

AI IGNITE WEEK

Technical Track

TASK 6: MUSIC MOOD CLASSIFIER

Problem Statement:

Songs often carry emotions — happy, sad, calm, or energetic. Build a tool that can classify a playlist of songs into moods using metadata (like tempo, loudness, and danceability).

What You'll Build:

A music mood analyzer that:

- Reads a CSV of songs with features (tempo, energy, loudness).
- Classifies each song into a mood: *Happy*, *Sad*, *Chill*, *Energetic*.
- Displays summary counts per mood.

Simple Approach:

```
pip install pandas scikit-learn matplotlib
```

Steps

1. Load a small dataset (Spotify song features).
2. Train a simple classifier (Decision Tree).
3. Predict moods for new songs.
4. Show distribution in a bar chart.

Sample Output

Playlist Mood Analysis:

Happy: 5 songs | Chill: 3 songs | Sad: 2 songs | Energetic: 4 songs

Time Required: 2–3 hours

Difficulty: Beginner–Intermediate