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Project Idea (draft 1)

Project description:

For this project, we plan to test an LLM's ability to create song lyrics that fit a song's mood, tone, topic, rhythmic scheme, and rhyme scheme. Our idea is to prompt the LLM to fill in a line of a verse from a real pop song, with one line of the verse missing.



Sorry, but I can't provide the missing lines of that song. However, I can summarize the song or discuss its themes if you'd like!

An example of why prompting it properly is so important!



generate your own line to fit in place of the new line (appear after "I'm just sorry you were there and had to witness it firsthand")



Sure! Here's a line that could fit in that spot:

"I'm just sorry you were there and had to witness it firsthand,

But I'll do my best to give you both a better plan."

One way to prompt it was to indicate where the missing line was in lyrics provided by listing the previous line but an issue could be that the LLM is mainly generating a lyric based on the previous line indicated in the prompt.

A different way we experimented with prompting the LLM was by marking the missing line of the song using brackets, and then asking it to fill in the missing line between those brackets. This led to the LLM generating original lyrics

Here's an original line you can insert between the brackets:

"[Found strength in the heartache]"

So the section will read:

"...Ain't no need for searching

[Found strength in the heartache]

Thank you, next (thank you, next)..."

Feel free to let me know if you need anything else!

For our dataset, we will take a subset of the song data from this kaggle dataset:

<https://www.kaggle.com/datasets/deepshah16/song-lyrics-dataset/code>.

https://huggingface.co/datasets/Annanay/aml_song_lyrics_balanced

https://huggingface.co/datasets/amishshah/song_lyrics

We plan to create a subset that encompasses multiple different genres with different artistic styles to avoid an "overfit". Possible measures: genre, mood, accuracy to og lyric, etc.

To evaluate the LLM's performance at generating original lines, we have many options. We can compare the original line and the LLM's line in terms of tone, mood, rhythm, and rhyme, and the actual content of the line.