



# BEATGEN PROJECT

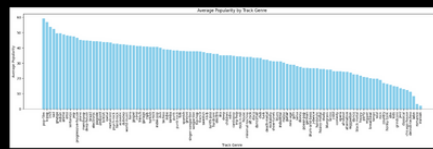
## PROBLEM

• In today's digital age, technology has made it incredibly easy for people to access music. With the advent of streaming platforms and smart devices, everyone can listen to their favorite songs anywhere, anytime. This ubiquitous access to music underscores the importance of creating songs that resonate with a wide audience, ensuring that they are catchy and appealing to diverse listeners.



## PROCESS

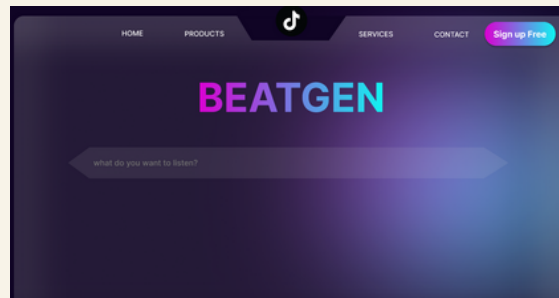
• From the graph using AI processing showing average popularity by genre, it was found that pop music is the most popular, while Iranian music is the least popular.



## PROCESS

After that, you'll proceed to train models using the CRISP-DM methodology for making predictions. The models you might experiment with include:

- K-Nearest Neighbors (KNN): A classification algorithm that assigns a class to a sample based on the majority class among its nearest neighbors.
- Decision Tree: A model that splits data into subsets based on feature values to make predictions or classifications.
- Naive Bayes: A probabilistic classifier based on Bayes' theorem, which assumes independence between features.



## QR-CODE



## BEATGEN at CMKL University

Beatgen is a program designed to generate music melodies and beats through AI-driven processes. It uses a database from applications such as Spotify, which is transformed into graphs to identify the most captivating beats for listeners, allowing Beatgen to produce highly effective and appealing music. This has the potential to introduce new, accessible melodies for audiences of all ages in the future. Additionally, our team plans to develop Beatgen into a fully functional website rather than just a prototype. The program also employs the CRISP-DM methodology to train its models, ensuring optimal stability and outcomes.

This program was developed for the AI Innovator Awards 2024 at CMKL University, which challenges participants to create innovative, AI-driven projects for future industries. Our team is one of the entrants in this competition, dedicating our full effort to bring our project to completion with the highest quality.