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Final Project

Music Playlist Generator:-An AI system based music playlist generator

The base ides is this system is to generate personalized music playlists based on users Preferences and mood. The aim is to use a part of given composition (MIDI File) to generate further music via extrapolation from Long short-term memory (LSTM) which is a which is a neural network used in deep learning an d artificial intelligence, then increasing the efficiency of the model using the relation between training loss. The system can analyze users listening history and preferences to recommend songs and create dynamic playlists using generative algorithms.

AGENDA

1. Problem Statement
2. Project Overview
3. Who Are The End Users?
4. Your Solution And Its Value Proposition
5. The Wow In Your Solution
6. Modeling
7. Result

PROBLEM STATEMENT

The base idea is to train the model to generate personalized music playlist based on the users mood and preferences. Long Short-Term Memory (LSTM) is a type of Recurrent Neural Network (RNN) capable of learning and remembering information over time. The model generates playlists dynamically based on the persons interest by analyzing there history.

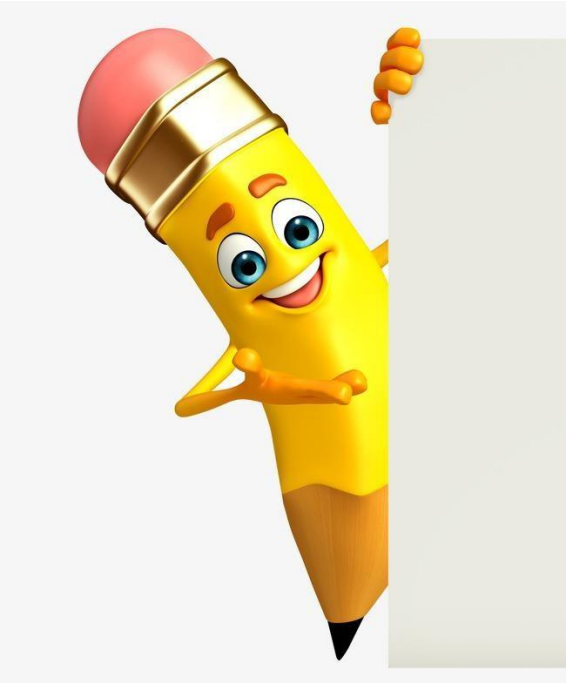
PROJECT OVERVIEW

The project is about generating interactive stories using Reinforcement Learning (RL). RL is a machine learning technique where an agent learns to make decisions by interacting with an environment to achieve a goal. In this case, the RL agent learns to generate stories interactively by choosing the next action (word or phrase) based on the current state (existing story).

WHO ARE THE END USERS?

The end users of this project could be who listens to music and who wants their playlist to updated according to their mood. The system also generates music for people who are interested in other language songs.

YOUR SOLUTION AND ITS VALUE PROPOSITION



The solution involves creating an environment where the model analyzes the users listened history and preferences to generate music of users interest. LSTMs are predominantly used because they can learn, process, and classify sequential data because these networks can learn long-term dependencies between time steps of data. The playlist generating system is dynamic ad it changes according to the mood and preference of the user.

THE WOW IN YOUR SOLUTION

Adaptability: The system can adapt its generation baesd on change in users listened history and preference..

Engagement: By using LSTM the system can make a memory of the and can generate music playlist to user.

Transparency: The system can potentially scale to handle various generation and hides the complex algorithms involved in playlist generations and in real time.

MODELING

Teams cam add wireframes

Environment: Defines the playlist generation process and provides methods for interacting with the agent.

LSTM: Implements the memory keeping algorithm and uses various gates to analyze the listened history of user to generate playlist.

.**Playlist generation:** Analyzes the history and preferences to generate playlist dynamically.

RESULTS

The result of the project is an AI based generation system that generates music playlist based on users preferences. The generated playlist are likely to be users preferences and interests New playlist is generated when user listens to other genre songs .

Demo Link