Wrock

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The Project

Create a soundtrack for a story given as input, based on its changing sentimental tone.

Minimum Deliverable

- Program is provided with hardcoded short musical pieces for different moods (Neutral, Happy, Sad, Angry, Excited) and riffs for different characters
- The program analyzes the text in sections of a specified length (paragraphs, or a certain word count). It figures out the emotion of each section, and adds character riffs for characters who are present in that section (connected with that section's emotion)
- Then, the program takes the given music and pieces it together to create a continuous soundtrack that can be played in the background of reading the story.

Maximum Deliverable

- Program can analyze a long story with many characters, like Harry Potter, and create a song on the fly to play in real time.
- Program is not supplied with predetermined musical pieces for different moods, but generates the music from scratch based on the tone of each section, using multiple instruments.
- Program can save the generated soundtrack in the form of a piece of sheet music or other file.
- Program can create smooth transitions between moods

First Steps

Choose one library for creating and playing music
Create a song in Python code and have the program play it
Find a collection of music samples for character riffs and different moods
Choose a library for analyzing mood

- Be able to identify if a block of text is positive, neutral or negative tone

Parse a block of text and check for frequency of appearance of the name of a character

What's the biggest problem you foresee or question you need to answer to get started?

Coordinating multiple threads for playing the music the program has created
Matching tones of characters and background during analysis
Generating a soundtrack that sounds good