Modified from DeepLearning.AI Hugging Face course

https://learn.deeplearning.ai/courses/open-source-models-hugging-face/lesson/3/natural-language-processing-(nlp)

```
!pip install transformers
    Requirement already satisfied: transformers in /usr/local/lib/python3.10/dist-packages (4.38.2)
    Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from transformer
    Requirement already satisfied: huggingface-hub<1.0,>=0.19.3 in /usr/local/lib/python3.10/dist-packaq
    Requirement already satisfied: numpy>=1.17 in /usr/local/lib/python3.10/dist-packages (from transformed)
    Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from trans
    Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.10/dist-packages (from transfor
    Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from ti
    Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from transformer
    Requirement already satisfied: tokenizers<0.19,>=0.14 in /usr/local/lib/python3.10/dist-packages (fi
    Requirement already satisfied: safetensors>=0.4.1 in /usr/local/lib/python3.10/dist-packages (from 1
    Requirement already satisfied: tqdm>=4.27 in /usr/local/lib/python3.10/dist-packages (from transform
    Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from hug
    Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.10/dist-packages
    Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages
    Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from request
    Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from I
    Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from I
# suppress warnings
from transformers.utils import logging
logging.set_verbosity_error()
from transformers import pipeline
# colab suggested this
# small model that only needs 1.6G of memory
chatbot = pipeline(task="conversational",
                   model="facebook/blenderbot-400M-distill")
    /usr/local/lib/python3.10/dist-packages/huggingface hub/utils/ token.py:88: UserWarning:
    The secret `HF TOKEN` does not exist in your Colab secrets.
    To authenticate with the Hugging Face Hub, create a token in your settings tab (<a href="https://huggingface">https://huggingface</a>.
    You will be able to reuse this secret in all of your notebooks.
    Please note that authentication is recommended but still optional to access public models or dataset
      warnings.warn(
    /usr/local/lib/python3.10/dist-packages/torch/ utils.py:831: UserWarning: TypedStorage is deprecated
       return self.fget. get (instance, owner)()
user_message = """
What are some fun activities I can do in the winter?
.....
from transformers import Conversation
conversation = Conversation(user_message)
print(conversation)
    Conversation id: fd887a10-8b3b-4164-8934-e8725a6c786d
    user:
```

What are some fun activities I can do in the winter?

```
# or
print(chatbot(Conversation("What else do you recommend?")))
    Conversation id: b6e82137-e901-4c1a-9eb5-0f4687598061
    user: What else do you recommend?
    assistant: Well, I'm not sure what else I can think of, but I do know that I'm going to miss her.
# the above has no memory of prior conversation, so could generate a random response
conversation.add_message(
    {"role": "user",
     "content": """
What else do you recommend?
    })
print(conversation)
    Conversation id: fd887a10-8b3b-4164-8934-e8725a6c786d
    What are some fun activities I can do in the winter?
conversation = chatbot(conversation)
print(conversation)
    Conversation id: fd887a10-8b3b-4164-8934-e8725a6c786d
    What are some fun activities I can do in the winter?
    assistant: I like snowboarding and skiing. What do you like to do in winter?
conversation.add_message(
    {"role": "user",
    "content": """
What activities do your recommend in the summer?
.....
    })
conversation = chatbot(conversation)
print(conversation)
    Conversation id: fd887a10-8b3b-4164-8934-e8725a6c786d
    What are some fun activities I can do in the winter?
    assistant: I like snowboarding and skiing. What do you like to do in winter?
    user:
    What activities do your recommend in the summer?
    assistant: Snowboarding is a lot of fun. You can do it indoors or outdoors.
```

See <u>HuggingChat</u> to find open source models you can use.

URL is hf.co/chat

Start coding or generate with AI.