

# AI-Based Mood Music Generator

“Music that understands your emotions”

## Prototype Submission

### 1. INTRODUCTION

- Music is deeply connected to human emotions.
- However, selecting the right song to match our mood can be challenging.
- Our project, the AI-based mood music generator, uses AI to detect a user's emotion through facial expressions or text input.
- It recommends or generates music that resonates with how the user feels.
- By blending emotion recognition with AI, our solution helps users to relax, focus, or uplift their mood with just a click.

### 2. Problem Statement

- Manual music selection is time consuming.
- Most platforms are not emotionally aware.

- These platforms usually recommend music based on listening history, popularity trends or playlists.
- If someone is feeling low or anxious, they have to manually search for calming or updating music-this breaks the experience.
- There is no automatic, emotion-aware system.

### 3. Implementation

```
import random
import os
import pygame

print("🎵 AI Mood Music Generator 🎵")
mood = input("How are you feeling today? ").lower()

# Mood-to-song mapping
mood_to_song = {
    "happy": "happy.mp3",
    "sad": "sad.mp3",
    "angry": "angry.mp3",
    "relaxed": "relaxed.mp3"
}

if mood in mood_to_song:
    song_file = f"songs/{mood_to_song[mood]}"
    song_path = os.path.join(os.getcwd(), song_file)

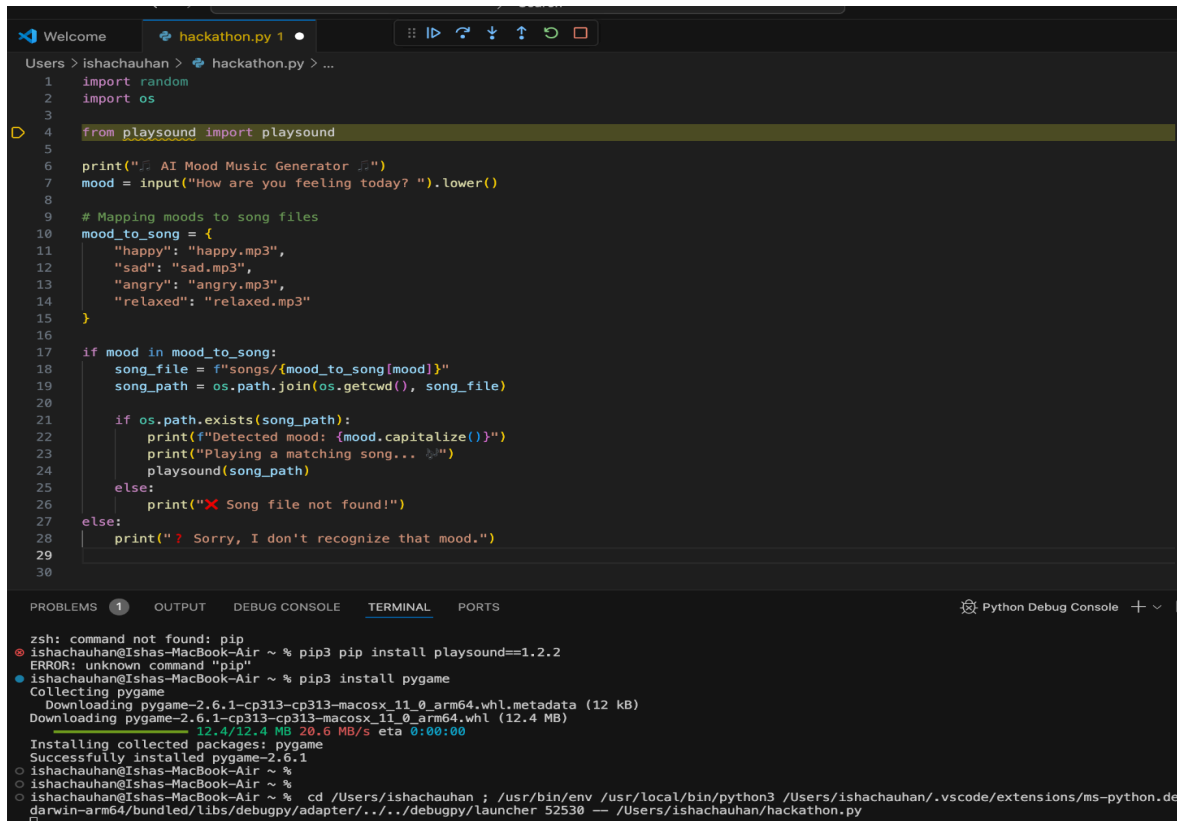
    if os.path.exists(song_path):
        print(f"Detected mood: {mood.capitalize()}")
        print("Playing a matching song... 🎵🎵")

    pygame.mixer.init()
```

```

pygame.mixer.music.load(song_path)
pygame.mixer.music.play()
input("Press Enter to stop music...")
pygame.mixer.music.stop()
else:
    print("Song file not found.")
else:
    print("Mood not recognized. Please try again.")

```



```

Welcome | hackathon.py 1
Users > ishachauhan > hackathon.py > ...
1  import random
2  import os
3
4  from playsound import playsound
5
6  print("AI Mood Music Generator 🎵")
7  mood = input("How are you feeling today? ").lower()
8
9  # Mapping moods to song files
10 mood_to_song = {
11     "happy": "happy.mp3",
12     "sad": "sad.mp3",
13     "angry": "angry.mp3",
14     "relaxed": "relaxed.mp3"
15 }
16
17 if mood in mood_to_song:
18     song_file = f"songs/{mood_to_song[mood]}"
19     song_path = os.path.join(os.getcwd(), song_file)
20
21     if os.path.exists(song_path):
22         print(f"Detected mood: {mood.capitalize()}")
23         print("Playing a matching song... 🎵")
24         playsound(song_path)
25     else:
26         print("❌ Song file not found!")
27 else:
28     print("⚠️ Sorry, I don't recognize that mood.")
29
30
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS Python Debug Console +
zsh: command not found: pip
ishachauhan@Ishas-MacBook-Air ~ % pip3 pip install playsound==1.2.2
ERROR: unknown command "pip"
ishachauhan@Ishas-MacBook-Air ~ % pip3 install pygame
Collecting pygame
  Downloading pygame-2.6.1-cp313-cp313-macosx_11_0_arm64.whl.metadata (12 kB)
  Downloading pygame-2.6.1-cp313-cp313-macosx_11_0_arm64.whl (12.4 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 12.4/12.4 MB 20.6 MB/s eta 0:00:00
Installing collected packages: pygame
Successfully installed pygame-2.6.1
ishachauhan@Ishas-MacBook-Air ~ %
ishachauhan@Ishas-MacBook-Air ~ %
ishachauhan@Ishas-MacBook-Air ~ % cd /Users/ishachauhan ; /usr/bin/env /usr/local/bin/python3 /Users/ishachauhan/.vscode/extensions/ms-python.de
darwin-arm64/bundled/Libs/debugpy/adapters/launcher 52530 -- /Users/ishachauhan/hackathon.py

```