Song Translation For Language Learning

Matthew Tang

Motivation: Listening to music is a great way to learn a language

Problem: Sentence by sentence translations of the lyrics are not very helpful

             Want a human like breakdown of individual phrases and components of the translation

Example: Which translation is more helpful?

1. 나는 읽기 쉬운 마음이야
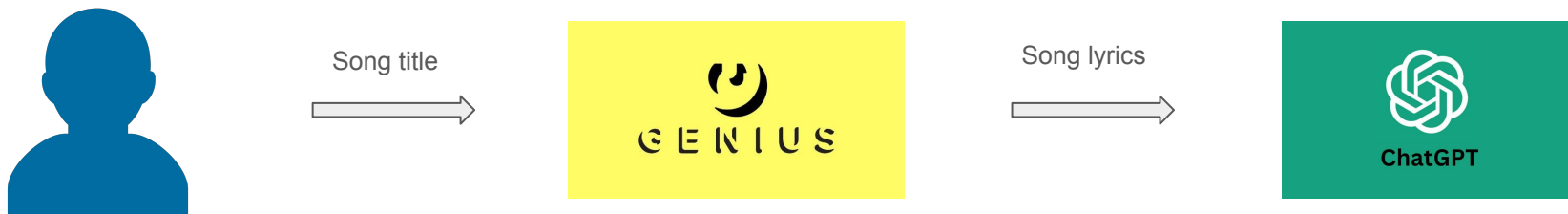Translation: I have an easy mind to read

2. 나는 읽기 쉬운 마음이야
- Overall translation: I am a heart that's easy to read.
- Word-by-word translation:
  - 나는 (naneun) = I
  - 읽기 (ilggi) = reading (noun form of "to read")
  - 쉬운 (swiun) = easy
  - 마음이야 (ma-eum-iya) = heart (is)

Song Translation For Language Learning

Matthew Tang

Workflow

System prompt: You are a translator which includes both the translation of each line as well as the translation of individual words

User prompt: Translate each line of the following lyrics, and also include the translations of each word: {lyrics}\n Include both the line by line translation as well as translations of each word

Song Translation For Language Learning   Matthew Tang

Challenges:

- Tuning level of detail
    a. Whether to translate particles as part of the word (나는 = I)
    b. Level of grammatical detail (Verb conjugations)
- Differences between ChatGPT Web and Chat API calls
    a. Likely due to hand picked system prompts in ChatGPT web