=sharing) for implementing multiple playlists in Jammming. You should use it as a resource when deciding what level of information you should include in your design document.

You can pick any feature you want for this project, but we have provided a list of potential options at the end of this article for inspiration. We can't wait to see your cool new features and unique solutions!

**How to Get Started**

To start this project, you will need to make a copy of our [technical design document template](https://docs.google.com/document/d/1QIBjLcNH5t7FrPwuC7jNnhE1JPmwskdB7U7z0OSeDsU/edit?usp=sharing). Open the template in a new tab and then copy the file by selecting all of the content (by clicking and dragging over all of the content, or pressing Ctrl + A) and then pressing copy (by selecting the "Edit" tab and clicking "Copy", or by pressing Ctrl + C). Then create a new document by navigating to docs.google.com and selecting "Start a New Document > Blank". Finally, paste the contents of the template into the new document (by selecting the "Edit" tab and clicking "Paste", or by pressing Ctrl + V). Update the name of the document to something descriptive, and you'll be ready to work on your project.

**How to Submit Your Project**

To submit your final project, you will need to create a .txt file with a link to your technical design document. To create a link to your document, click the "Share" button at the top right of your Google Doc. A popup will appear. At the top of the popup, click the "Get shareable link" button to generate a link to your document. After clicking this button, a link should appear in the popup window. Above the link should be a button that says "Anyone can edit" on it. If it does not, click the button and switch it to "Anyone can edit". Once this is done, press "Copy link" to the right of the link.

On your computer, create a new file in your text editor and paste the link into the file. Save this file as **jammming\_feature\_request.txt**. You should then submit this file to submit your project in the upcoming project submission screen.

**Potential Jammming Features:**

* Pressing enter triggers a search
* Include preview samples for each track
* Only display songs not currently present in the playlist in the search results
* Add a loading screen while playlist is saving
* Update the access token logic to expire at exactly the right time, instead of setting expiration from when the user initiates their next search
* After user redirect on login, restoring the search term from before the redirect
* Ensure playlist information doesn't get cleared if a user has to refresh their access token