

CHATBOT

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Details-

Source code-

```
import streamlit as st
from transformers import AutoTokenizer, AutoModelForSeq2SeqLM

def load_model():
    model_name = "facebook/blenderbot-400M-distill"
    model = AutoModelForSeq2SeqLM.from_pretrained(model_name)
    tokenizer = AutoTokenizer.from_pretrained(model_name)
    return model, tokenizer

def generate_response(input_text, conversation_history, model, tokenizer):
    history_string = "\n".join(conversation_history)
    inputs = tokenizer.encode_plus(history_string, input_text, return_tensors="pt")
    reply_ids = model.generate(inputs["input_ids"], max_length=100, pad_token_id=tokenizer.eos_token_id)
    response = tokenizer.decode(reply_ids[0], skip_special_tokens=True)
    return response

model, tokenizer = load_model()
st.title("Interactive Chatbot")
if "conversation_history" not in st.session_state:
    st.session_state.conversation_history = []
user_input = st.text_input("Ask me anything:", "")
if user_input:
    with st.spinner("Generating response..."): #Shows a loading spinner in the UI while the chatbot generates a response.
        response = generate_response(user_input, st.session_state.conversation_history, model, tokenizer)
    st.session_state.conversation_history.append(f"You: {user_input}")
    st.session_state.conversation_history.append(f"Bot: {response}")
st.write("\n".join(st.session_state.conversation_history))
```

Model using: **BlenderBot 400M Distilled** model from Facebook's AI team from **Hugging Face**

Presented in : **Streamlit UI**

```
##first of all we are creating a chatbot using streamlit UI and hugging face packages. first we are creating the model for that we are importing the model name from hugging face
# Loads the pre-trained model from the Hugging Face model hub, and adding the tokenizer associated with model
#after that we are adding the generate output function in which we are adding the message history and reply message is been printed and it is decoded into the human readable format
#after this we are creating the UI
#Checks if there is no existing conversation_history in the session state. If no conversation history exists, it initializes an empty list to store the conversation.
```

I have run the code and it is traversing into the UI but it is still loading and the bot is not appearing.

```
(env) C:\Users\karth\Downloads\Desktop\ACM>.env\Scripts\activate
(env) C:\Users\karth\Downloads\Desktop\ACM>streamlit run "c:\Users\karth\Downloads\Desktop\ACM\chatbot.py"

You can now view your Streamlit app in your browser.

Local URL: http://localhost:8501
Network URL: http://10.113.16.218:8501
```

