

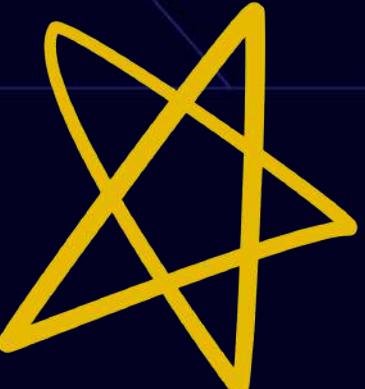


**Welcome**  
**to our**  
**Minor Project**

# MusiFY



A SONG RECOMMENDATION SYSTEM  
[based on your favourite genre :)]



# Meet the Team



1. **Abinash Samal - 21051109**
  2. **Akanksha Rath - 21051195**
  3. **Giridhar Gopal - 21052758**
- **Under the guidance of:**
- Prof. Abhishek Raj**

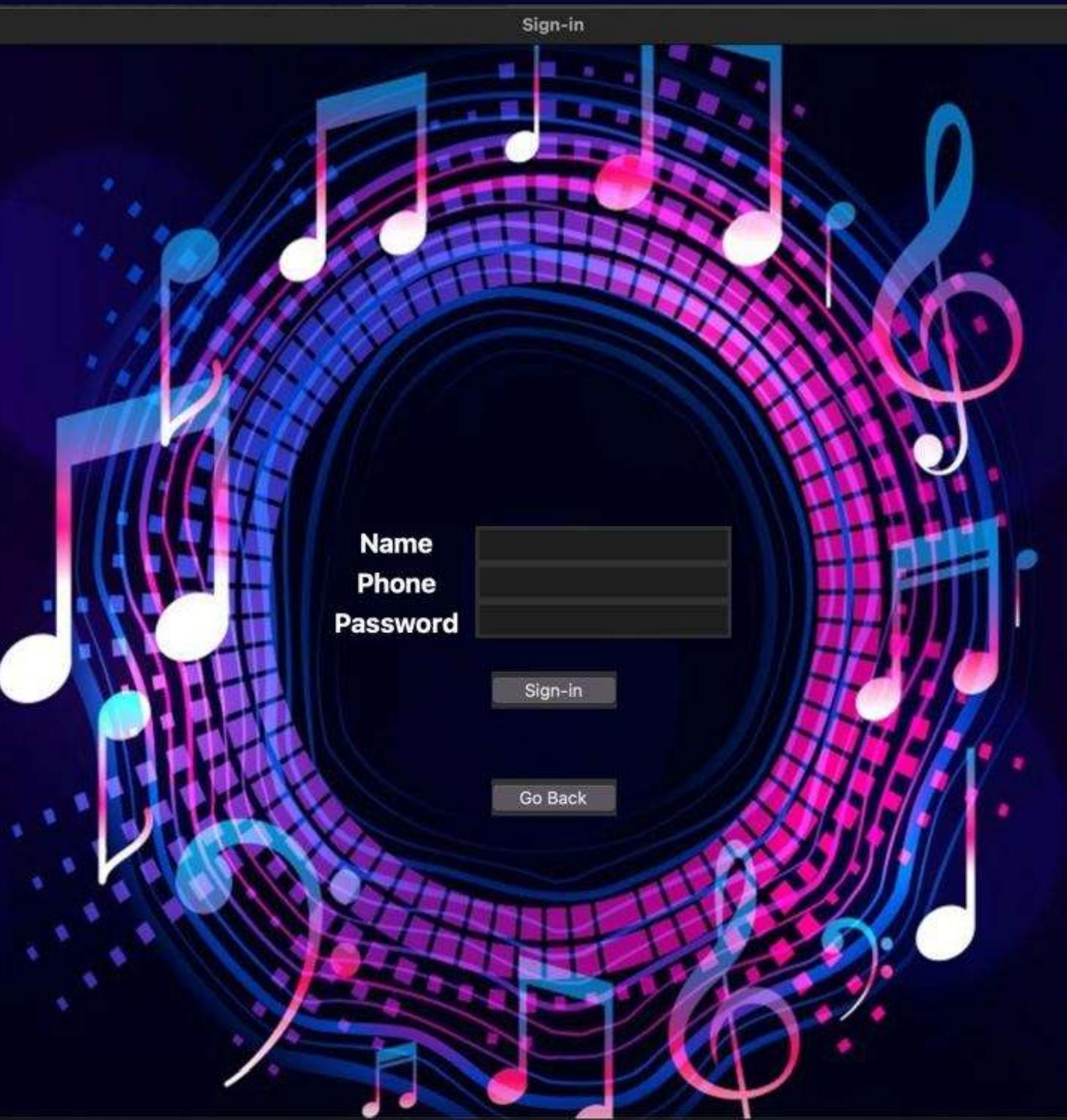
# Table of Contents :

- A glimpse of the code
- Data Cleansing
- Use case of Data-Set
- Demonstrating the project
  - ~working of the GUI
  - ~explaining the purpose
  - ~how to use it effectively
- Future scope
- Closing Thoughts

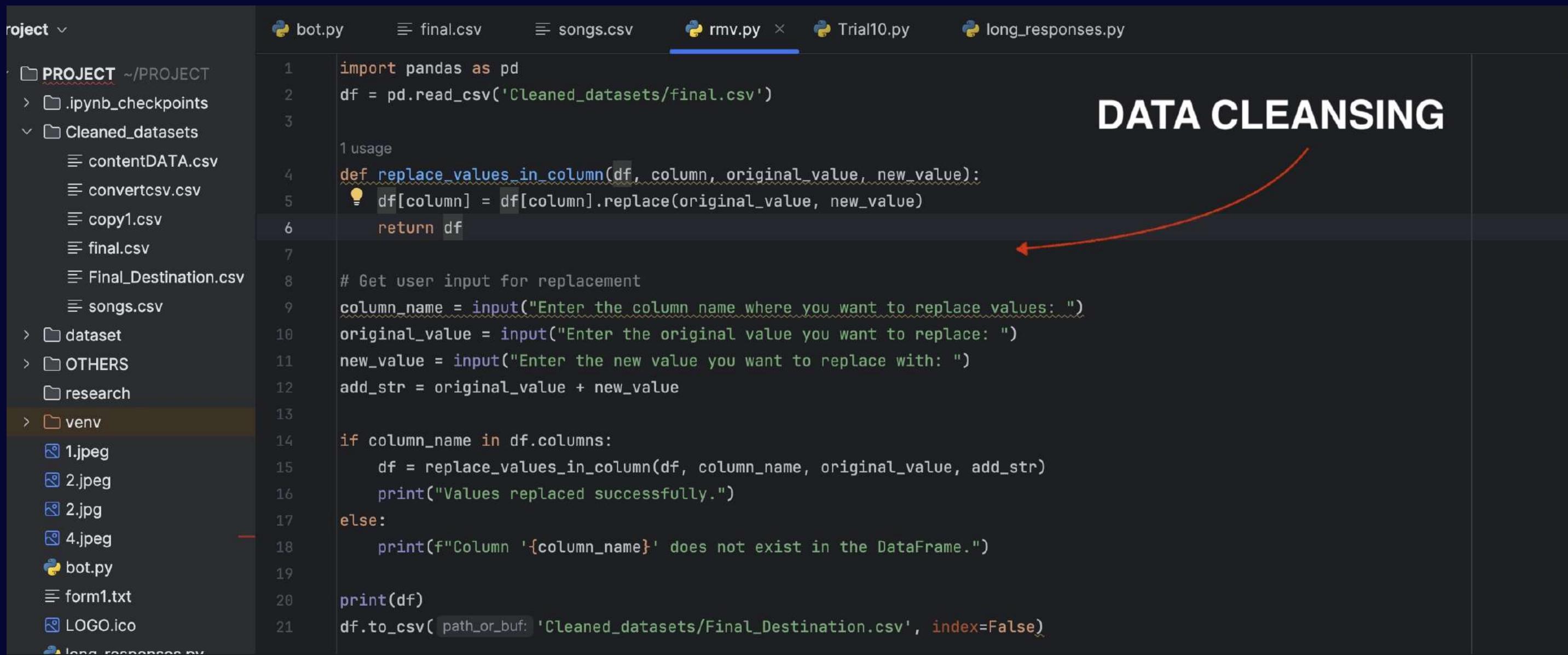


- **Glimpse of code:**

```
final.csv      songs.csv      rmv.py      Trial10.py      long_responses.py  
usage  
def openNewWindow():  
  
    newWindow = Toplevel(window)  
    window.withdraw()  
    newWindow.title("Sign-in")  
    newWindow.geometry("1470x956")  
    newWindow.option_add( pattern: "*Cursor", value: "arrow")  
  
    nf = Frame(newWindow, bg="grey", borderwidth=0, relief=SUNKEN)  
    nf.pack(side=LEFT, expand=TRUE, fill=BOTH)  
  
    image1 = Image.open("2.jpg")  
    resize_image1 = image1.resize((1470, 956))  
    img1 = ImageTk.PhotoImage(resize_image1)  
    label1 = Label(nf, image=img1)  
    label1.pack()  
  
    nf1 = Frame(nf, bg="#00031A", borderwidth=0)  
    nf1.place(in_=nf, anchor="c", relx=.42, rely=.5)  
  
    nf2 = Frame(nf, bg="#00031A")  
    nf2.place(in_=nf, anchor="w", relx=.46, rely=.5)  
  
    name_new = Label(nf1, text="Name", font="comicsansms 20 bold", bg="#00031A")  
    phone_new = Label(nf1, text="Phone", font="comicsansms 20 bold", bg="#00031A")  
    password_new = Label(nf1, text="Password", font="comicsansms 20 bold", bg="#00031A")  
  
    name_new.pack()  
    phone_new.pack()  
    password_new.pack()  
  
    namevalue_new = StringVar()
```



- **Data Cleaning: Ensuring Accuracy and Integrity in data**



## DATA CLEANSING

```
import pandas as pd
df = pd.read_csv('Cleaned_datasets/final.csv')

# usage
def replace_values_in_column(df, column, original_value, new_value):
    df[column] = df[column].replace(original_value, new_value)
    return df

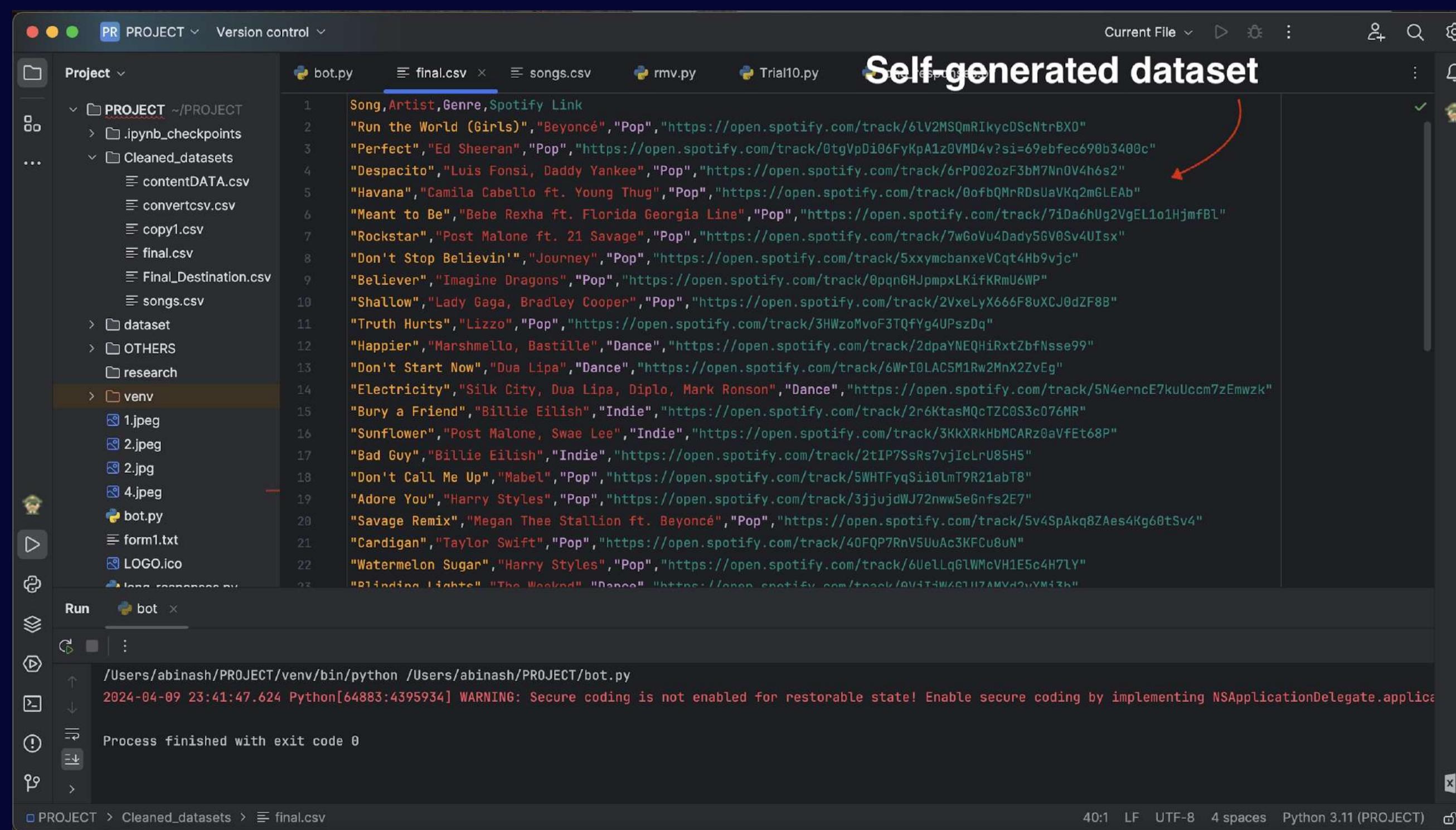
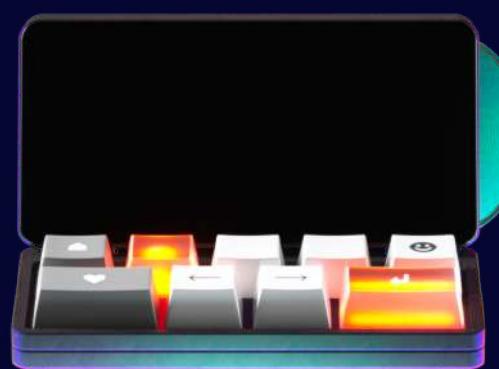
# Get user input for replacement
column_name = input("Enter the column name where you want to replace values: ")
original_value = input("Enter the original value you want to replace: ")
new_value = input("Enter the new value you want to replace with: ")
add_str = original_value + new_value

if column_name in df.columns:
    df = replace_values_in_column(df, column_name, original_value, add_str)
    print("Values replaced successfully.")
else:
    print(f"Column '{column_name}' does not exist in the DataFrame.")

print(df)
df.to_csv( path_or_buf: 'Cleaned_datasets/Final_Destination.csv', index=False)
```



# • Harnessing the Power of Self-Generated Dataset :



## Self-generated dataset

```
1 Song,Artist,Genre,Spotify Link
2 "Run the World (Girls)", "Beyoncé", "Pop", "https://open.spotify.com/track/6lV2MSqmRIkycDScNtrBX0"
3 "Perfect", "Ed Sheeran", "Pop", "https://open.spotify.com/track/0tgVpDi06FyKpA1z0VMD4v?si=69ebfec690b3400c"
4 "Despacito", "Luis Fonsi, Daddy Yankee", "Pop", "https://open.spotify.com/track/6rP002ozF3bM7Nn0V4h6s2"
5 "Havana", "Camila Cabello ft. Young Thug", "Pop", "https://open.spotify.com/track/0afbQMrRDsUaVKq2mGLEAb"
6 "Meant to Be", "Bebe Rexha ft. Florida Georgia Line", "Pop", "https://open.spotify.com/track/7iDa6hUg2VgEL1o1HjmfbL"
7 "Rockstar", "Post Malone ft. 21 Savage", "Pop", "https://open.spotify.com/track/7wGoVu4Dady5GV0Sv4UIsx"
8 "Don't Stop Believin'", "Journey", "Pop", "https://open.spotify.com/track/5xxymcbanxeVCqt4Hb9vjc"
9 "Believer", "Imagine Dragons", "Pop", "https://open.spotify.com/track/0pqn6HJpmpxLKifKRmU6WP"
10 "Shallow", "Lady Gaga, Bradley Cooper", "Pop", "https://open.spotify.com/track/2VxeLyX666F8uXCJ0dZF8B"
11 "Truth Hurts", "Lizzo", "Pop", "https://open.spotify.com/track/3HWzoMvoF3TQfYg4UPszDq"
12 "Happier", "Marshmello, Bastille", "Dance", "https://open.spotify.com/track/2dpaYNEQHiRxtZbfNsse99"
13 "Don't Start Now", "Dua Lipa", "Dance", "https://open.spotify.com/track/6WrIOLAC5M1Rw2MnXZvEg"
14 "Electricity", "Silk City, Dua Lipa, Diplo, Mark Ronson", "Dance", "https://open.spotify.com/track/5N4erncE7kuUccm7zEmwzk"
15 "Bury a Friend", "Billie Eilish", "Indie", "https://open.spotify.com/track/2r6KtasMQcTZC0S3c076MR"
16 "Sunflower", "Post Malone, Swae Lee", "Indie", "https://open.spotify.com/track/3KkXRkBMCARz0aVfEt68P"
17 "Bad Guy", "Billie Eilish", "Indie", "https://open.spotify.com/track/2tIP7SsRs7vjIcLnU85H5"
18 "Don't Call Me Up", "Mabel", "Pop", "https://open.spotify.com/track/5WHTFyqSii0lmT9R21abT8"
19 "Adore You", "Harry Styles", "Pop", "https://open.spotify.com/track/3jjujdWJ72nww5eGnfs2E7"
20 "Savage Remix", "Megan Thee Stallion ft. Beyoncé", "Pop", "https://open.spotify.com/track/5v4SpAkq8ZAes4Kg60tSv4"
21 "Cardigan", "Taylor Swift", "Pop", "https://open.spotify.com/track/40FQP7RnV5UuAc3KFCu8uN"
22 "Watermelon Sugar", "Harry Styles", "Pop", "https://open.spotify.com/track/6UelLqGLWMcVH1E5c4H7LY"
23 "Blinding Lights", "The Weeknd", "Dance", "https://open.spotify.com/track/0V4T4MxG717AMVd2uYMa3h"
```

Project

- bot.py
- final.csv
- songs.csv
- rmv.py
- Trial10.py

Run

- bot

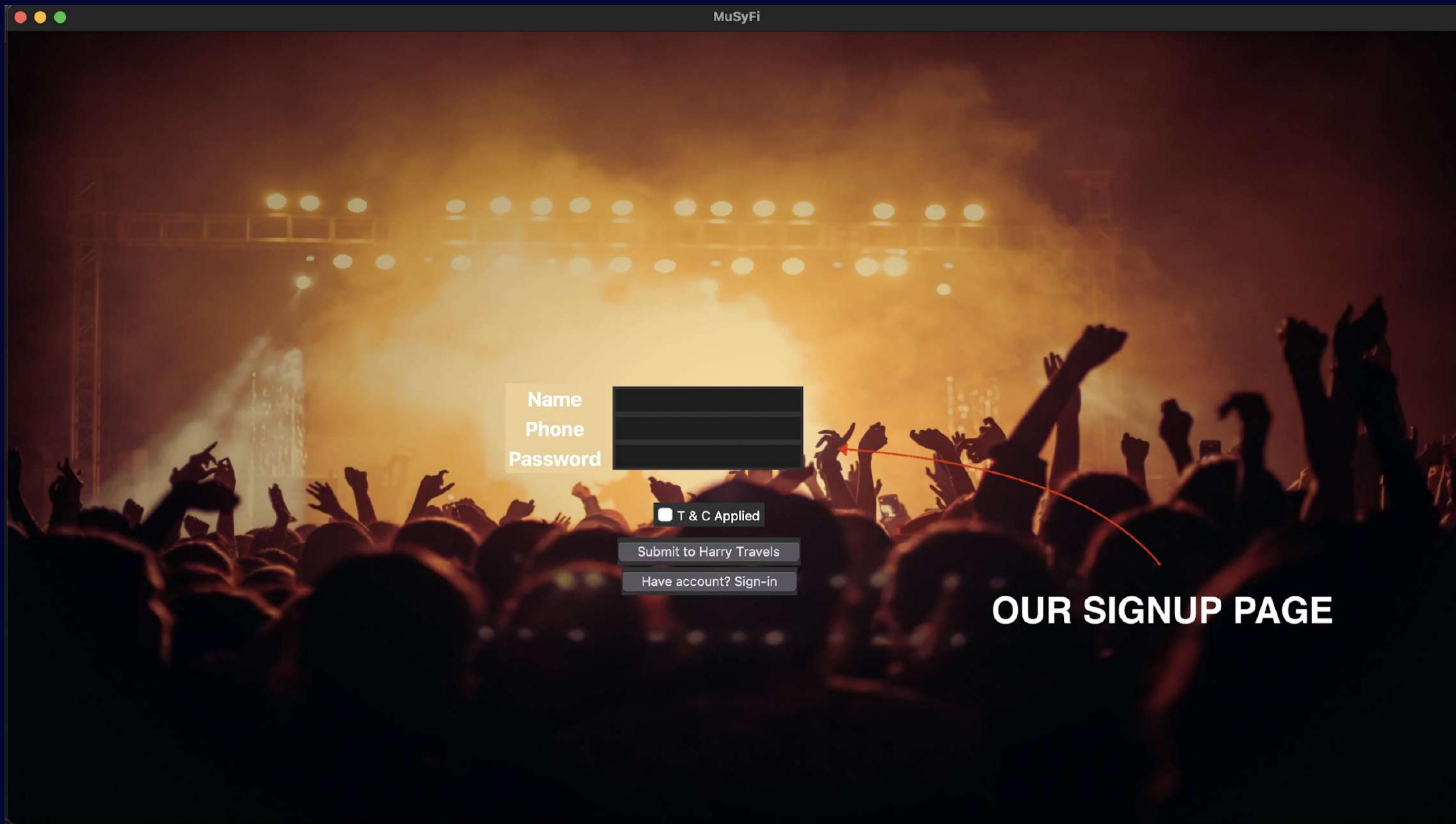
Output:

```
/Users/abinash/PROJECT/venv/bin/python /Users/abinash/PROJECT/bot.py
2024-04-09 23:41:47.624 Python[64883:4395934] WARNING: Secure coding is not enabled for restorable state! Enable secure coding by implementing NSApplicationDelegate.applicationDidFinishLaunching: and NSApplicationDelegate.applicationWillTerminate: methods.
```

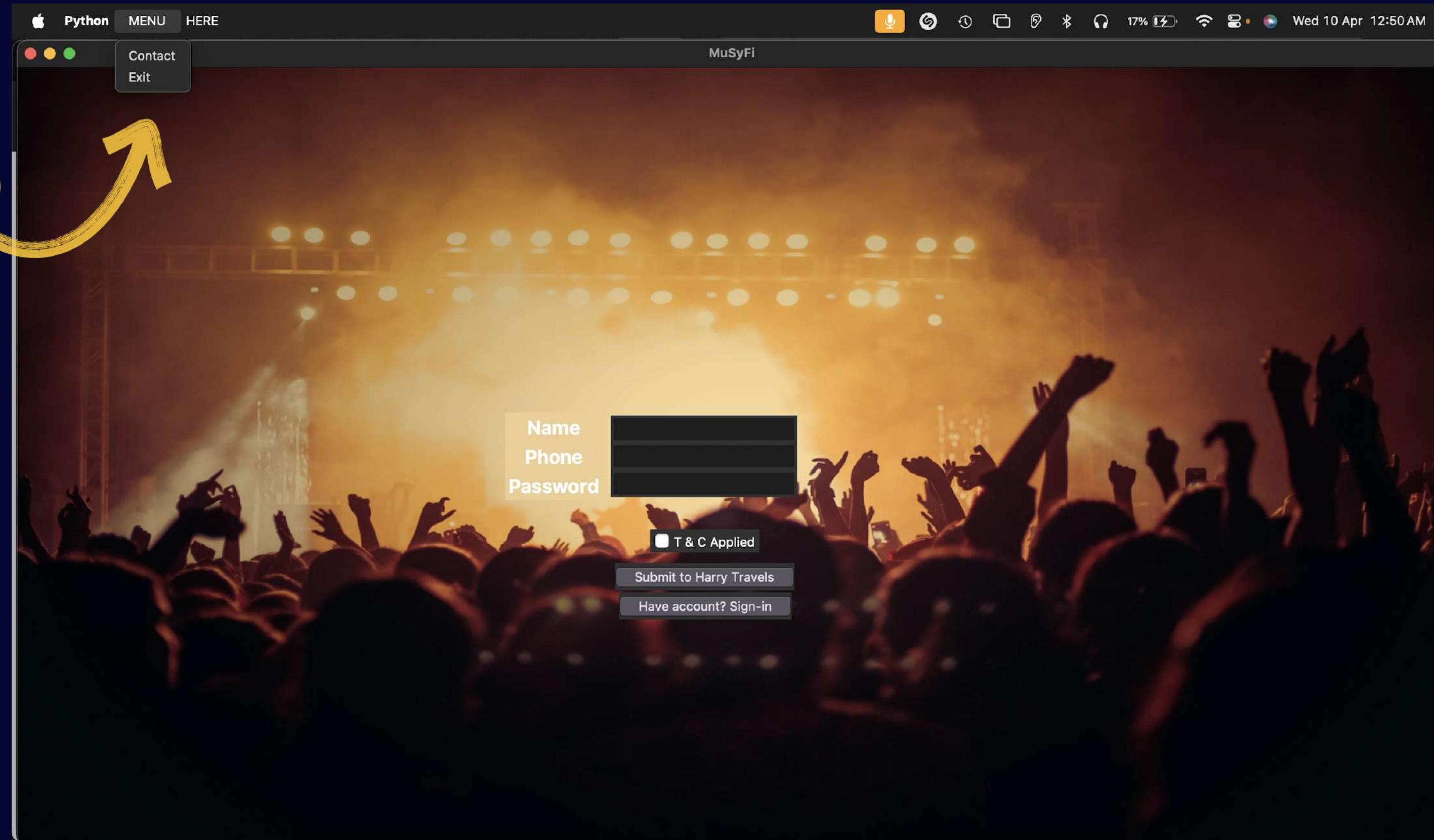
Process finished with exit code 0

40:1 LF UTF-8 4 spaces Python 3.11 (PROJECT)

- After we run the program ,we are directed into our sign-up page :

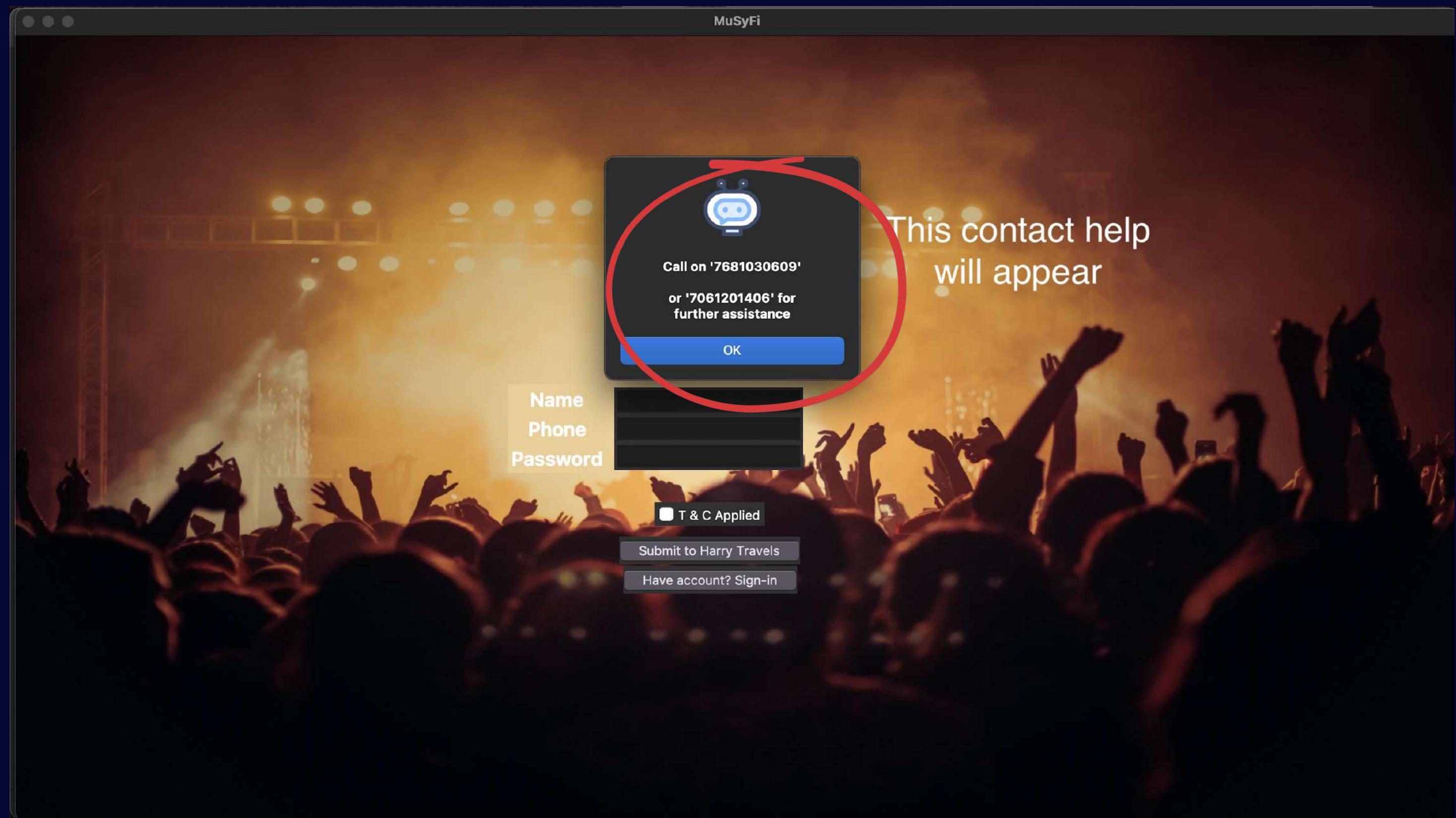


- **From here, you can contact us for help & support regarding the issues of the website, if you encounter any!**

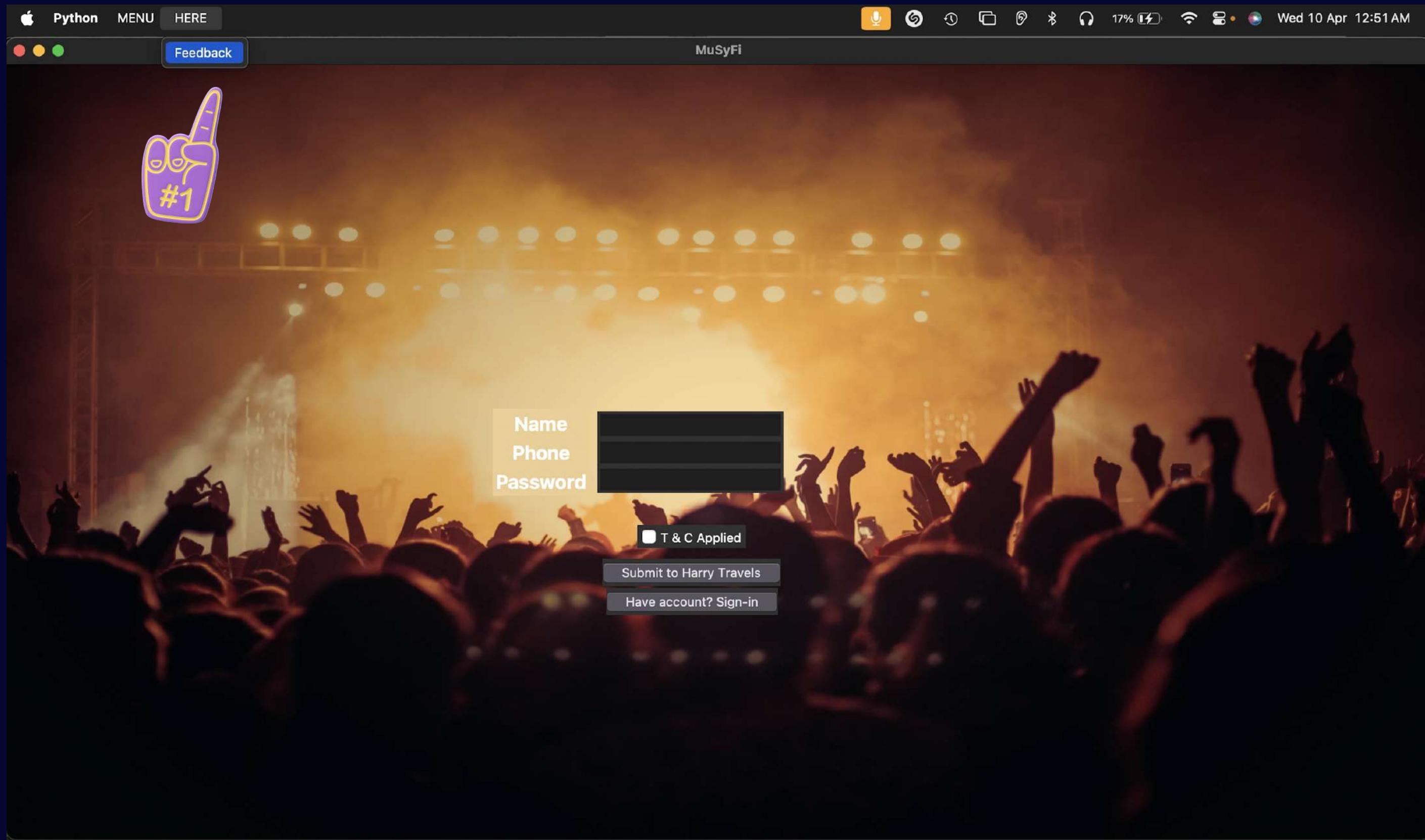




- These are the contact details:

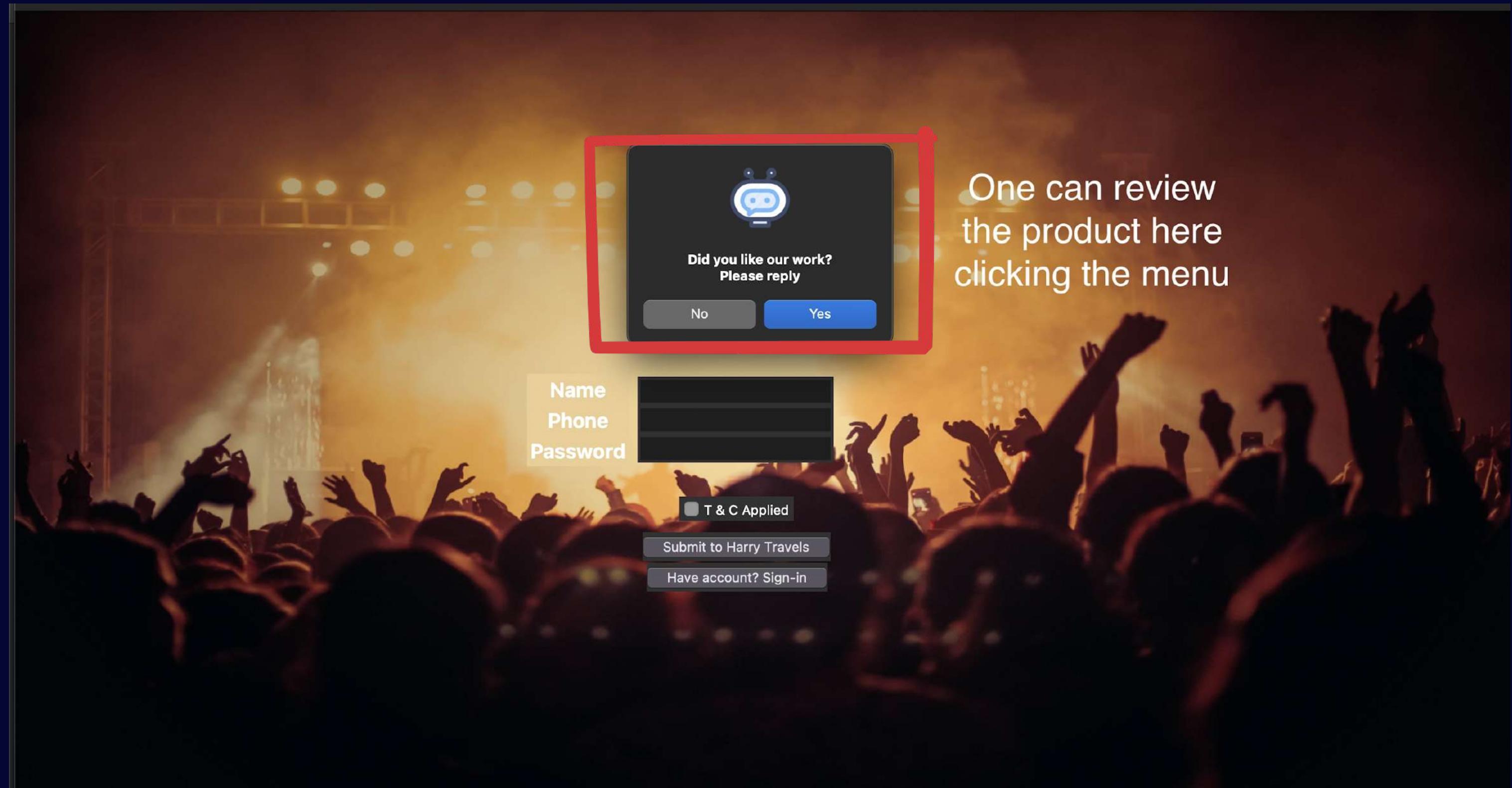


- Please give us your valuable feedback !



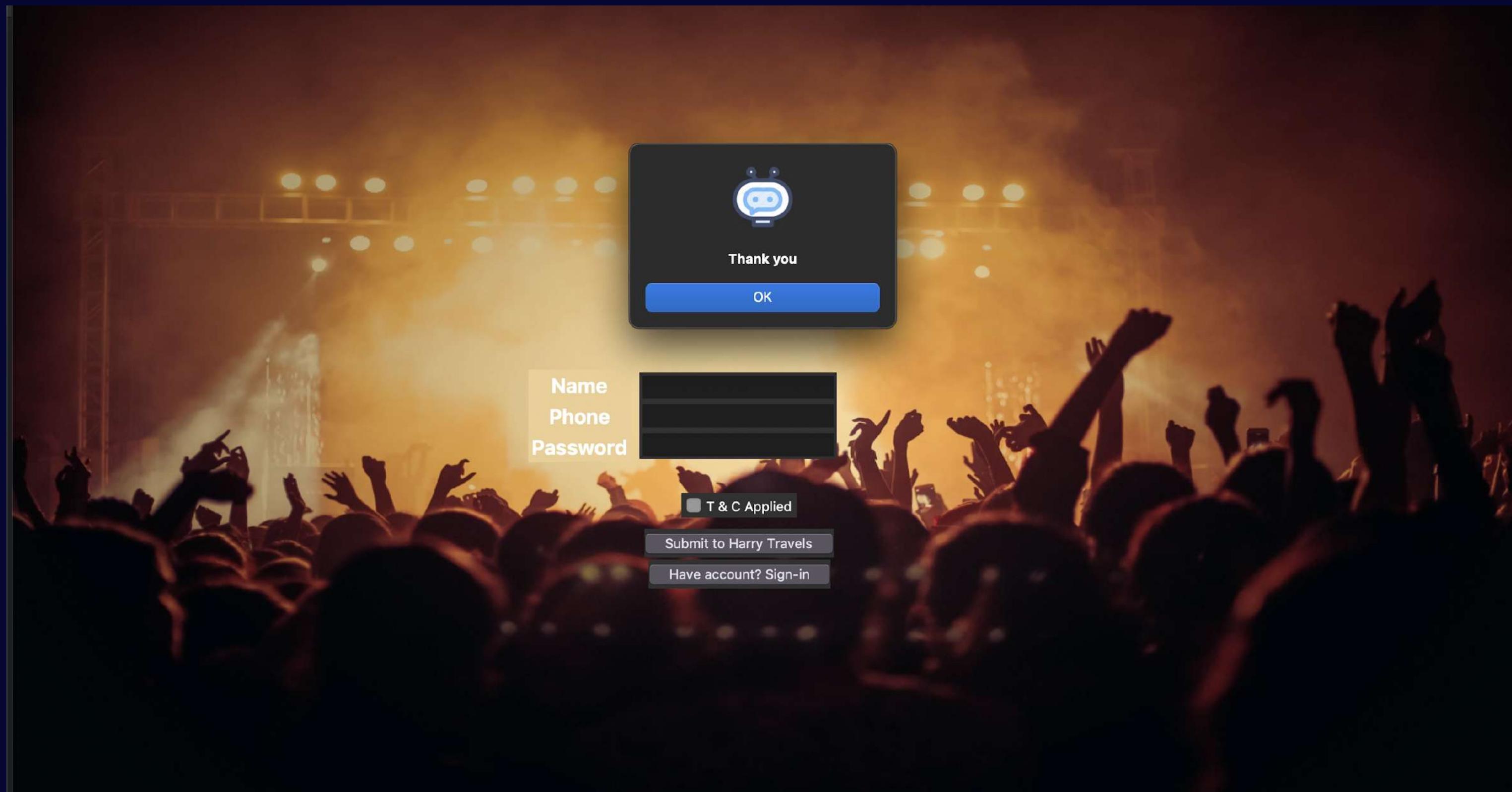
**NEW!**

- Please review the product that we made :

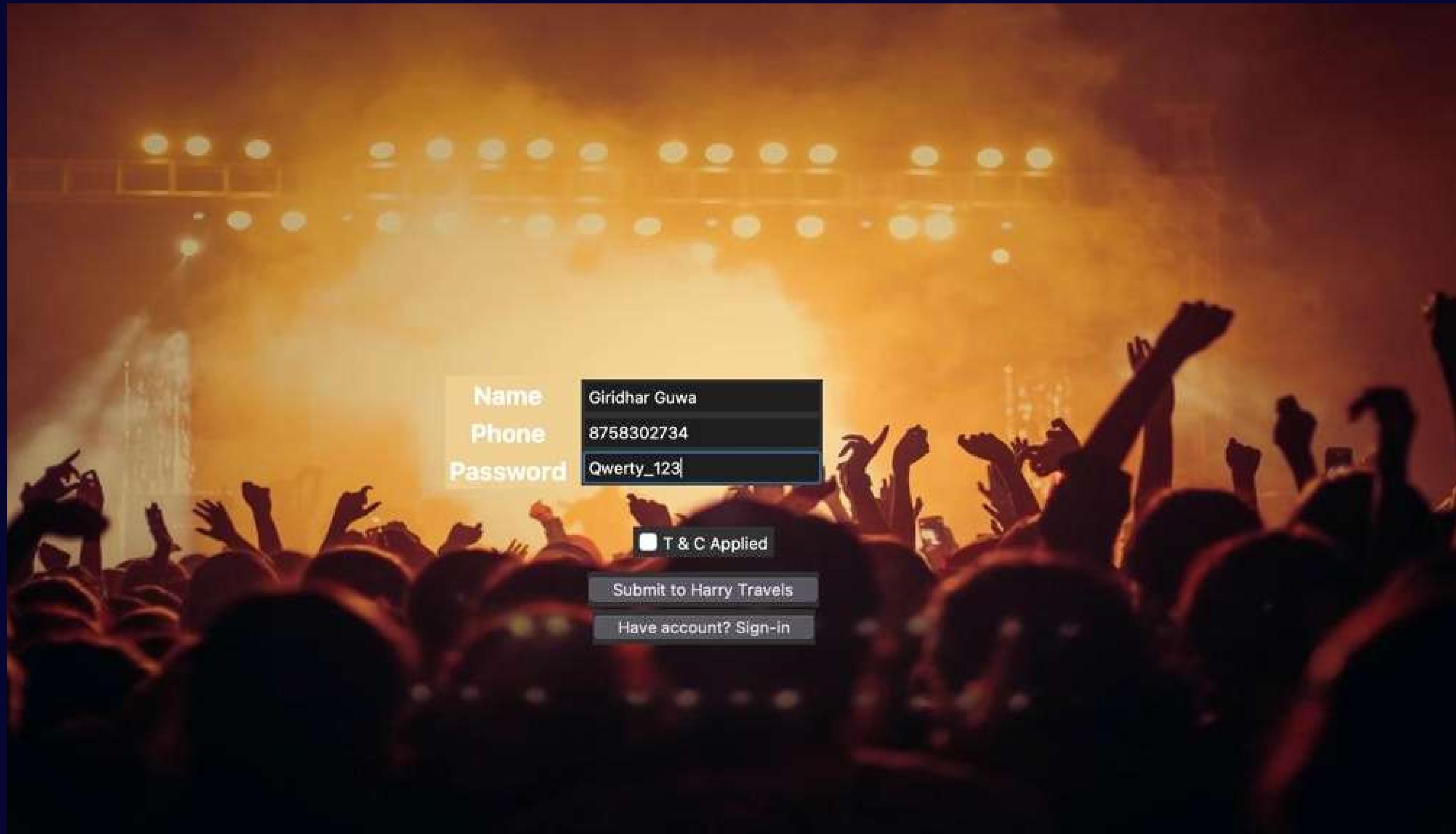
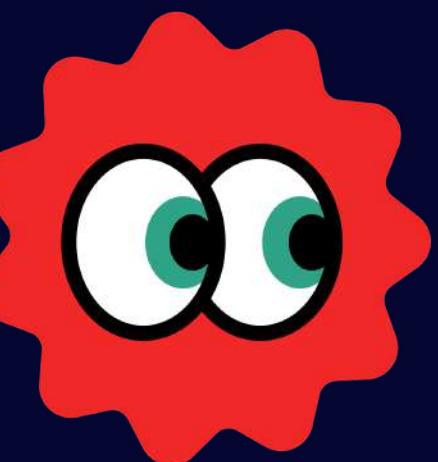


One can review  
the product here  
clicking the menu

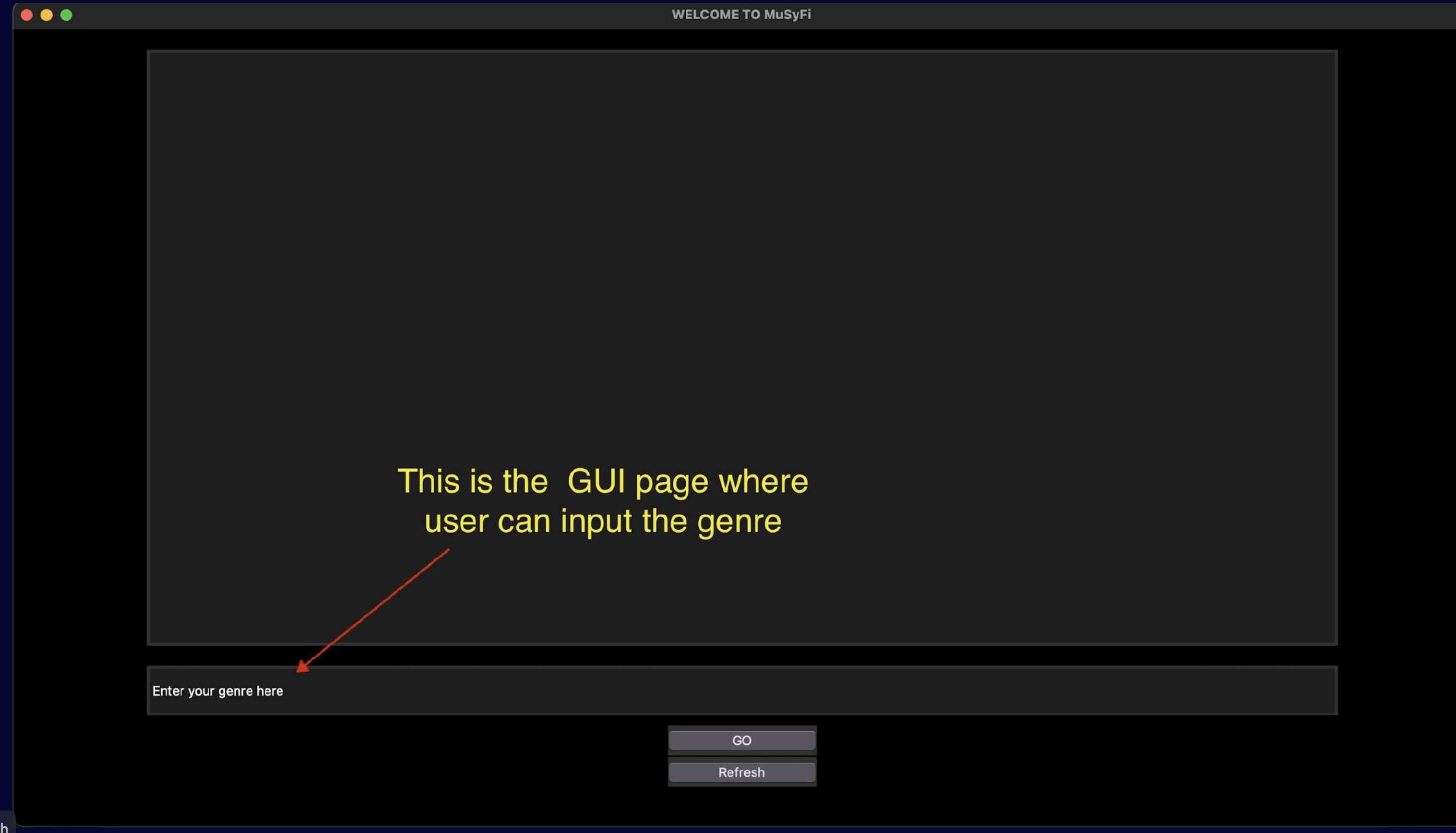
- **We received your feedback!!**



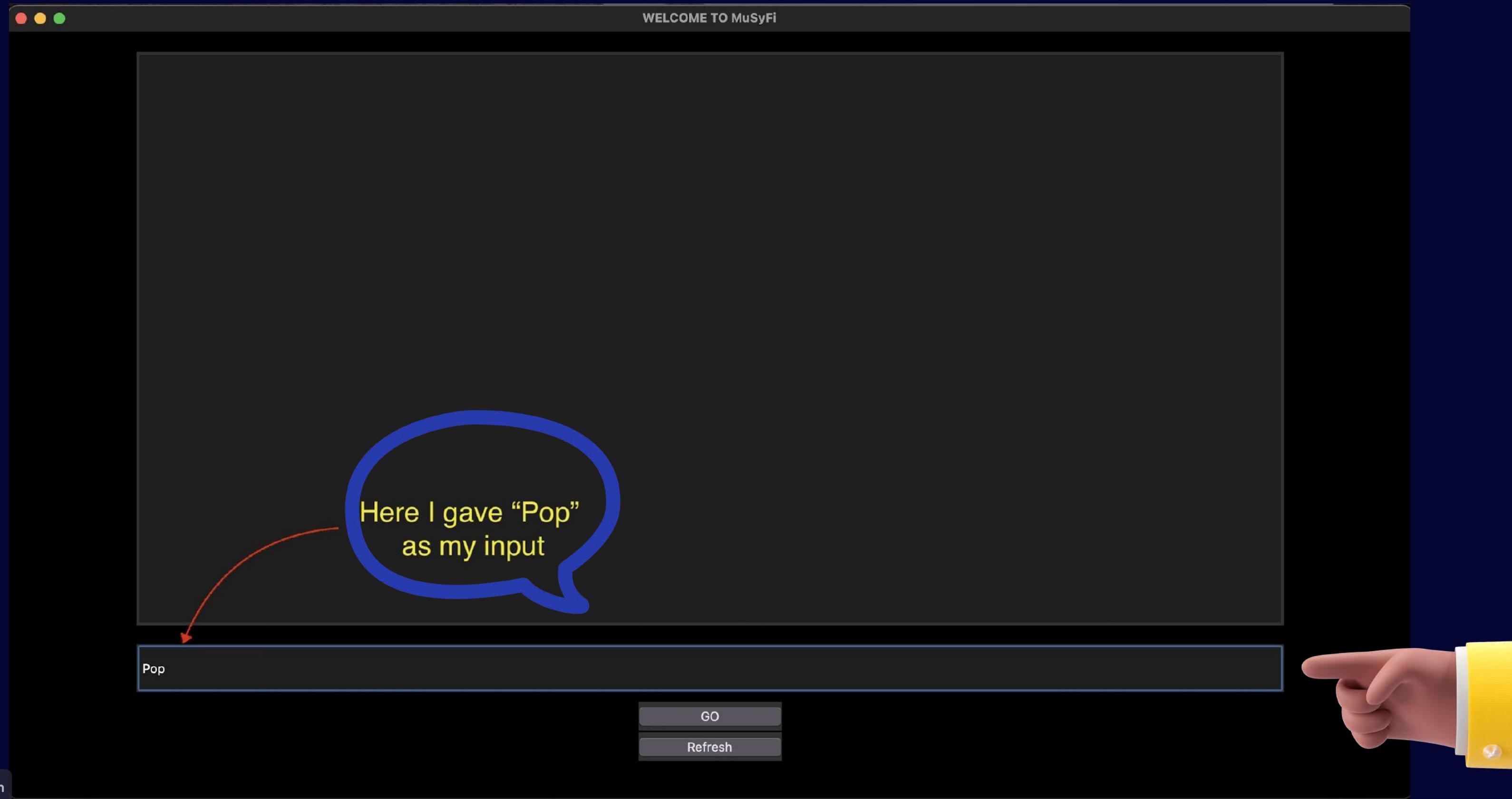
- Write your details here and enter into the main page:



- This page will be launched after you submit your details as shown in the previous slides.



- Proceed to write your favourite genre as shown in the picture below. Here, we have written 'pop' as an example.



- As you can see below, after clicking go, all of the songs that come under the genre 'pop' are recommended.

WELCOME TO MuSyFi

You: **Pop**

Bot:

- 1. Run the World (Girls)
- 2. Perfect
- 3. Despacito
- 4. Havana
- 5. Meant to Be
- 6. Rockstar
- 7. Don't Stop Believin'
- 8. Believer
- 9. Shallow
- 10. Truth Hurts
- 11. Don't Call Me Up
- 12. Adore You
- 13. Savage Remix
- 14. Cardigan
- 15. Watermelon Sugar

Songs recommended from genre selected

After entering “GO” we can see the output window

Try Pitch

GO

Refresh



- As we can see, after we click on our desired song, we will be redirected to a webpage (i.e Spotify) where you can actually listen the song.

WELCOME TO MuSyFi

- 4. Havana
- 5. Meant to Be
- 6. Rockstar
- 7. Don't Stop Believin'
- 8. Believer
- 9. Shallow
- 10. Truth Hurts
- 11. Don't Call Me Up
- 12. Adore You
- 13. Savage Remix
- 14. Cardigan
- 15. Watermelon Sugar
- 16. Rain on Me
- 17. Positions
- 18. Drivers License
- 19. Willow

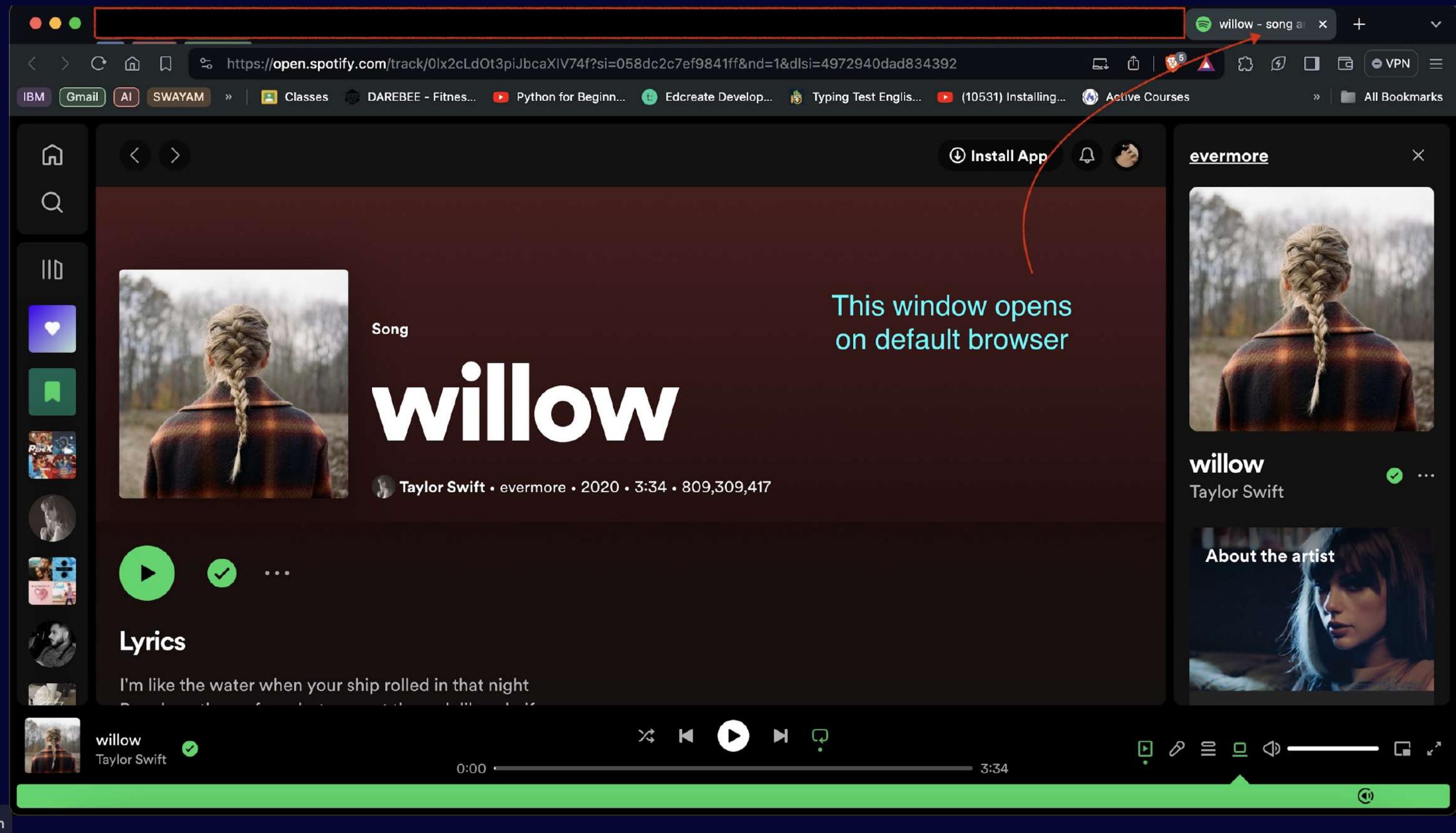
For example when we click on “19. Willow”,  
We will be redirected to the song link page

Try Pitch

GO  
Refresh



- The webpage opens on your default browser as you can see below.





# Future Scope:

- We can add a voice commanding system which can record the incoming command and reciprocate respectively.
- Further more, this song recommendation system can be a music player for the recommended songs for personal use .
- Lastly as a major use, this can be integrated with lambda service of AWS for browser purpose i.e. online music recommendation system. This way the dataset isn't of much need, there is a sea of data on internet and data can be used directly in forms of ".csv" clumps.

# Closing Thoughts: A Note of Gratitude



- And there you go, enjoy the songs from your favorite genres. Go ahead and try some genres like indie, dance, etc.
- Don't forget to give feedback as it really means a lot to us.
- We hope you had a good time trying out our little project.
- It has been made from scratch with a lot of hardwork and dedication, especially from our team leader, Abinash!
- Also, a huge thank you to our project-in-charge, Prof. Abhishek Raj. He has been nothing but a great pillar of support and strength, without his feedback and encouragement, we would have been nowhere.

# Thank You!



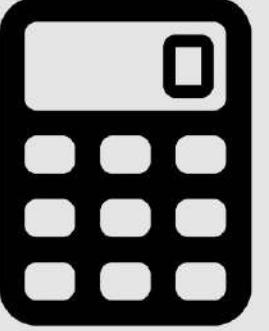
# References :

**Code with Harry**

**Python GUI**

**Course For Beginners #0**

**Teaser + Course Details  
And Contents!**



[www.CodeWithHarry.com](http://www.CodeWithHarry.com)

**Edureka (ML)**



**TKINTER PYTHON TUTORIAL**





# Want to make a presentation like this one?

Start with a fully customizable template, create a beautiful deck in minutes, then easily share it with anyone.

[Create a presentation \(It's free\)](#)