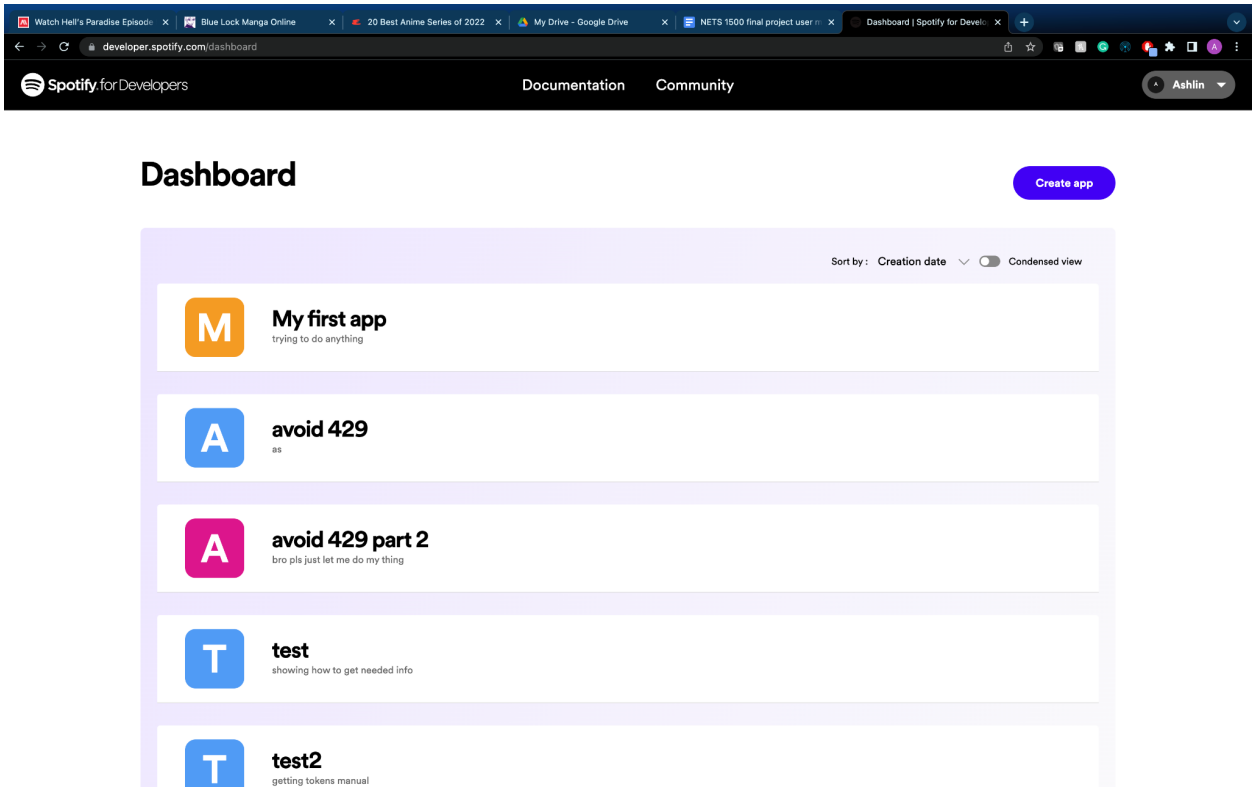
Software Installations

Sidenote: This should theoretically work in all IDE's, but we did use Visual Studios to run all of our code.
Step 1: Open the Folder titled NETS1500 Final Project
Step 2: Activate a virtual environment by entering the following in the VSCode Terminal:
python3 -m venv env
source env/bin/activate
Step 3: Install necessary modules which are numpy, selenium, and requests using pip in the VSCode Terminal:
pip3 install numpy
pip3 install selenium
pip3 install requests

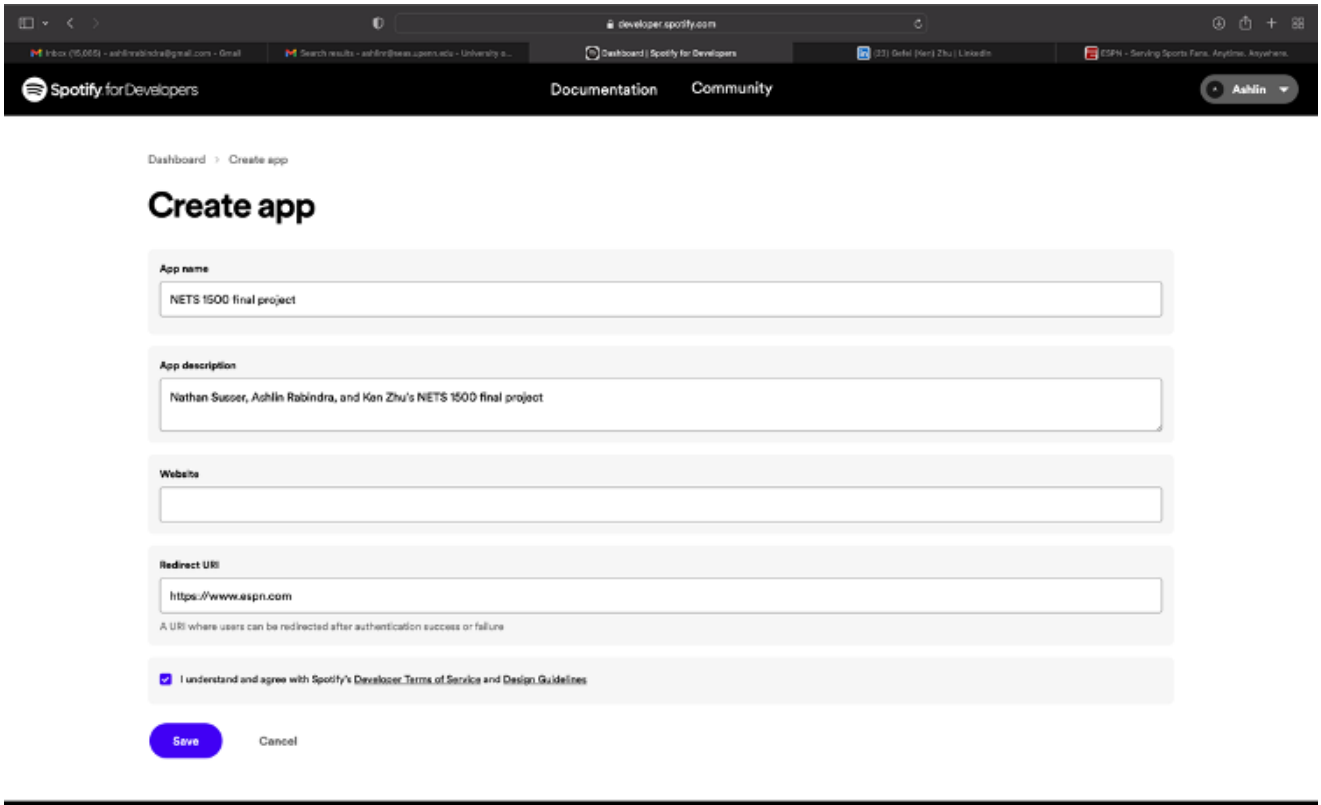
You also need to have Chrome installed on your laptop and a Spotify account. A free Spotify account should suffice if you don't already have one.

Steps to Run Code:

1. Create a developer's account by going to this website: https://developer.spotify.com/
2. Sign in with your Spotify account and go to the dashboard page which can be accessed by the drop down in the top right corner and will look like this but with presumably less apps:

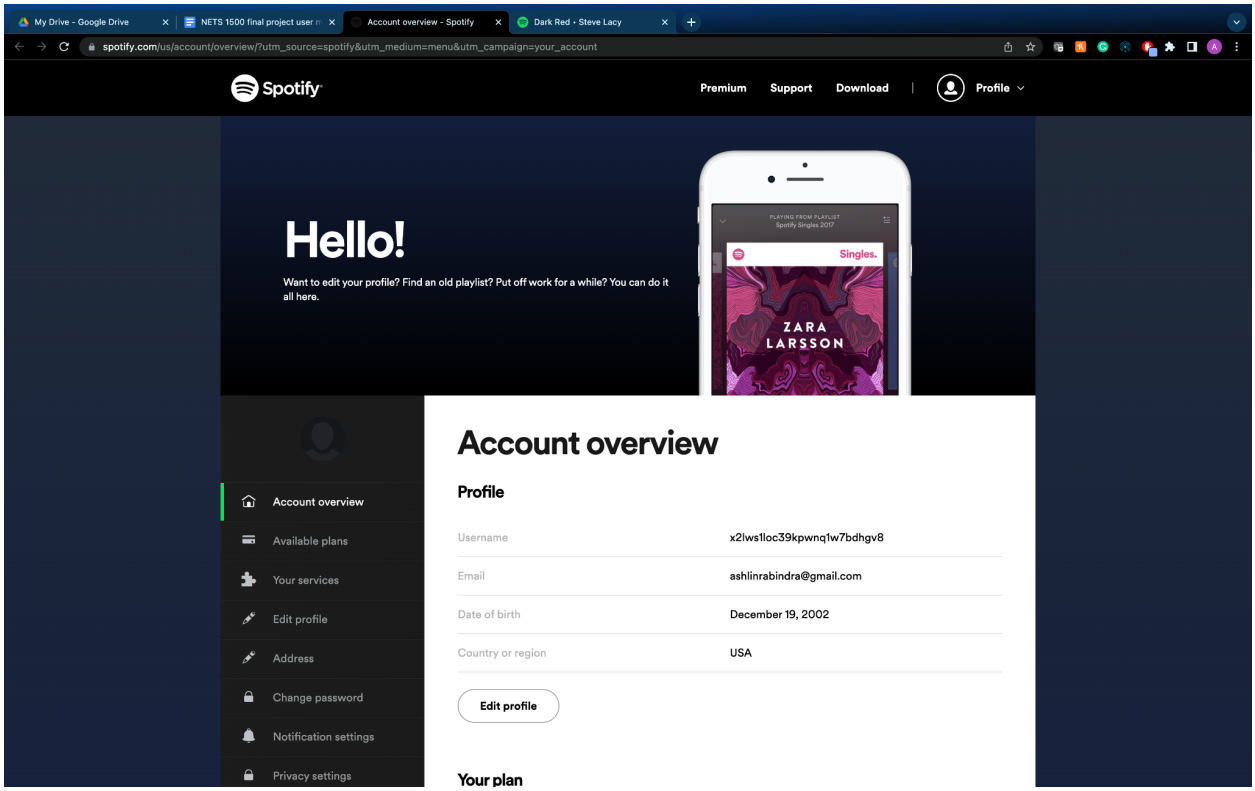


3. Click the create app at the top right, and input the fields like below. The redirect URI can be any valid URI. A valid URI must contain the https: portion of the URL to be valid. For example, google.com is not a valid URI, but https://www.google.com/ is valid. After you input the fields, save them at the bottom of the page. The redirect_uri will be used later.



4. Click the "settings" at the top right corner. Under "basic information," click "view client secret." The client ID and client secret are two pieces of information you will need to connect our app to your personal Spotify account.
5. Go to your own Spotify account as a typical user, not a developer, and click your personal icon in the top-right corner, and go to "Account." In the "account overview," you should see your username. This is your spotify_user_id. The spotify_username parameter is whatever username or email you use to sign in to your Spotify account. The ID and username may be the same, depending on if you have set it up in the past or not. For example, my spotify_user_id is the username below, but my spotify_username is my

email because that's what I use to sign in.



6. Find a playlist that you listen to on Spotify, and locate its url by clicking the three dots next to the playlist, hovering over share, and clicking copy link to playlist. Paste the playlist url into a search bar then copy the portion of the url that is after 'playlist/' and before the '?'. This is your "playlist_id." An example playlist id from a playlist url would be the highlighted portion here : https://open.spotify.com/playlist/6YOVw508TqWCXsjo4zvEvq?si=4db01ec1149e4593.
7. Open the Python project and go to the file "Helper.py." Change the client_id, client_secret, and redirect_uri to the correct respective values that you found/created earlier.
8. Go to "Main.py", change spotify_user_id, spotify_username, spotify_user_passcode, and playlist_id to their respective values that you found earlier. The passcode is your passcode that you use to sign in to Spotify with. It wil only be used by a WebDriver to help automate the process and will not be able to be accessed by anyone else.
9. In the parameters of the complete_rec function in Main.py, you can also change the name and length of the created playlist.
10. Run Main.py. After the file is run, a Chrome window should pop up. The window will automatically sign you in and redirect you to a page where you agree to give your client access to your playlists. The page that allows you to click the agree button will only be open for 5 seconds. If you don't click agree within 5 seconds, the program **will crash**. You'll be redirected to your redirect_uri which should close on its own after a few

seconds. Do not manually close close the window as this will cause an error. Soon thereafter, you should have a new recommended playlist in your Spotify Library!