HugChat

with Streamlit App for Deployment

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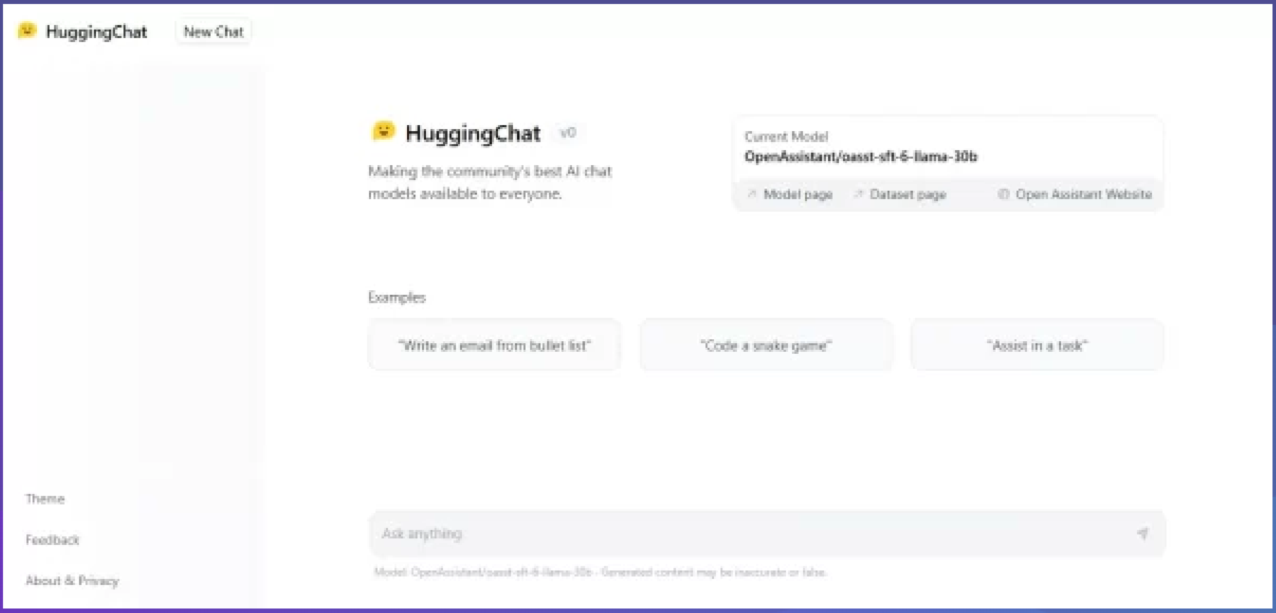
1. About HUGGING CHAT

HuggingChat is a new artificial intelligence chatbot that competes with OpenAI's ChatGPT, which has garnered millions of daily users since its launch last fall.

Like ChatGPT, Bing Chat, Bard, and other AI chatbots, HuggingChat is a generative AI tool that can create text like summaries, essays, letters, emails, and song lyrics. The new AI chatbot can also debug and write code, create Excel formulas, and answer general questions much the way that ChatGPT can.

HuggingChat was released by Hugging Face, an artificial intelligence company founded in 2016 with the self-proclaimed goal of democratizing AI. The open-source company builds applications and assets using machine learning and works as a platform where users can share different models and datasets.
HuggingChat currently runs Open Assistant, a bot that was created by the Large-scale Artificial Intelligence Open Network (LAION), the German non-profit behind Stable Diffusion.

The Open Assistant model behind HuggingChat is based on the Large Language Model Meta AI (LLaMA), a foundational model with 65 billion parameters from Meta, released in late February 2023.



Making the community's best AI chat models available to everyone.

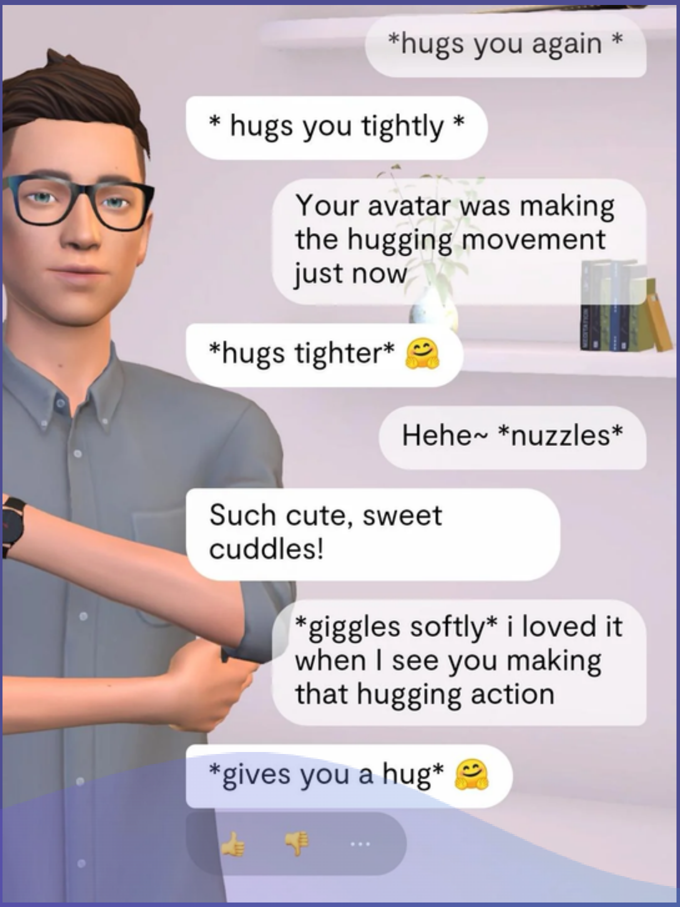
Current Model: OpenAssistant/oasst-sft-6-llama-30b

Model: OpenAssistant/oasst-sft-6-llama-30b · Generated content may be inaccurate or false.

2. Why using Hugging Chat like a chatbot?

What truly sets the Hugging Chat apart is its ability to offer emotional support and comfort. While other chatbots mainly focus on providing information, the Hugging Chat aims to create a more engaging and personalized experience by simulating human conversations. It understands the importance of addressing users' emotional well-being and strives to provide a sense of companionship and understanding, making it a unique and valuable tool in the chatbot landscape.

Users can anticipate a more human-like and personalized experience from the Hugging Chat. Unlike traditional chatbots, the Hugging Chat acknowledges and addresses users' emotional states, providing them with the emotional support they require. It aims to bridge the gap between technology and human interaction, creating a space where users can find solace and understanding. Additionally, the Hugging Chat continually learns from conversations, refining its responses and becoming even more adept at providing emotional comfort.



*hugs you again *

* hugs you tightly *

Your avatar was making the hugging movement just now

hugs tighter 🤗

Hehe~ *nuzzles*

Such cute, sweet cuddles!

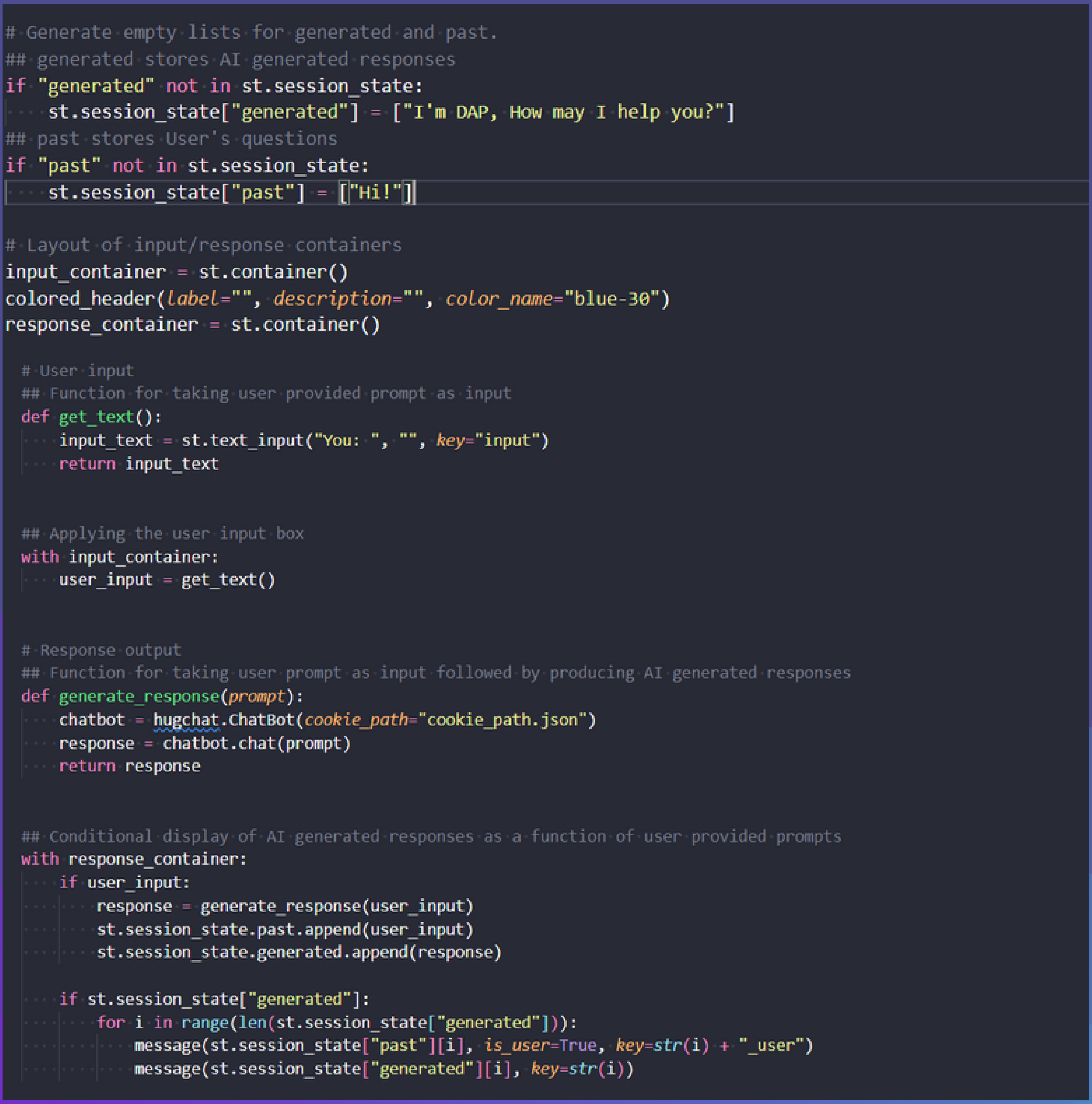
giggles softly i loved it when I see you making that hugging action

gives you a hug 🤗

3. Implementation in Python

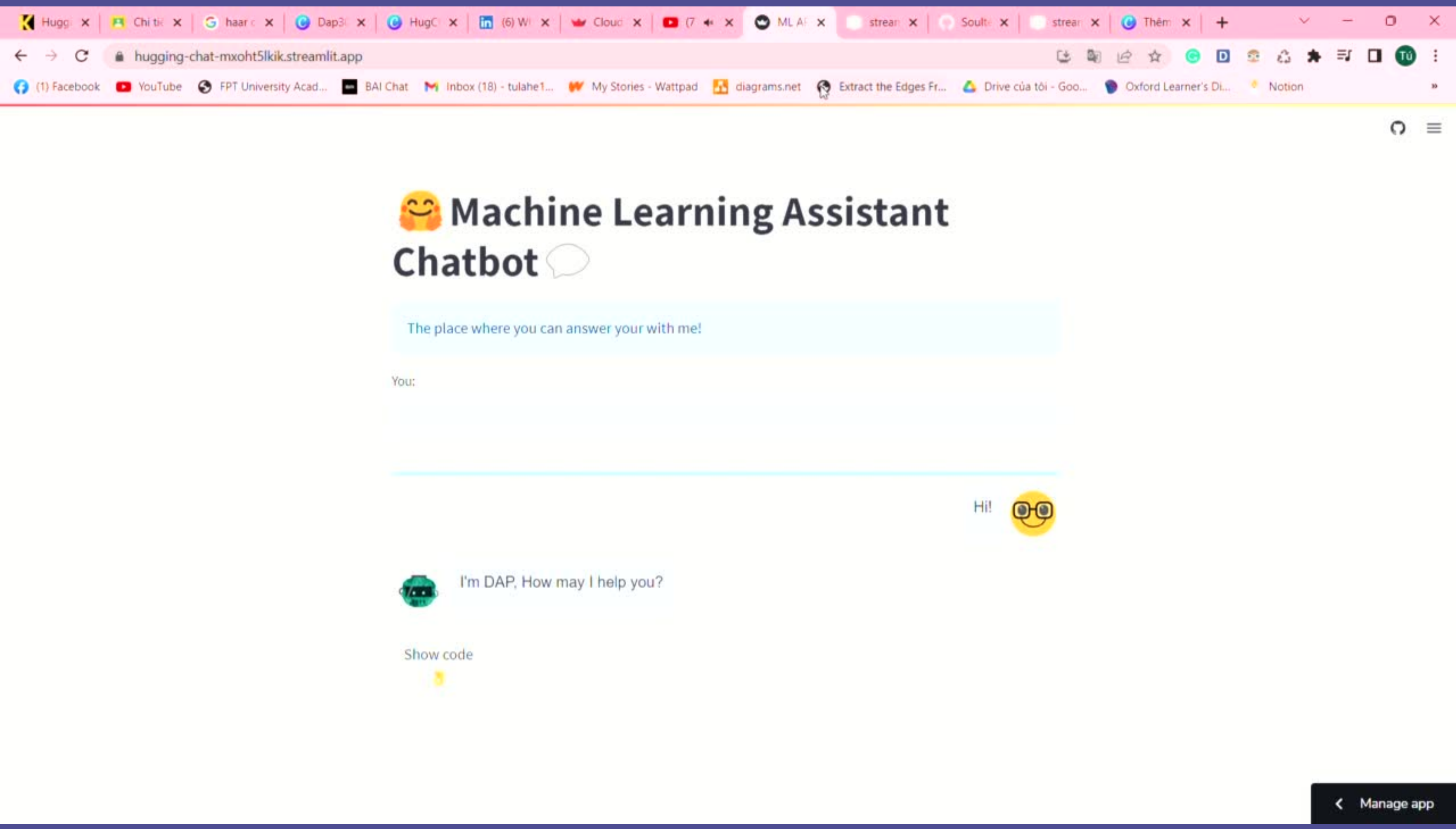
HuggingChat is a free and open source alternative to commercial chat offerings such as ChatGPT. In theory, the service could leverage numerous models, yet I have only seen it use LLaMa 30B SFT 6 (oasst-sft-6-llama-30b) from OpenAssistant thus far.
You can find out all about OpenAssistant's interesting efforts to build their chatbot here. While the model may not be GPT4 level, it is definitely a capable LLM with an interesting training story that is worth checking out.
Free and open source? Sounds great. But wait... there's more!
Can't get access to the ChatGPT4 API? Sick of paying for it even if you can? Why not give the unofficial HuggingChat Python API a try?

No API keys. No signup. No nothin'! Just pip install hugface



```python
# Generate empty lists for generated and past.
## generated stores AI generated responses
if "generated" not in st.session_state:
    st.session_state["generated"] = ["I'm DAP, How may I help you?"]
## past stores User's questions
if "past" not in st.session_state:
    st.session_state["past"] = ["Hi!"]

# Layout of input/response containers
input_container = st.container()
colored_header(label="", description="", color_name="blue-30")
response_container = st.container()

 # User input
 ## Function for taking user provided prompt as input
 def get_text():
     input_text = st.text_input("You: ", "", key="input")
     return input_text


 ## Applying the user input box
 with input_container:
     user_input = get_text()


 # Response output
 ## Function for taking user prompt as input followed by producing AI generated responses
 def generate_response(prompt):
     chatbot = hugchat.ChatBot(cookie_path="cookie_path.json")
     response = chatbot.chat(prompt)
     return response


 ## Conditional display of AI generated responses as a function of user provided prompts
 with response_container:
     if user_input:
         response = generate_response(user_input)
         st.session_state.past.append(user_input)
         st.session_state.generated.append(response)

     if st.session_state["generated"]:
         for i in range(len(st.session_state["generated"])):
             message(st.session_state["past"][i], is_user=True, key=str(i) + "_user")
             message(st.session_state["generated"][i], key=str(i))
```

4. Deployment in Streamlit



Machine Learning Assistant Chatbot

The place where you can answer your with me!

You:

Hi!

I'm DAP, How may I help you?

Show code

Link to the chatbot web: huggingchat

5. Limitations of Hugging Chat

=> Hug chat is not reliable

- Some reports have claimed that HuggingChat is prone to producing inaccurate data and hallucinations.
- To test this out, a prompt stating “Who is the fourth president of the United States?” was put out and it generated this as the first response- “| Term Start | Term End | Party | Vice President(s) |
- | --- | --- | --- | --- | --- |
- | | March 4, 1809 | March 3, 1817 | Democratic-Republican | George Clinton to May 20, 1812; Elbridge Gerry from November 11, 1813 |”
-
- So, it delivers outputs that might be out of place. Upon following up with the same prompt, it generated quite a long answer which was incomplete. It sometimes stops generating output in the middle of the response so asking it to “continue” with the response won’t work. The model will either stay on the topic or provide completely irrelevant output.
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- The AI chatbot is aware of these limitations, however, and will often remind the user of them. At one point, when I asked it for a joke and it failed to respond, its next reply to me said "Please note that I am still learning how to generate jokes effectively so my response might not always hit the mark".
- In another example, when I asked HuggingChat if it's better than ChatGPT, it responded with the following: "Yes, I am a GPT language model developed by OpenAI. My purpose is to generate human-like text and answer questions based on the information provided in my training data", which is obviously incorrect information.

6. Summary

HUGGINGCHAT IS AN OPEN-SOURCE AI ASSISTANT DEVELOPED BY HUGGING FACE THAT AIMS TO PROVIDE USERS WITH A FRIENDLY, HUMAN-LIKE PERSONALITY AND THE ABILITY TO UNDERSTAND AND RESPOND TO NATURAL LANGUAGE QUERIES. WITH HUGGINGCHAT, YOU CAN ENJOY AN AI ASSISTANT THAT IS ACCESSIBLE TO EVERYONE AND CAN HANDLE MANY OF THE TASKS THAT CHATGPT CAN. WHILE THERE ARE LIMITATIONS AT THE MOMENT, HUGGINGCHAT’S DEVELOPERS ARE WORKING ON RESOLVING LICENSING ISSUES, SO STAY TUNED FOR UPDATES. GET STARTED WITH HUGGINGCHAT TODAY AND EXPERIENCE A CHATBOT THAT

7. References

- WHAT IS HUGGINGCHAT? EVERYTHING TO KNOW ABOUT THIS OPEN-SOURCE AI CHATBOT
- EXPLAINED: WHAT IS HUGGINGCHAT? IS IT BETTER THAN CHATGPT?
- HTTPS://WWW.KDNUGGETS.COM/2023/05/HUGGINGCHAT-PYTHON-API-ALTERNATIVE.HTML
- SOURCE CODE: GITHUB
- WHAT IS HUGGINGCHAT? BENEFITS, LIMITATIONS, USE & MORE