

## **Welcome to Spotify's Data Science Innovation Team!**

As a second-year student with a background in music theory, linguistics, and machine learning, you've been selected by Dr. Elena Vazquez, Head of Content Intelligence, to take on a project that could reshape music discovery at Spotify.

### **Your Task?**

Prove that lyrics, not just acoustic features, hold the key to classifying musical genres. Can you unlock the hidden patterns that differentiate a hip-hop track from a country ballad or a metal anthem?

### **Why This Matters:**

Spotify adds 60,000 new songs daily, making accurate genre classification crucial. Current systems focus on audio features, but lyrics provide an untapped opportunity. From country storytelling to hip-hop rhymes, understanding lyrical patterns could improve recommendations for 500 million users worldwide.

### **Your Mission:**

- Analyze a dataset of 10,000 songs across five genres.
- Extract features like emotional tone, rhyme schemes, and vocabulary.
- Build models using NLP and machine learning techniques.
- Evaluate performance and uncover key insights

### **The Deliverable:**

Develop a machine learning model that classifies genres based on lyrics. Your work will have a real-world impact on music recommendations and discovery.

Ready to start? Dive into the GitHub repo: [\[GitHub Repo Link\]](#)

This project is your chance to revolutionize how we understand the language of music!