AURALY

FEEL THE MUSIC, HEAR THE MOOD

THE CURATORS

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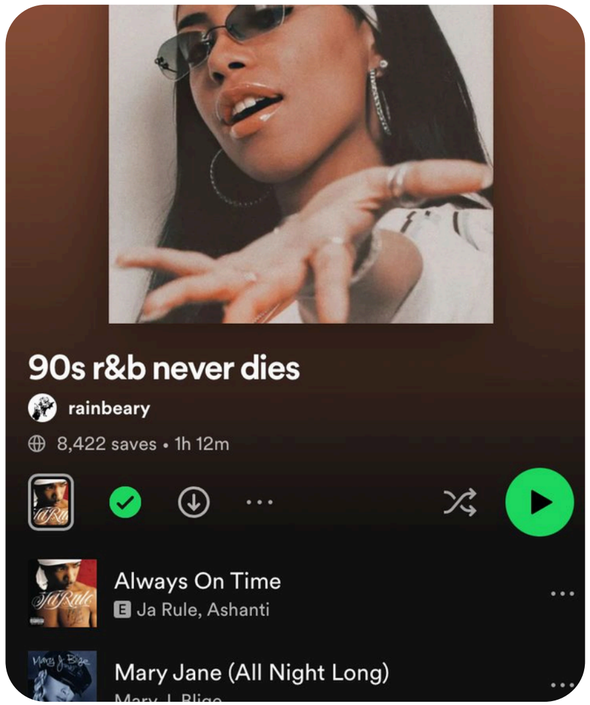
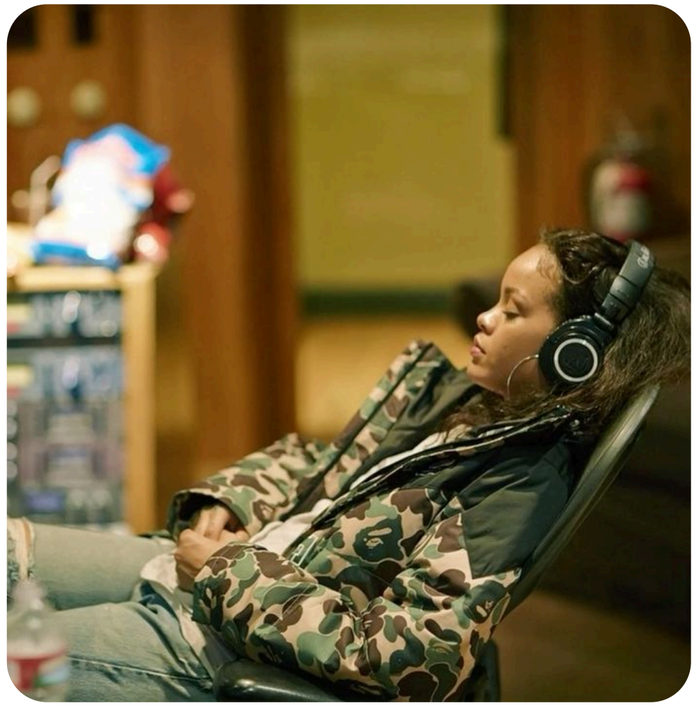
Every Vibe Deserves a Soundtrack

Auraly is an intelligent mood-based music recommendation system that turns emotions into playlists.
Auraly is a double entendre : ’Aura’ for the vibe and ‘Aural’ for listening/hearing

EMOTIONAL GAP

Music apps are aware of the music you listened to yesterday,

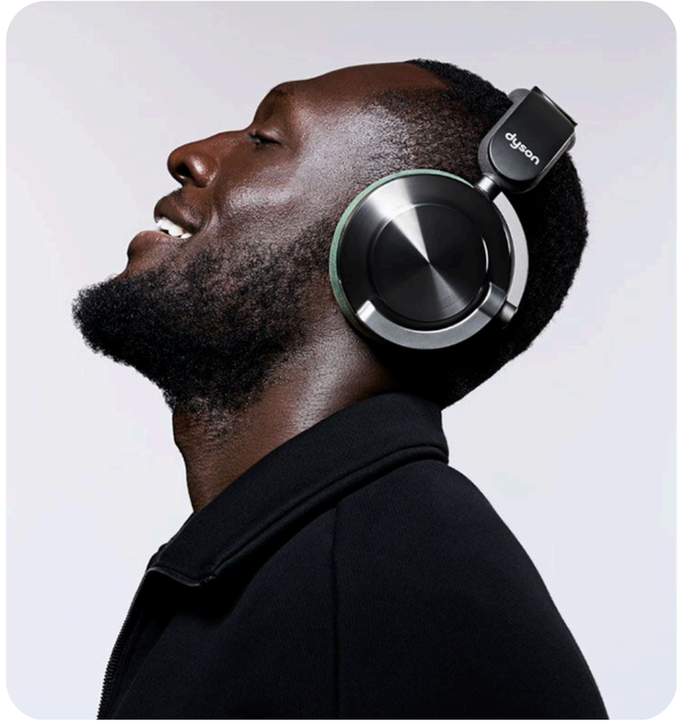


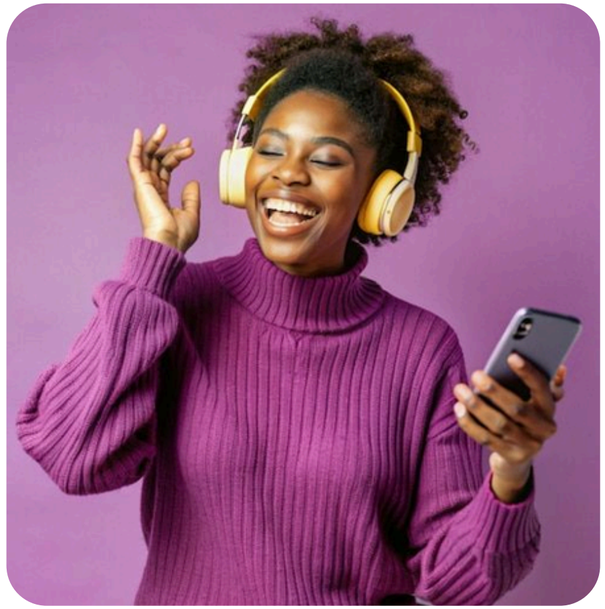


But they have no idea how you **feel** right now(your **mood**)

Why Does our Mood Matter?

Listeners choose music based on emotion — not just genre. Mood drives engagement and retention.





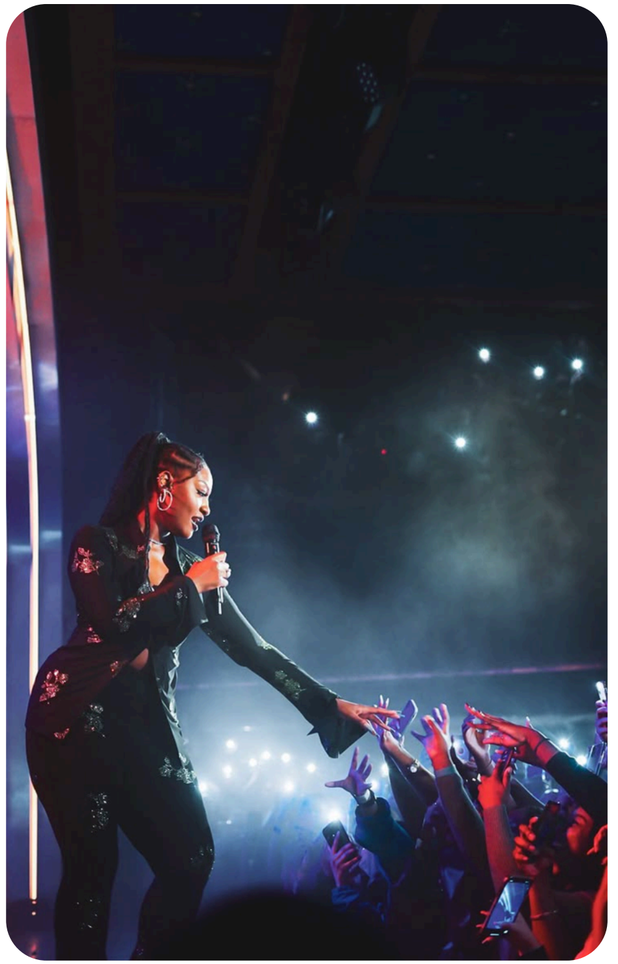
Our Purpose in Harmony

Main Objective

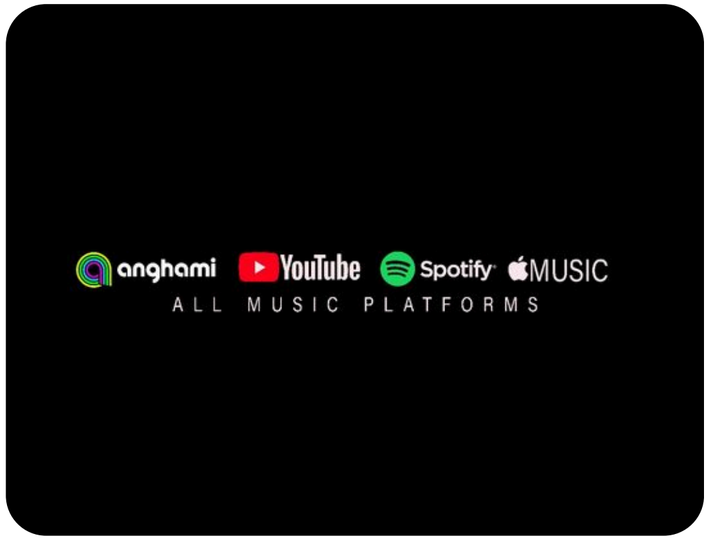
Build an intelligent system that detects mood and curates personalized playlists.

Specific Objectives

1. Automate playlist creation based on emotion.
2. Boost engagement through mood-driven recommendations.
3. Personalize music discovery experiences.



The Auraly Community



1. Listeners: Get playlists that match their mood.
2. Streaming platforms: Boost engagement with personalized music
3. DJs & Curators: Quickly find songs that fit the vibe

DATA SOURCES

1. Spotify and Youtube Audio features (**Kaggle**)
2. Mood-labelled phrase Dataset (collected from friends and family)

Data that Feels Real

Kaggle provided reliable audio data; our custom mood phrases added the human touch — making Auraly's predictions more natural and emotionally authentic.

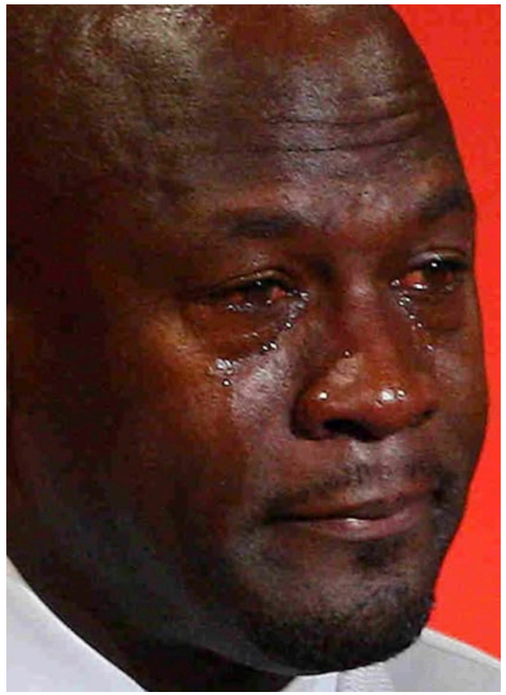
The Brains Behind The Beats ♪

Three notebooks powered Auraly’s evolution :

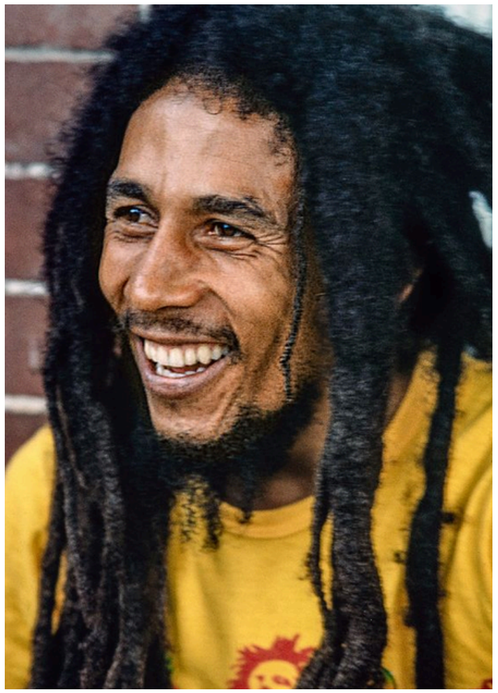
1. training the mood prediction model
2. cleaning Spotify data for playlist generation
3. using NLP to translate everyday phrases into emotions.

MOODS

The Machine Learning model predicts mood from the following song audio features:



0=SAD



1=HAPPY

2=ENERGETIC

3=CALM

AURALY

MOODS CLASSIFICATION MODELS

1. XGBoost Classifier Model (**Best performing model**)

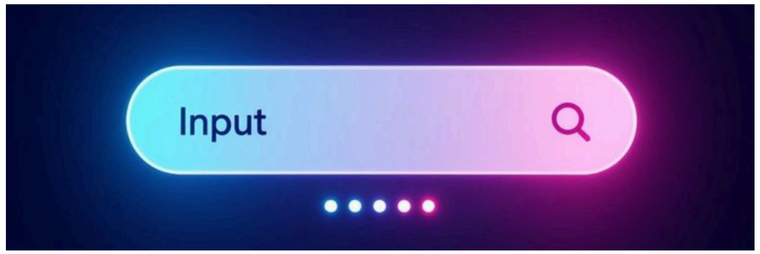
2. Random Forest Tree Model

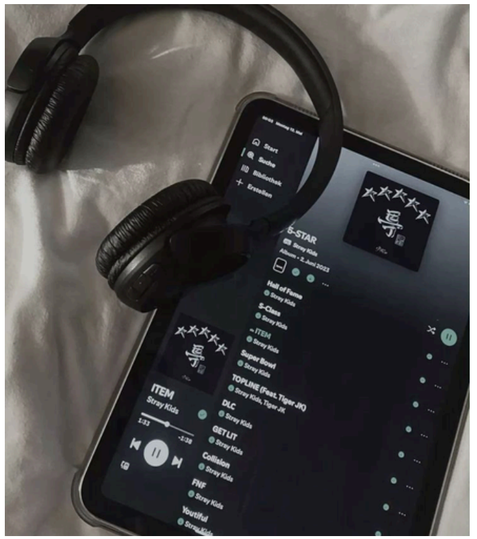
3. Logistic Regression Model-Baseline model(Least performing model)

AURALY ENGINE OVERFLOW

The model follows these 4 simple processses:

1. USER INPUT🎙️: You type a short Phrase (I feel good)
2. MOOD DETECTION🧠: Auraly analyzes the phrase and predicts your mood
3. MUSIC SELECTION🎶: The system finds songs that match the mood
4. PLAYLIST GENERATION📀: You get a personalized playlist instantly





MODEL RESULTS

Performance Paths

Accurate mood classification

Production Roles

Smooth phrase interpretation

Teaching Options

Engaging and emotionally aware playlists

What we Learnt The Hard Way

1.Data restrictions made emotion-tagged music hard to collect.
2.Balancing mood labels required SMOTE and careful sampling.
3.Ambiguous emotions challenged our classifier boundaries.

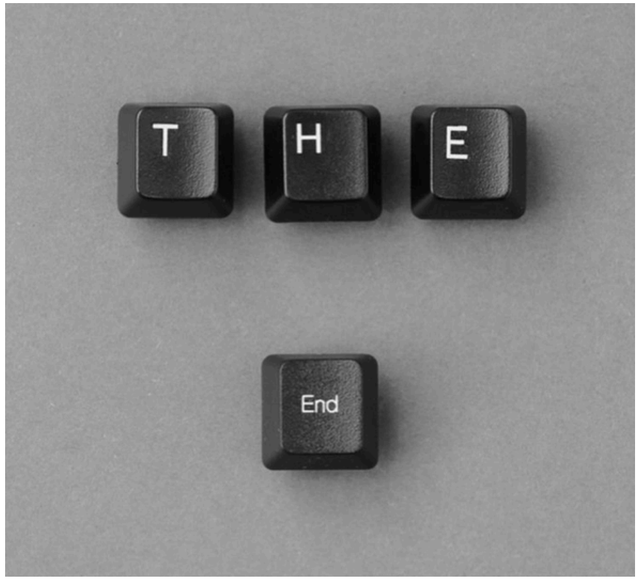
Lesson: Emotion in Data Science is powerful,but messy

DEPLOYMENT

The final code was pushed to GitHub.
Followed by a sucessful connection via streamlit cloud
then finally:
a working prototype was deployed via Streamlit.

- Tested with >2,000 songs labeled by mood.

Thank You !



Thank you for listening.
Reach out for any questions .