

## Data Focused Python (C3 Mini 2021)

### Music Debut Helper

Group 9 -

Nicole Miya Sylvester -nsylvest@andrew.cmu.edu

Nyle Usmani – nusmani@tepper.cmu.edu

Yashvi Thakkar – ypt@andrew.cmu.edu

----- READ ME -----

The packages to be installed are:

1. plotly using the following command-

```
pip install plotly==4.14.3
```

2. cufflinks-py using the following command-

```
conda install -c conda-forge cufflinks-py
```

3. plotly-orca using the following command-

```
conda install -c plotly plotly-orca
```

The demonstration of Music Debut Helper is available on the link below.

<https://youtu.be/PEPqqN5F13s> (Demonstration video)

[https://drive.google.com/file/d/19jlOCRIIds-C-NuuiHrx8ydTGfRHf9O\\_G/view](https://drive.google.com/file/d/19jlOCRIIds-C-NuuiHrx8ydTGfRHf9O_G/view) (Demonstration with Scraping of one remaining dataset -Ticketmaster and prototype model from 5:24 mins in the video)

**MusicDebut\_final.py** is the main file and rest python files are used for scraping data. The details are of the files are given below:

1. Music.py – Web scraping music data from using Last FM API

2. TicketMaster.py – Web scraping Ticketmaster website to fetch concert per state data using its API

3. numbeoData1.py – Scraping using Beautiful soup to fetch purchasing power related data of different US states

4. numbeoData2.py – Scraping using Beautiful soup to fetch crime index related data of different US states.

On running the MusicDebut\_final.py file in IDLE/Spyder following are the snippets of outputs being generated.

## 1. The home interface

The screenshot shows the 'Music Debut Helper' application window. It has a title bar with standard window controls. The main content area is light gray and contains the following elements:

- Welcome to Music Debut Helper!** (Large heading)
- Can you please share your name? :** followed by an empty text input field.
- Let's get you started! Could you please fill out these preferences? :D** (Section header)
- Which genre are you into?** followed by a dropdown menu.
- Do you have US state region preference for music concerts/launch?** followed by a dropdown menu.
- Please select your preferences for states recommendations:** (Section header)
- Three stacked dropdown menus labeled: **Purchasing Power Index level:**, **Restuarant/Entertainment Expenditure level:**, and **Safety Index level:**.
- A row of three blue buttons: **Generate Popular Genre/State**, **Check Top Five Artists**, and **Generate States Suggestion**.
- A single blue button above them: **Explore The Insights**.
- NOTE:** On clicking the buttons, the graphs will be plotted in your Chrome browser. Please wait to be redirected and feel free to come back and add/change more filters. Thank you! (Text block)
- Exit Application** button (Bottom right).

## 2. After typing in details and selecting genre

This screenshot shows the same 'Music Debut Helper' application window, but with user input. The 'Which genre are you into?' dropdown is now set to 'Electronic'. The 'Check Top Five Artists' button is highlighted, and a list of artists is displayed below it:

Your competition will be:

1. The Chemical Brothers
2. The Prodigy
3. Air
4. Portishead
5. Röyksopp

All other elements, including the form fields, buttons, and the note, remain the same as in the first screenshot.

3. After selecting the filters – US state region, Purchasing power index, Safety Index, Restaurant/Entertainment Index

Music Debut Helper

## Welcome to Music Debut Helper!

Can you please share your name? :)

Let's get you started! Could you please fill out these preferences? :D

Which genre are you into?

Do you have US state region preference for music concerts/launch?

Please select your preferences for states recommendations:

Purchasing Power Index level:

Restuarant/Entertainment Expenditure level:

Safety Index level:

[Explore The Insights](#)

[Generate Popular Genre/State](#) [Check Top Five Artists](#) [Generate States Suggestion](#)

Your competition will be:

1. The Chemical Brothers
2. The Prodigy
3. Air
4. Portishead
5. Röyksopp

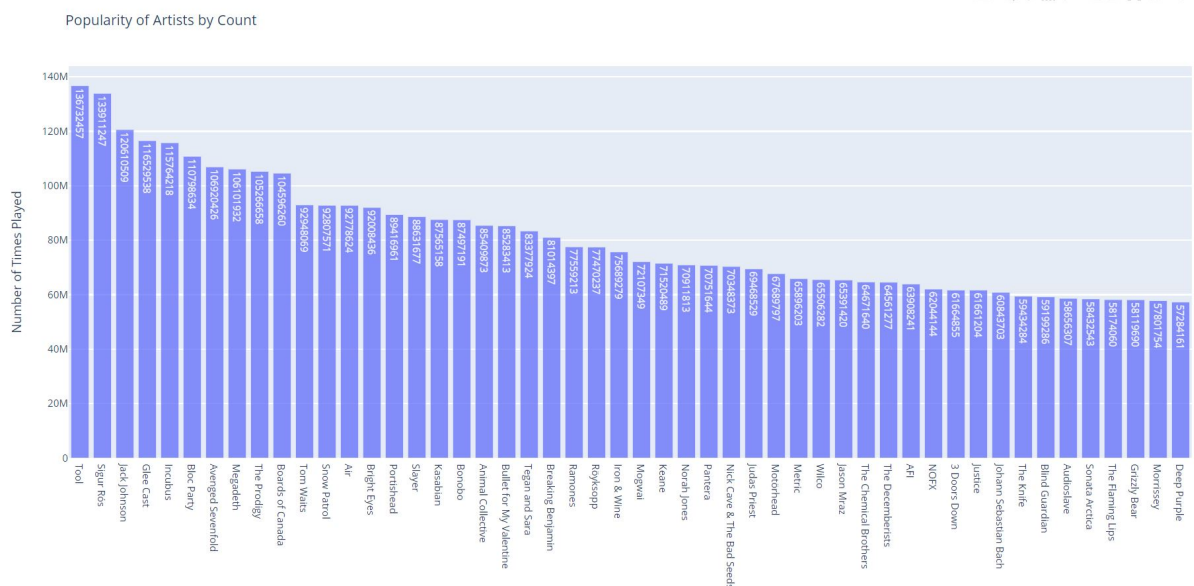
The recommended states to debut from are:

Sorry! No states with the current selected filters were found. Please reset them.

[Exit Application](#)

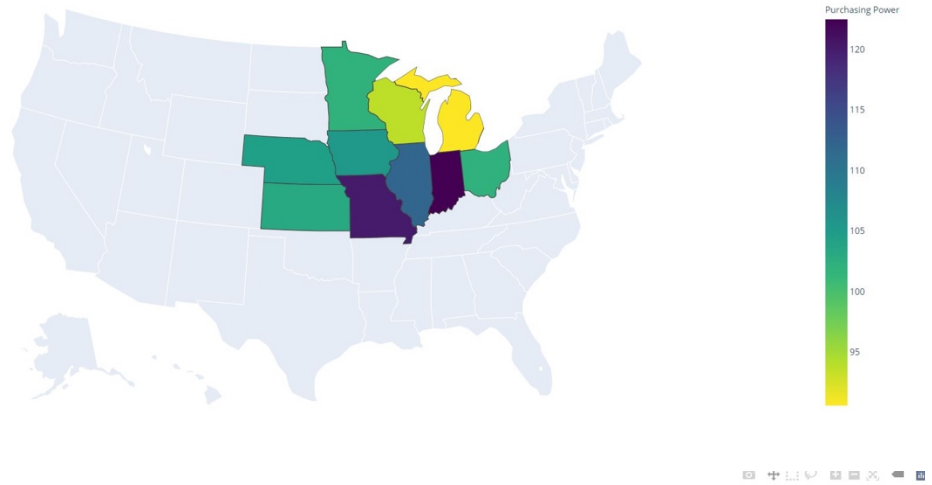
NOTE: On clicking the buttons, the graphs will be plotted in your Chrome browser. Please wait to be redirected and feel free to come back and add/change more filters. Thank you!

4. On clicking 'Explore some Insights' – you will be redirected to your chrome browser where the graphs will be plotted

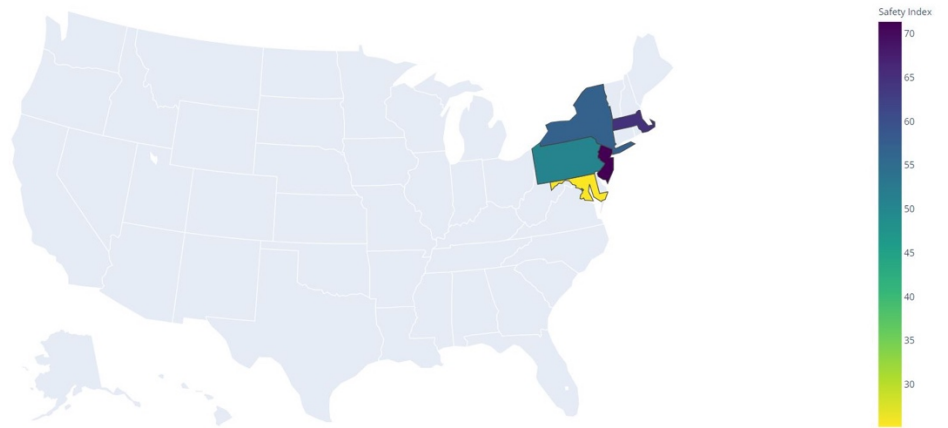




Purchasing Power by State

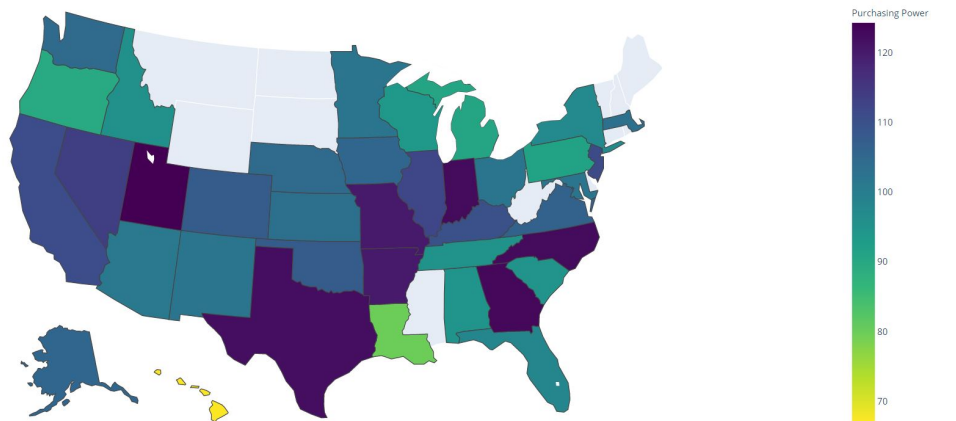


Safety Index by State

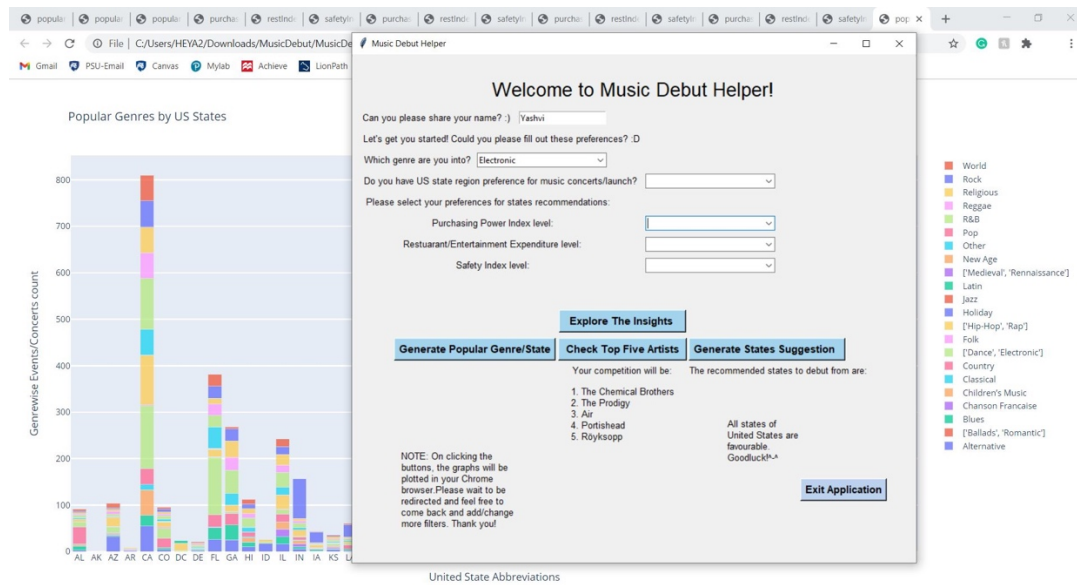


6. On not selecting any filters or US regions.

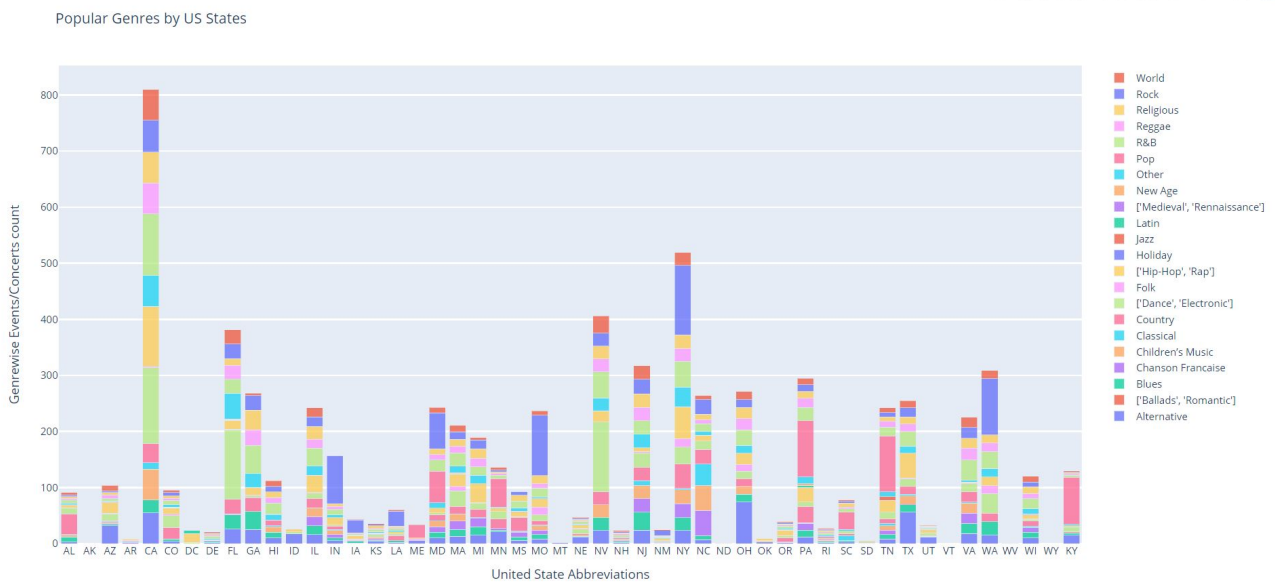
Purchasing Power by State



## 7. On clicking 'Top five artists'



## 8. On clicking 'Generate Popular/Genre by State'



## 9. On clicking 'Exit' button

The screenshot shows the 'Music Debut Helper' application window. The title bar reads 'Music Debut Helper'. The main content area has a heading 'Welcome to Music Debut Helper!'. Below this, there are several input fields and dropdown menus for user preferences: 'Can you please share your name? :)' with the value 'Yashvi', 'Let's get you started! Could you please fill out these preferences? :D', 'Which genre are you into?' with 'Electronic', 'Do you have US state region preference for music concerts/launch?' with 'SouthEast', and three dropdowns for 'Please select your preferences for states recommendations:': 'Purchasing Power Index level:' (Low), 'Restuarant/Entertainment Expenditure level:' (Low), and 'Safety Index level:' (Moderate). At the bottom left, there is a note: 'NOTE: On clicking the buttons, the graphs will be plotted in your Chrome browser. Please wait to be redirected and feel free to come back and add/change more filters. Thank you!'. In the center, there are three buttons: 'Generate Popular Genre/State', 'Explore The Insights', and 'Check Top Five Artists'. The 'Check Top Five Artists' button is active, showing a list of artists: '1. The Chemical Brothers', '2. The Prodigy', '3. Air', '4. Portishead', and '5. Röyksopp'. At the bottom right, there is an 'Exit Application' button. A 'Goodbye!' dialog box is open over the 'Exit Application' button, with the text 'Goodbye, Yashvi it's been fun! Goodluck :D' and an 'OK' button.

Music Debut Helper

### Welcome to Music Debut Helper!

Can you please share your name? :)

Let's get you started! Could you please fill out these preferences? :D

Which genre are you into?

Do you have US state region preference for music concerts/launch?

Please select your preferences for states recommendations:

Purchasing Power Index level:

Restuarant/Entertainment Expenditure level:

Safety Index level:

**Generate Popular Genre/State**

**Explore The Insights**

**Check Top Five Artists**

Your competition will be

1. The Chemical Brothers
2. The Prodigy
3. Air
4. Portishead
5. Röyksopp

NOTE: On clicking the buttons, the graphs will be plotted in your Chrome browser. Please wait to be redirected and feel free to come back and add/change more filters. Thank you!

**Exit Application**

Goodbye!

Goodbye, Yashvi it's been fun! Goodluck :D

OK

Sorry! No states with the current selected filters were found. Please reset them.

**\*\* All the buttons will redirect you to the Chrome browser for plotting the graphs. Internet connection isn't required. The graphs can be regenerated on adding/changing new filters.**