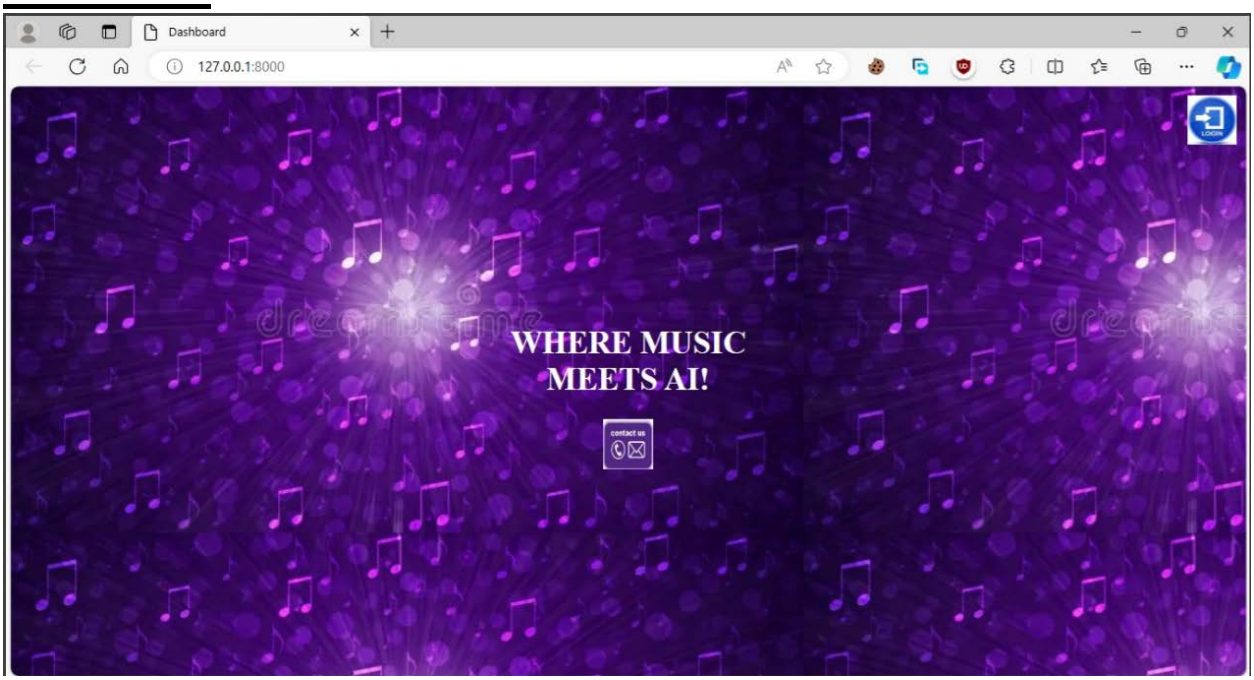
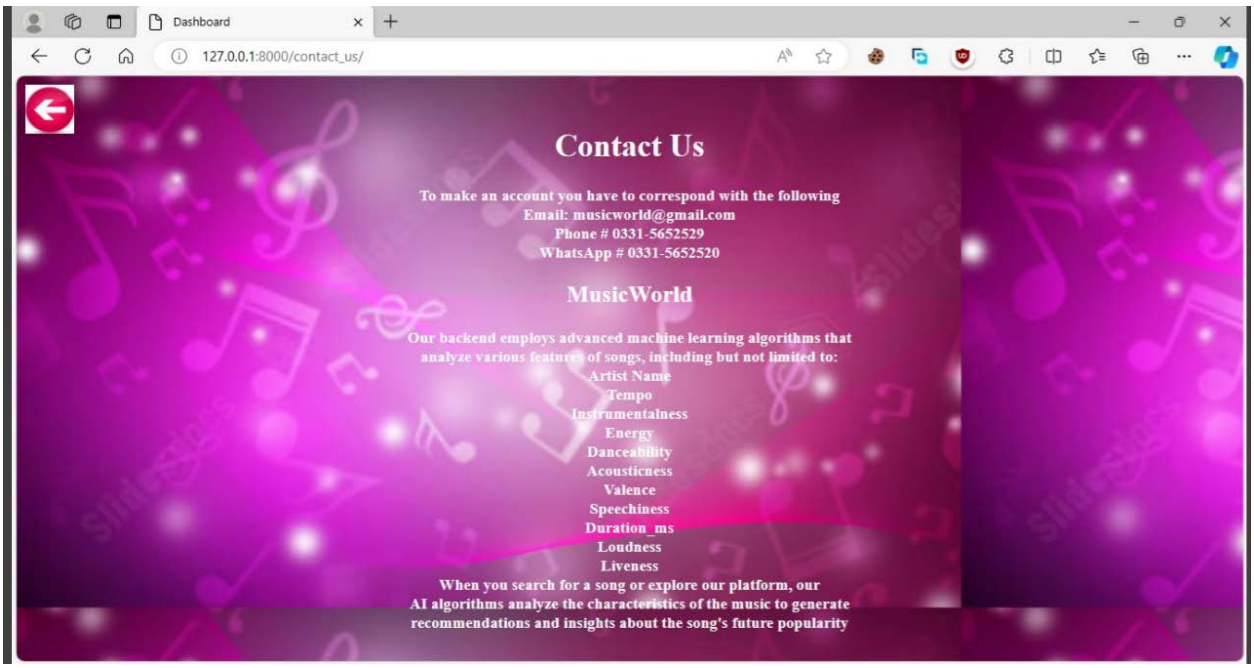
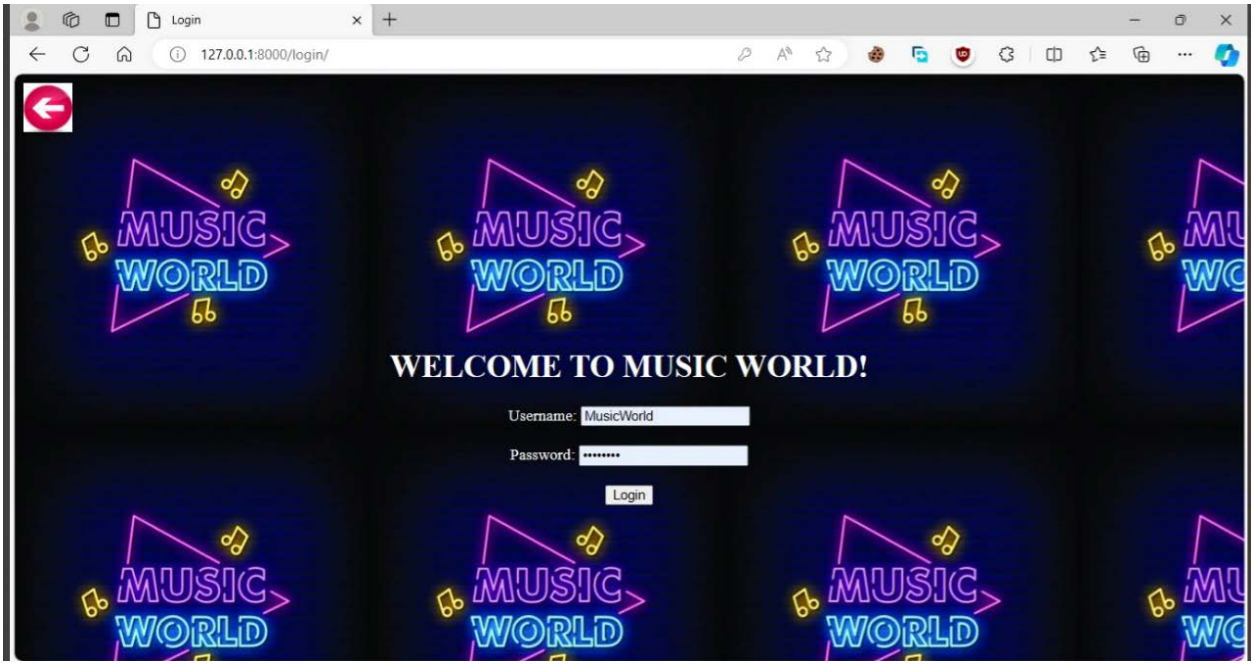
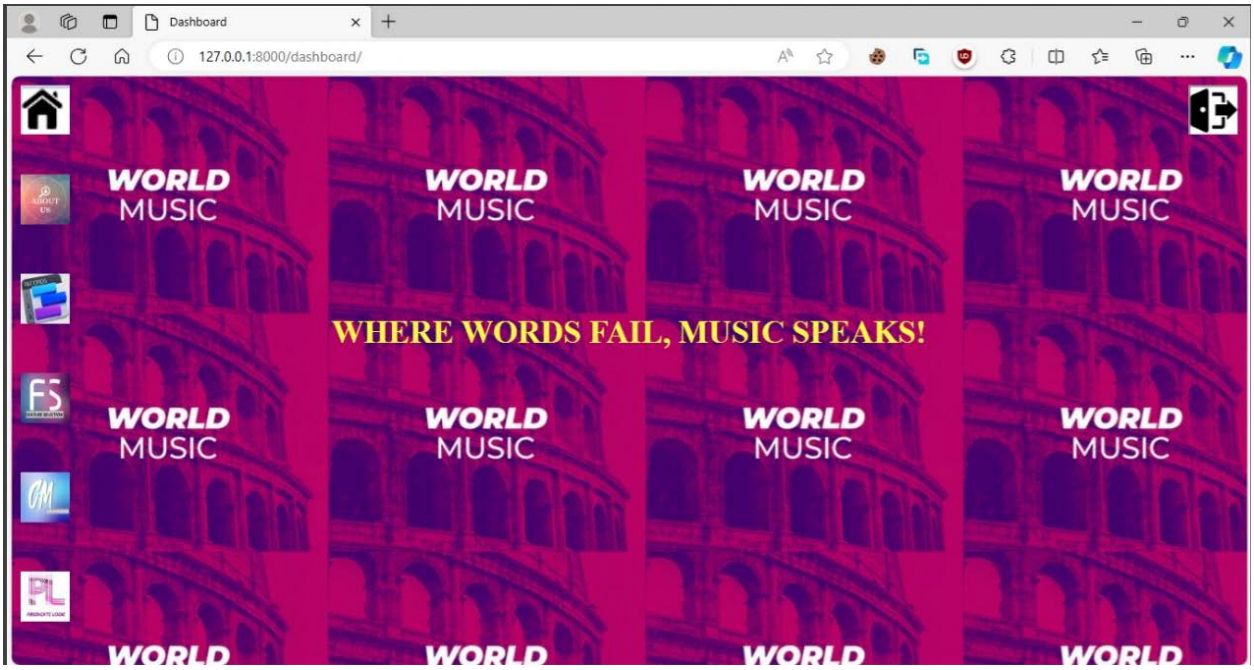
```
        energy = float(request.POST.get('energy'))
        instrumentalness = float(request.POST.get('instrumentalness'))
        valence = float(request.POST.get('valence'))
        speechiness = float(request.POST.get('speechiness'))
        duration_ms = float(request.POST.get('duration_ms'))
        loudness = float(request.POST.get('loudness'))
        liveness = float(request.POST.get('liveness'))
        is_popular = predict_popularity(acousticness, danceability, energy, instrumentalness,
valence, speechiness, duration_ms, loudness, liveness)
        return render(request, 'MusicWorld/result.html', {'is_popular': is_popular})
    return render(request, 'MusicWorld/predict_song.html')
def result(request):
        return render(request, 'MusicWorld/result.html')
```

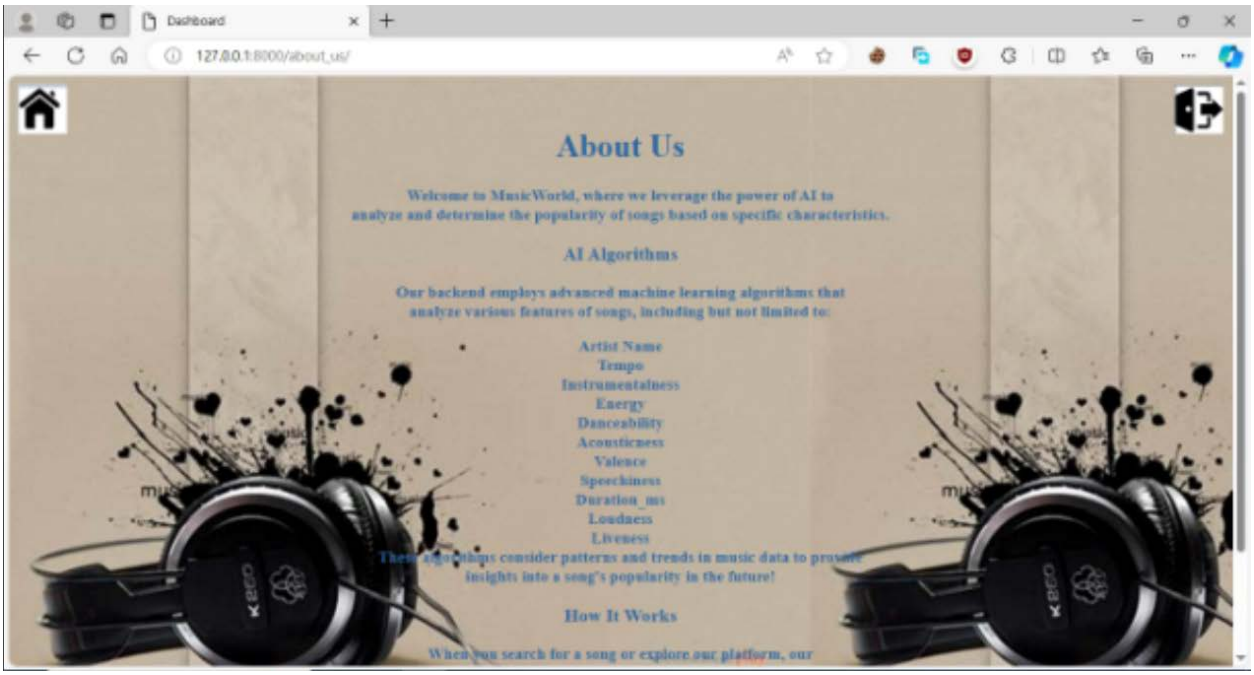
OUTPUT:

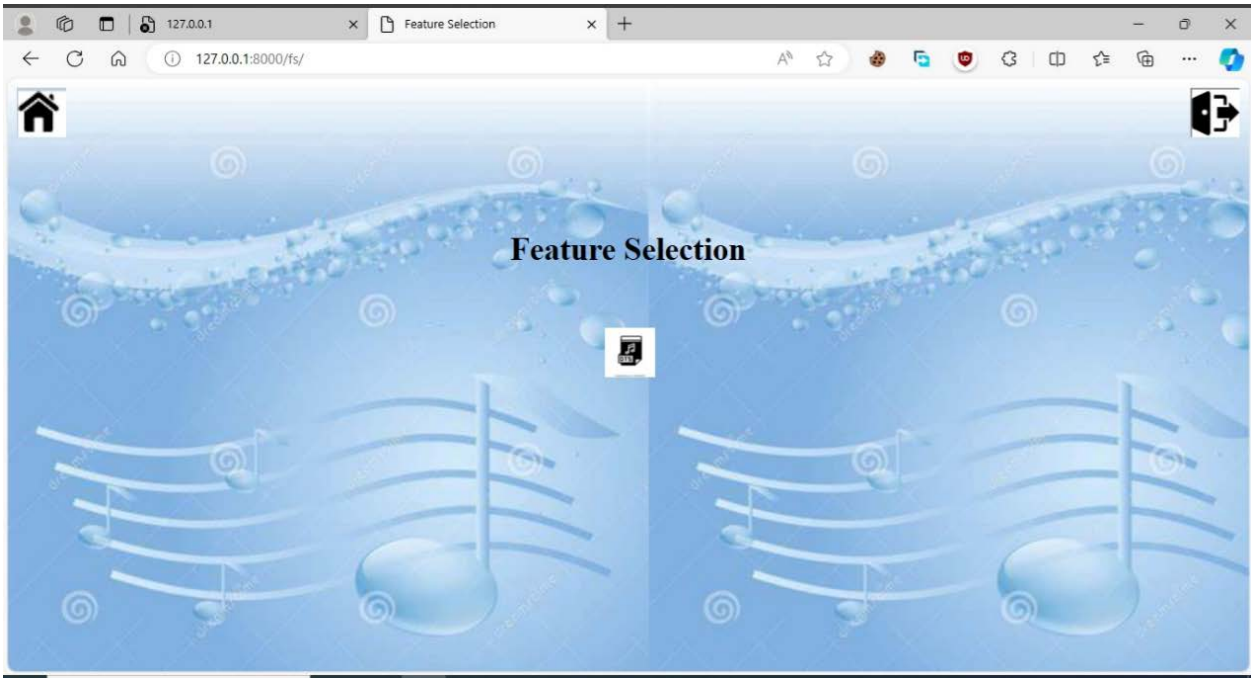


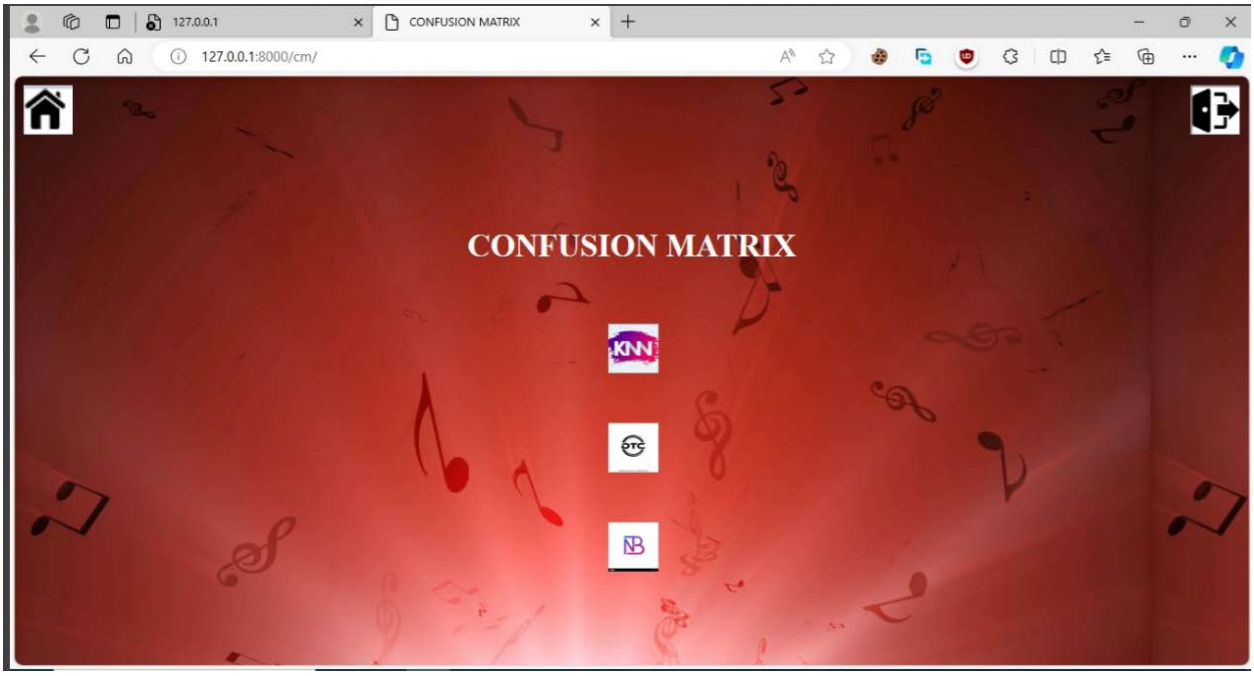

Dashboard
127.0.0.1:8000/contact_us/
Contact Us
To make an account you have to correspond with the following
Email: musicworld@gmail.com
Phone # 0331-5652529
WhatsApp # 0331-5652520
MusicWorld
Our backend employs advanced machine learning algorithms that analyze various features of songs, including but not limited to:
Artist Name
Tempo
Instrumentalness
Energy
Danceability
Acousticness
Valence
Speechiness
Duration_ms
Loudness
Liveness
When you search for a song or explore our platform, our AI algorithms analyze the characteristics of the music to generate recommendations and insights about the song's future popularity

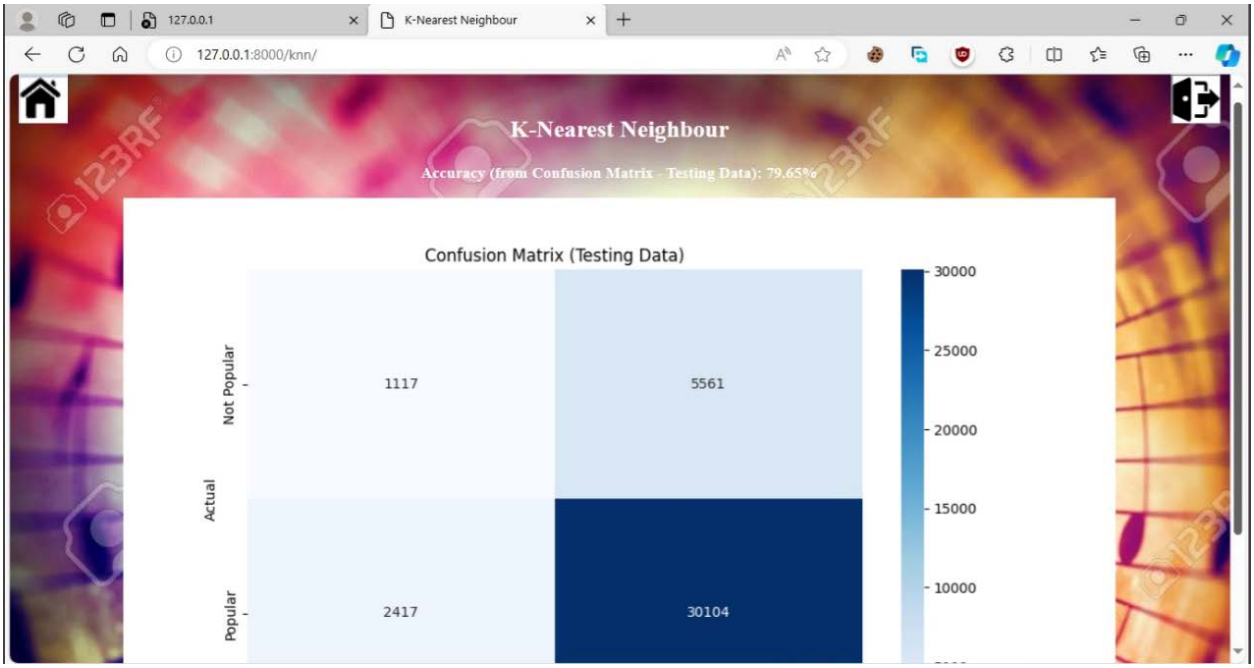

Login
127.0.0.1:8000/login/
MUSIC WORLD
WELCOME TO MUSIC WORLD!
Username: MusicWorld
Password: ••••••••
Login

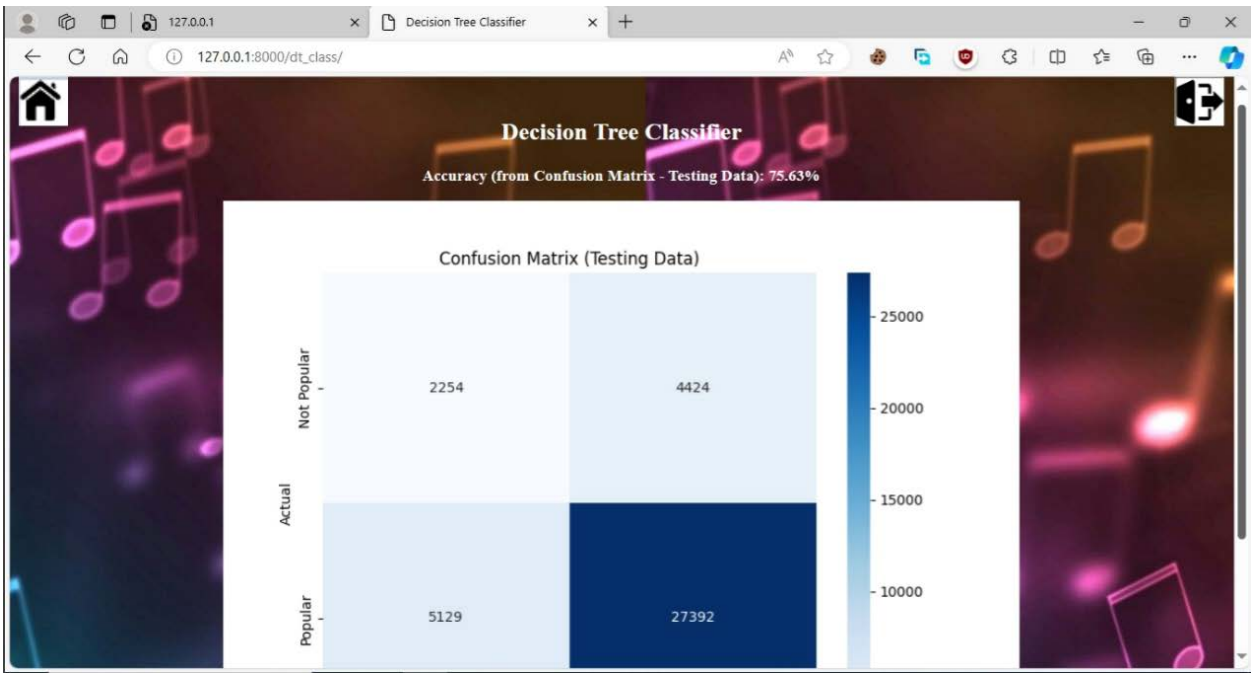

Dashboard
127.0.0.1:8000/dashboard/
WORLD MUSIC
WHERE WORDS FAIL, MUSIC SPEAKS!

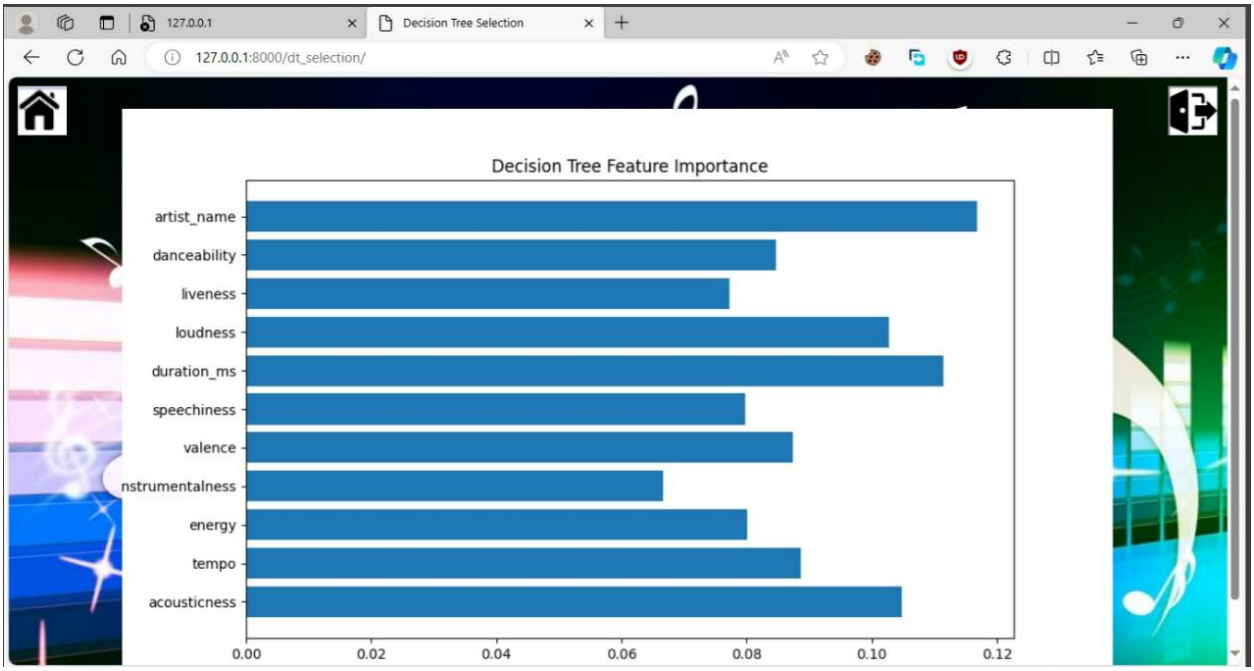

Dashboard
127.0.0.1:8000/about_us/
About Us
Welcome to MusicWorld, where we leverage the power of AI to analyze and determine the popularity of songs based on specific characteristics.
AI Algorithms
Our backend employs advanced machine learning algorithms that analyze various features of songs, including but not limited to:
Artist Name
Tempo
Instrumentalness
Energy
Danceability
Acousticness
Valence
Speechiness
Duration_ms
Loudness
Liveness
These algorithms consider patterns and trends in music data to provide insights into a song's popularity in the future!
How It Works
When you search for a song or explore our platform, our

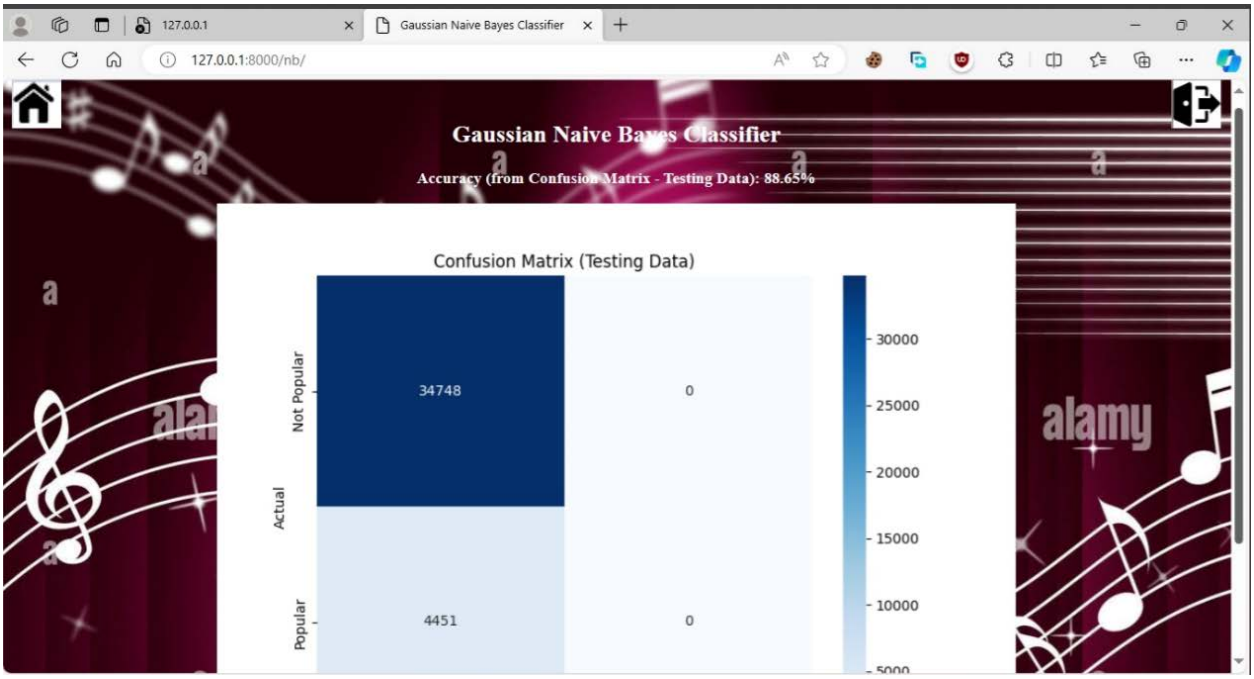

127.0.0.1
Feature Selection
127.0.0.1:8000/fs/
Feature Selection

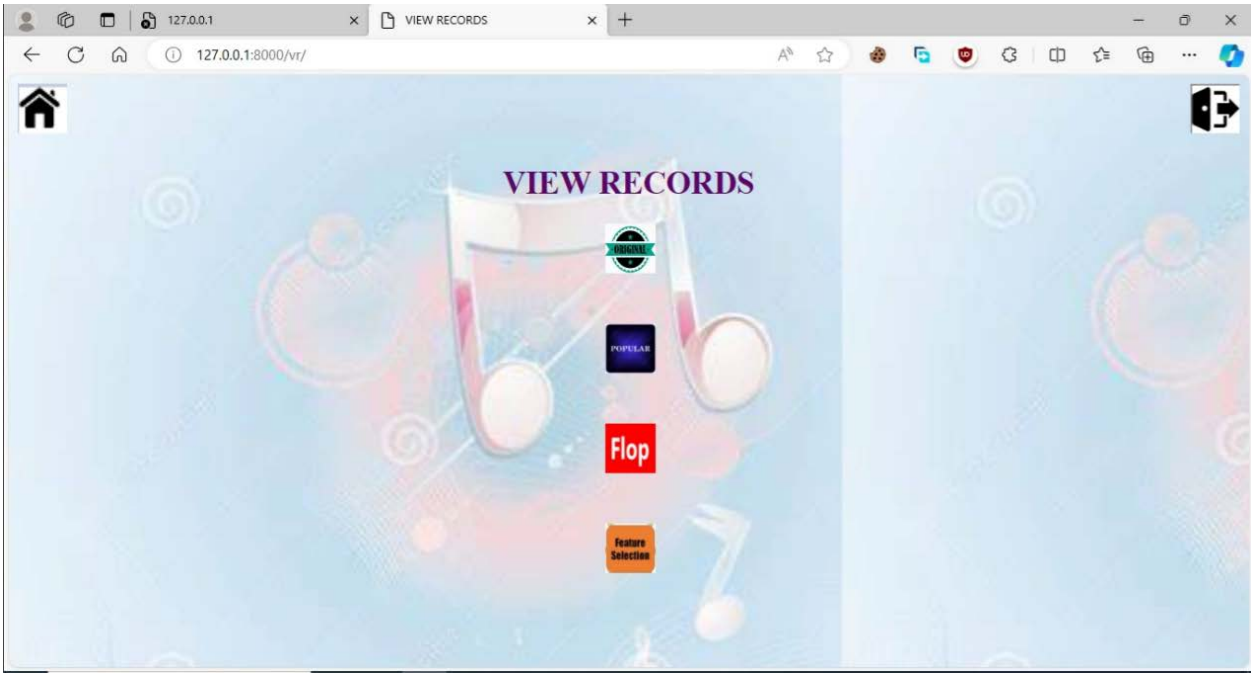

127.0.0.1
CONFUSION MATRIX
127.0.0.1:8000/cm/
CONFUSION MATRIX
KNN
DTC
NB

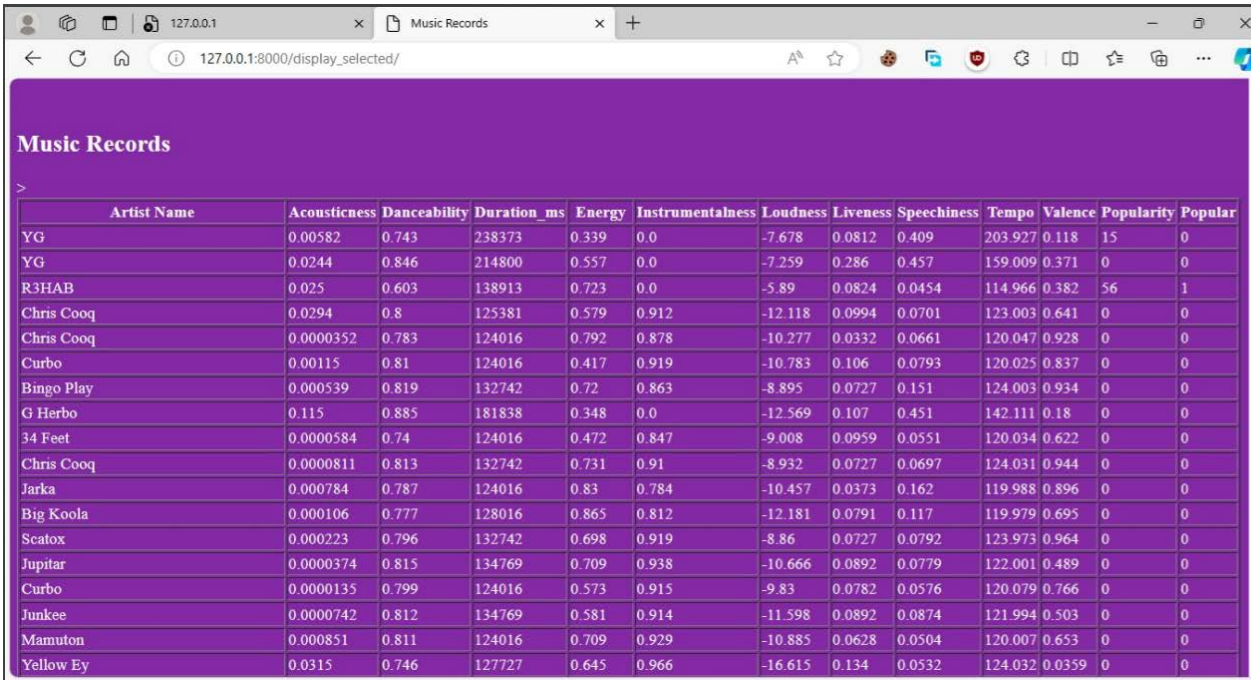

127.0.0.1
K-Nearest Neighbour
127.0.0.1:8000/knn/
K-Nearest Neighbour
Accuracy (from Confusion Matrix - Testing Data): 79.65%
Confusion Matrix (Testing Data)
Actual
Not Popular
Popular
1117
5561
2417
30104
30000
25000
20000
15000
10000


127.0.0.1
Decision Tree Classifier
127.0.0.1:8000/dt_class/
Decision Tree Classifier
Accuracy (from Confusion Matrix - Testing Data): 75.63%
Confusion Matrix (Testing Data)
Actual
Not Popular
Popular
2254
4424
5129
27392
25000
20000
15000
10000


127.0.0.1
Decision Tree Selection
127.0.0.1:8000/dt_selection/
Decision Tree Feature Importance
artist_name
danceability
liveness
loudness
duration_ms
speechiness
valence
nstrumentalness
energy
tempo
acousticness
0.00
0.02
0.04
0.06
0.08
0.10
0.12


127.0.0.1
Gaussian Naive Bayes Classifier
127.0.0.1:8000/nb/
Gaussian Naive Bayes Classifier
Accuracy (from Confusion Matrix - Testing Data): 88.65%
Confusion Matrix (Testing Data)
Actual
Not Popular
Popular
34748
0
4451
0
30000
25000
20000
15000
10000
5000





Music Records

>

Artist Name	Acousticness	Danceability	Duration_ms	Energy	Instrumentalness	Loudness	Liveness	Speechiness	Tempo	Valence	Popularity	Popular
YG	0.00582	0.743	238373	0.339	0.0	-7.678	0.0812	0.409	203.927	0.118	15	0
YG	0.0244	0.846	214800	0.557	0.0	-7.259	0.286	0.457	159.009	0.371	0	0
R3HAB	0.025	0.603	138913	0.723	0.0	-5.89	0.0824	0.0454	114.966	0.382	56	1
Chris Cooq	0.0294	0.8	125381	0.579	0.912	-12.118	0.0994	0.0701	123.003	0.641	0	0
Chris Cooq	0.0000352	0.783	124016	0.792	0.878	-10.277	0.0332	0.0661	120.047	0.928	0	0
Curbo	0.00115	0.81	124016	0.417	0.919	-10.783	0.106	0.0793	120.025	0.837	0	0
Bingo Play	0.000539	0.819	132742	0.72	0.863	-8.895	0.0727	0.151	124.003	0.934	0	0
G Herbo	0.115	0.885	181838	0.348	0.0	-12.569	0.107	0.451	142.111	0.18	0	0
34 Feet	0.0000584	0.74	124016	0.472	0.847	-9.008	0.0959	0.0551	120.034	0.622	0	0
Chris Cooq	0.0000811	0.813	132742	0.731	0.91	-8.932	0.0727	0.0697	124.031	0.944	0	0
Jarka	0.000784	0.787	124016	0.83	0.784	-10.457	0.0373	0.162	119.988	0.896	0	0
Big Koola	0.000106	0.777	128016	0.865	0.812	-12.181	0.0791	0.117	119.979	0.695	0	0
Scatox	0.000223	0.796	132742	0.698	0.919	-8.86	0.0727	0.0792	123.973	0.964	0	0
Jupitar	0.0000374	0.815	134769	0.709	0.938	-10.666	0.0892	0.0779	122.001	0.489	0	0
Curbo	0.0000135	0.799	124016	0.573	0.915	-9.83	0.0782	0.0576	120.079	0.766	0	0
Junkee	0.0000742	0.812	134769	0.581	0.914	-11.598	0.0892	0.0874	121.994	0.503	0	0
Mamuton	0.000851	0.811	124016	0.709	0.929	-10.885	0.0628	0.0504	120.007	0.653	0	0
Yellow Ey	0.0315	0.746	127727	0.645	0.966	-16.615	0.134	0.0532	124.032	0.0359	0	0

127.0.0.1 | Music Records

127.0.0.1:8000/display_records/

Music Records

Artist Name	Track ID	Track Name	Acousticness	Danceability	Duration_ms	Energy	Instrumentalness	Loudness	Key	Liveness	Mode	Speechi
YG	2RM4jf1Xa9zPgMGRDiht8O	Big Bank feat. 2 Chainz, Big Sean, Nicki Minaj	0.00582	0.743	238373	0.339	0.0	-7.678	1	0.0812	1	0.409
YG	1tHDG53xJNGsItRA3vfVgs	BAND DRUM (feat. A$AP Rocky)	0.0244	0.846	214800	0.557	0.0	-7.259	8	0.286	1	0.457
R3HAB	6Wosx2euFPMT14UXiWudMy	Radio Silence	0.025	0.603	138913	0.723	0.0	-5.89	9	0.0824	0	0.0454
Chris Cooq	3J2Jpw61sO7l6Hc7qdYV91	Lactose	0.0294	0.8	125381	0.579	0.912	-12.118	5	0.0994	0	0.0701
Chris Cooq	2jbYvQCyPgX3CdmAzeVeuS	Same - Original mix	0.0000352	0.783	124016	0.792	0.878	-10.277	7	0.0332	1	0.0661
Curbo	26Y1lX7ZOpw9Ql3gGAlqLK	Debauchery - Original mix	0.00115	0.81	124016	0.417	0.919	-10.783	9	0.106	0	0.0793
Bingo Play	5eIyK73BrxHLnly4F9PWqg	Grandma - Original mix	0.000539	0.819	132742	0.72	0.863	-8.895	4	0.0727	0	0.151
G Herbo	13Mf2ZBpfNkgWJowvM5hXh	Bon app??tit	0.115	0.885	181838	0.348	0.0	-12.569	9	0.107	1	0.451
34 Feet	7BQaRTHk44DkMhIVNcXy2D	Among - Original mix	0.0000584	0.74	124016	0.472	0.847	-9.008	8	0.0959	1	0.0551
Chris Cooq	049RxG2laEl9U1PGYeIqLV	Hazard - Original mix	0.0000811	0.813	132742	0.731	0.91	-8.932	11	0.0727	1	0.0697

127.0.0.1 | Popular Music Records

127.0.0.1:8000/popular/

Popular Music Records

Artist Name	Track ID	Track Name	Acousticness	Danceability	Duration_ms	Energy	Instrumentalness	Loudness	Key	Liveness	Mod
R3HAB	6Wosx2euFPMT14UXiWudMy	Radio Silence	0.025	0.603	138913	0.723	0.0	-5.89	9	0.0824	0
Snow Patrol	0aYzQjr1hq0qJwp45diy5M	Heal Me	0.122	0.552	241160	0.789	0.00000498	-5.449	9	0.0874	1
Lecrae	1FYd1szE0RHXOAM00V4MEx	Coming In Hot	0.0271	0.89	200168	0.454	0.00000358	-8.777	8	0.157	1
Curtis Walsh	0C5jmw61aKNP6ngy0FXm56	Full Recovery	0.786	0.524	176135	0.307	0.0	-9.753	9	0.111	1
Espinoza Paz	7bjAtBIgDlmTQAILEtww40	El Pr??ximo Viernes	0.696	0.783	251992	0.432	0.00000105	-5.551	0	0.0382	1
Gloria Trevi	47Y8o48cWHjMR0YyVccX8J	Que Me Duela	0.096	0.717	202320	0.814	0.000217	-5.744	11	0.0631	0
Miky Woodz	0gBAr8mSDKLXhZFW0dNyc7	About Me	0.233	0.819	252880	0.539	0.0	-4.901	1	0.181	1
The Interrupters	4C0ZP5m9z0pfefQHUhach5	Gave You Everything	0.000751	0.413	186120	0.987	0.00266	-3.096	2	0.515	1
TAEYEON	1HVjqP22I8rGY1gyEqrEuy	Circus	0.669	0.75	234027	0.473	0.0	-6.906	1	0.103	1
MYA	01GkSQ5gDn2BHOfgfdUepy	Loco por Ti	0.0568	0.705	194674	0.712	0.0	-5.409	11	0.0921	1
MEUTE	1MdbDBwEEecnILiyWChJFh	You & Me	0.652	0.661	306423	0.548	0.265	-4.053	10	0.0913	0
Z?? Neto & Cristiano	1fyhyOy6iS9E2NckAzjmTo	Status Que Eu N?□o Queria - Ao Vivo	0.59	0.58	153934	0.871	0.0	-4.052	4	0.564	1
Didirri	05veb69kd6kyLyPUohsrxp	I Can't Get Last Night Out Of My Head	0.359	0.571	195418	0.375	0.0	-12.281	0	0.0963	1
The Vamps	3hpyJoGe3N31LuIJFBT90u	Black And Blue	0.287	0.588	196973	0.711	0.0	-6.038	11	0.0806	1
The Vamps	50YYb5vjb7ZTkNpv0MVFf4	Tequila	0.141	0.529	185720	0.517	0.0	-7.557	10	0.34	1
Seven Lions	569BGSWQapYD8Niuy67Cal	After Dark - Edit	0.00316	0.558	229859	0.976	0.38	-3.906	1	0.166	0
		Fireworks - Recorded at									

127.0.0.1 | Not Popular Music Records

127.0.0.1:8000/not_popular/

Not Popular Music Records

Artist Name	Track ID	Track Name	Acousticness	Danceability	Duration_ms	Energy	Instrumentalness	Loudness	Key	Liveness	Mode	Speechi
YG	2RM4jf1Xa9zPgMGRDiht8O	Big Bank feat. 2 Chainz, Big Sean, Nicki Minaj	0.00582	0.743	238373	0.339	0.0	-7.678	1	0.0812	1	0.409
YG	1tHDG53xJNGsItRA3vfVgs	BAND DRUM (feat. A$AP Rocky)	0.0244	0.846	214800	0.557	0.0	-7.259	8	0.286	1	0.457
Chris Cooq	3J2Jpw61sO7l6Hc7qdYV91	Lactose	0.0294	0.8	125381	0.579	0.912	-12.118	5	0.0994	0	0.0701
Chris Cooq	2jbYvQCyPgX3CdmAzeVeuS	Same - Original mix	0.0000352	0.783	124016	0.792	0.878	-10.277	7	0.0332	1	0.0661
Curbo	26Y1lX7ZOpw9Ql3gGAlqLK	Debauchery - Original mix	0.00115	0.81	124016	0.417	0.919	-10.783	9	0.106	0	0.0793
Bingo Play	5eIyK73BrxHLnly4F9PWqg	Grandma - Original mix	0.000539	0.819	132742	0.72	0.863	-8.895	4	0.0727	0	0.151
G Herbo	13Mf2ZBpfNkgWJowvM5hXh	Bon app??tit	0.115	0.885	181838	0.348	0.0	-12.569	9	0.107	1	0.451
34 Feet	7BQaRTHk44DkMhIVNcXy2D	Among - Original mix	0.0000584	0.74	124016	0.472	0.847	-9.008	8	0.0959	1	0.0551
Chris Cooq	049RxG2laEl9U1PGYeIqLV	Hazard - Original mix	0.0000811	0.813	132742	0.731	0.91	-8.932	11	0.0727	1	0.0697
Jarka	118GQ70Sp6pMqn6w1oKuki	Strummer - Original mix	0.000784	0.787	124016	0.83	0.784	-10.457	1	0.0373	1	0.162

Predict Song Popularity

127.0.0.1:8000/predict_song/

Predict Song Popularity

Track Name: Cool

Acousticness: 34823974

Danceability: 343

Tempo: 213

Energy: 43

Instrumentalness: 3212

Valence: 2

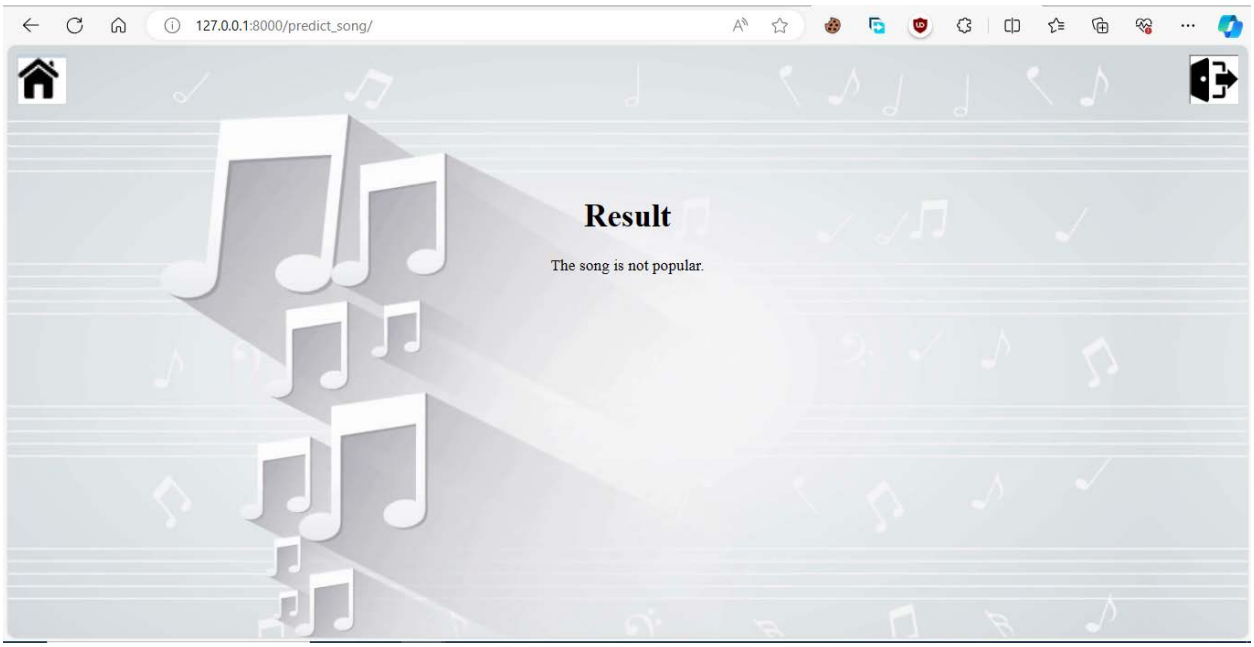
Speechiness: 21

Duration_ms: 342342

Loudness: 2

Liveness: 1

Predict


127.0.0.1:8000/predict_song/
Result
The song is not popular.