

BASIC TEXT GENERATOR

LEVEL:EASY

Description: Use a simple generative AI model to generate text based on a prompt

Skills: Basic Python, text generation, API usage

Overview

This project utilizes the OpenAI language model to generate text according to prompts specified by users. It uses GPT-2, developed by OpenAI, as a powerful transformer-based model. This project first asks the user to enter a prompt then the user gets generated text as an output.

Prerequisites

You must have prior knowledge about the following:

- Basic Python
- Transformers and their implementation.
- Use of torch in python
- Basic Generative AI knowledge

Requirements

Before running the project, ensure you have the following installed:

- Transformers library by Hugging Face
- Python 3.6 or higher
- PyTorch

Code Explanation

- **Imports:** The python script imports libraries, including transformers for the GPT-2 model and torch for tensor operations.
- **Model Initialization:** Initialization of GPT-2 tokenizer and model occurs using `from_pretrained()` method
- **Text Generation Function:** The `text_generate()` function is used to generate text based on the prompt specified by the user takes a prompt and generates text using specified parameters.
- **Main Function:** The `main()` function is a user interface which asks the user to enter a prompt and then display generated text.

Example

Enter your prompt: "Once upon a time"

"Once upon a time, in a land far away, there lived a young princess who loved to explore the forest."