**Title: Music Genre Classification**

**Synopsis**

**Introduction:**

Music is like a mirror, and it tells people a lot about who you are and what you care about, whether you like it or not. We love to say “you are what you stream,” – Spotify

Music classification is now widely used by businesses, either to make suggestions to clients or simply as a commodity. The first step in that direction is to identify music genres. Machine Learning algorithms have been shown to be quite effective at extracting trends and patterns from massive data sets. In Music Analysis, the same principles are used.

**Problem Statement:**

Music plays a very important role in people’s lives. Music brings like-minded people together and is the glue that holds communities together. Communities can be recognized by the type of songs that they compose, or even listen to. Different communities and groups listen to different kinds of music. One main feature that separates one kind of music from another is the genre of the music.

**Objective:**

1. Developing a machine learning model that classifies music into genres shows that there exists a solution which automatically classifies music into its genres based on various different features, instead of manually entering the genre.
2. Another objective is to reach a good accuracy so that the model classifies new music into its genre correctly.

**Dataset:**

This project makes use of a dataset of audio tracks with comparable sizes and frequency ranges. The GTZAN genre classification dataset is the most commonly suggested dataset for music genre classification projects, and it was collected specifically for this purpose. This dataset was chosen since it is the most widely used public dataset for machine listening research in Music Genre Recognition (MGR). The frequency and time domain properties of these audio recordings are used to classify them.

**Benefits:**

* Classifiers can be trained to sort large personal music collections based on mood or on scenarios when one might like to listen to particular recordings, such as while driving or while doing the laundry. Similarity analysis can be used to help detect the distribution of pirated recordings.
* Genre classification creates conceptual links between different objects which can be used to enhance music browsing functionality and can be further developed into personalized retrieval or marketing tools (for example, music recommendations based on songs or genre previously listened).

**Applications:**

*Mall:*

Music is played continuously in the malls, and selection of right music to be played is hectic as well as time consuming work. So here, our system helps to choose the song according to any occasion or event.

*Restaurant:*

In a restaurant, choosing the right music is an important task when it comes to various occasions as per customer’s demand; our system will help to choose a particular genre song for the same.

*Airport:*

Music is played in the airports for the entertainment of people as they wait for hours due to various reasons, so our system will help to choose the song as per the requirements.

**Team members:**

Maddali Sowmya

Pooja Chandrashekara