Software Engineering Project: Deep Music Dive

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Current Problems

- The growth of music sharing platforms has grown over the years, resulting in music creators being more abundant than ever before.
- Everyone hates running out of new music to listen to.
- It is hard for talented musicians to get discovered.
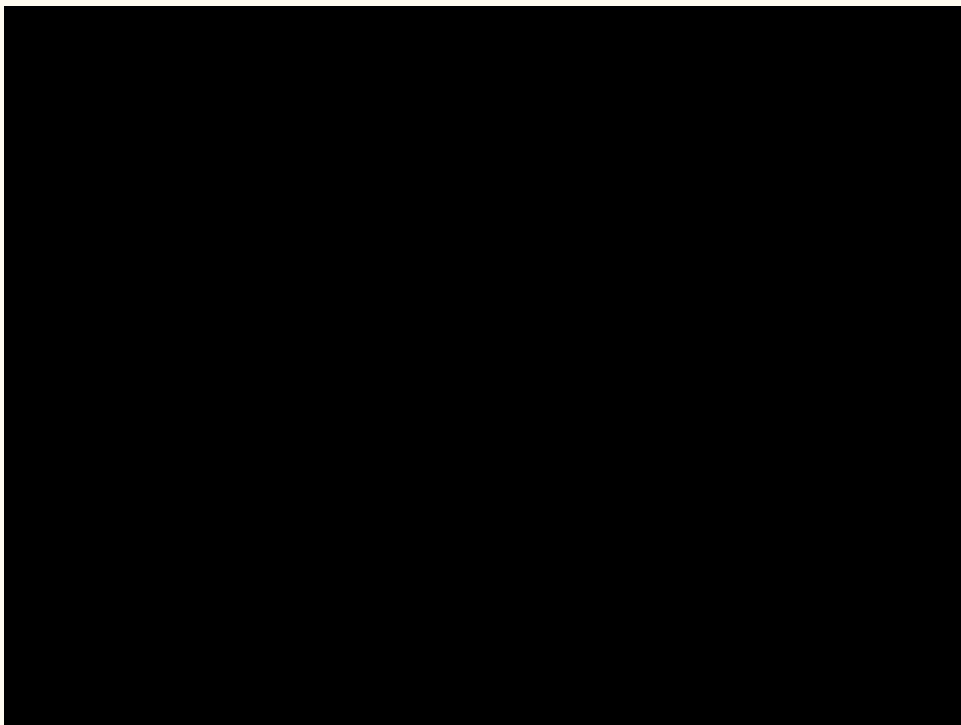
What is Deep Music Dive?

- A web-based product
- Provides insight towards upcoming trends and artists
- Uses graphs, charts, and other powerful visualizations to help the user interpret the data
- Allows Music Record Labels to find patterns
- Uses AI to find important song attributes
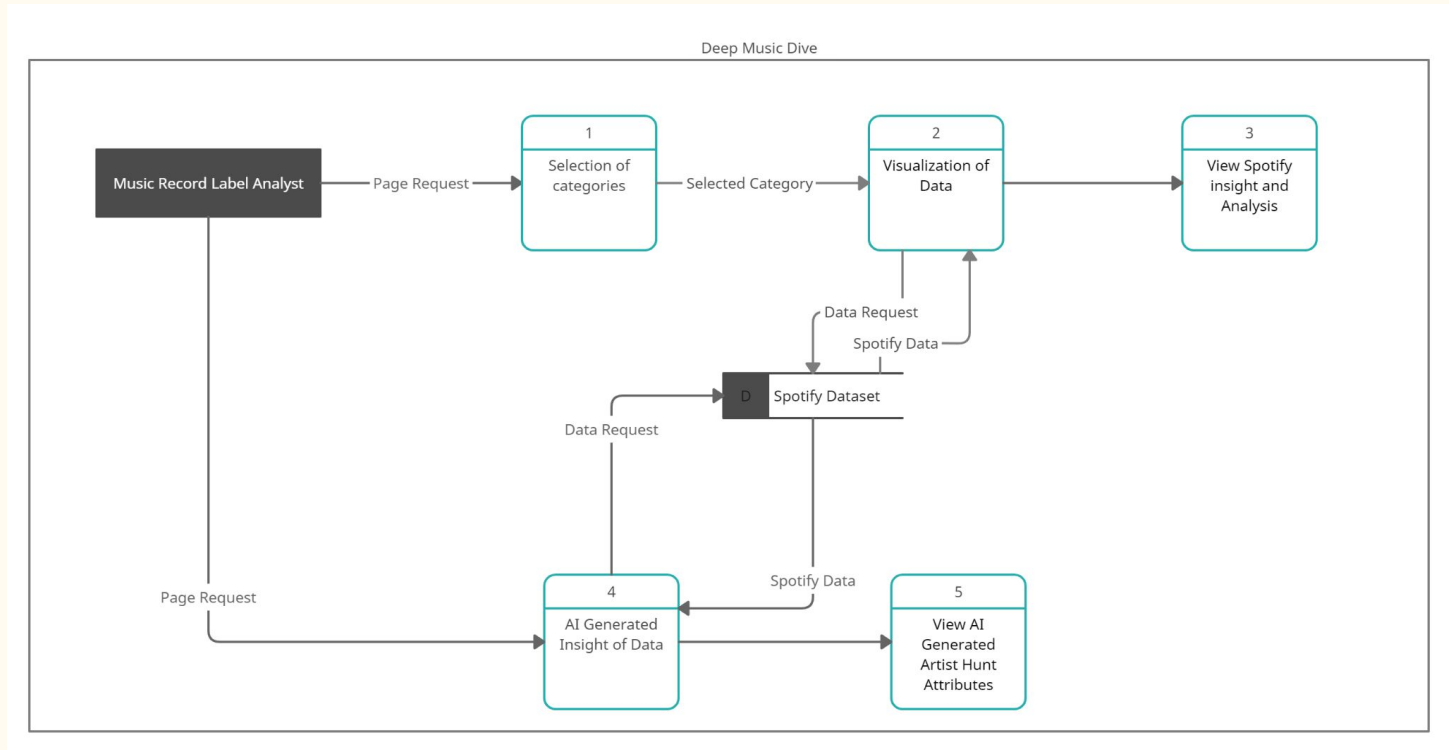
Who is our audience?

- **Music Record Labels**

Demo

The System Model

Deep Music Dive

Music Record Label Analyst → Page Request → 1 Selection of categories → Selected Category → 2 Visualization of Data → 3 View Spotify insight and Analysis

Data Request
Spotify Data

D Spotify Dataset

Data Request

Page Request

Spotify Data

4 AI Generated Insight of Data → 5 View AI Generated Artist Hunt Attributes

Customer Feedback

Testing
- 7 out of 9 tasks were performed intuitively when tested
- Customer struggled to identify which tab would go to which page
- One task was not implemented at the time of testing

Feedback & Resulting Changes

- Customer wanted a list of possible outcomes for AI generated attributes
  - Implemented
- Customer wanted description above the AI generated attributes
  - Corrected
- Customer wanted "How-To" section of homepage to be more specific and elaborate.
  - Implemented

Additional enhancements

- Future enhancements
  - AI attributes matching new Artists' attributes
  - Expand on the amount of data used
  - Add more analysis categories
  - Expand scope to artists
  - Add more AI attributes

Challenges and Lessons Learned

Challenges
- Learning Data Visualization
- Incorporating data into website
- Learning how to incorporate machine learning algorithms with spotify data
- Incorporating the agile method into our project

Lessons Learned
- Learned how to manage teams using Trello
- Learned further about how to operate sprints
- Learned about data visualization in different forms such as charts, graphs, etc
- Learned how to implement machine learning predictions to song data
- Learned how to implement agile method
- Learned better team cooperation

Thanks for listening!