





- PLAYLIST
  - 01 Business Problem
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  - 04 Results

C THANKS!

# Automated Mood Detection

Using Spotify Audio Features to Detect a Song's Mood

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## Meet the team



James Meredith

Data Scientist, Rock Legend



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# **Business Problem**

A Smarter Spotify Recommendation System







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# A Context-specific **Recommendation System**

Hey Spotify! Build me a playlist for the day!

I'm exhausted! Just keep it chill.



Sure thing! What's your mood for the day?

Okay! Here's a playlist full of songs you're sure to enjoy!













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Spotify Audio Features + Mood Tags









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## **Data**

Audio Feature Data from Spotify API



**Emotion Tags from Last.FM** 





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# **Methods**

Automatic Mood Detection Based on Audio Features









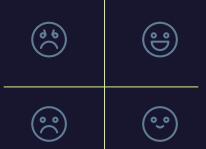
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## **Methods**

- **Emotions:** 
  - Нарру
  - Sad
  - Angry
  - Relaxed
- Prediction model to predict a song's dominant mood



















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# Results

Accurate, user-free emotion labeling

















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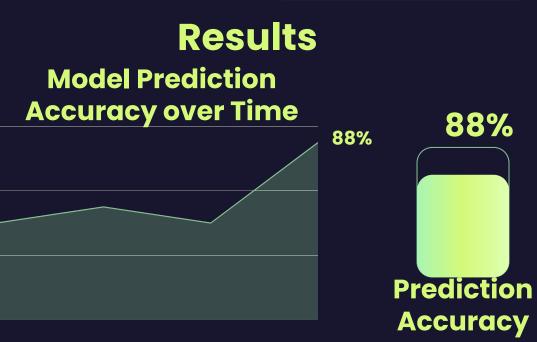


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## **Business Recommendations**

Integrate mood detection into recommendation system!

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# **Looking Forward...**

- Improve model accuracy by including Lyric Analysis
- Implement and track user feedback!











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# Thanks!

Do you have any questions? jam637.jlm@gmail.com

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