

Don't Think You Can Create Your Own Chatbot? You Can!

WHAT IS A CHATBOT?

A chatbot is a software application designed to simulate conversation with human users, often via text or voice interactions, to provide information, assistance, or entertainment based on programmed responses or artificial intelligence algorithms. (GPT-4, 04/08/24)

CHATBOT GENERATORS

PLATFORM	STRENGTHS	WEAKNESSES
AutogenStudio UI 2.0	Microsoft product; provides a lot of directions	Requires Python 3.11, a Conda environment, and API keys; steep learning curve
ChatGPT-4	AI leader; can include API's; useful for knowledgeable developers	Users must have an account to engage chatbot; 20 file upload limit
CrewAI	You can sign up to be on wait list (as of 04/15/24)	Still in beta; accepting names for wait list
HuggingFace	You can choose which AI model powers the chatbot; can connect chatbot to Internet (experimental)	Users must have an account to engage chatbot
Mizou	Adheres to COPPA/FERPA/GDPR guidelines; shares chat history; does not use AI data for training; supports 50 grade levels	<i>Knowledge File uploads, Grading Rubrics, and Time functionality all require \$\$ subscription; narrow use cases for AI functionality</i>
Poe	Chatbot can be toggled to "cite sources"	User cannot provide online training sources
RiffbotAI	Promotes reflection; easy-to-use; supports 19 languages	Training material limited to text inputs only (no uploads or ULRs); narrow use cases for AI functionality; free plan limited to 500 chats across all created bots
Zapier	Development template; AI-generated chatbot-user interaction	Free account allows for 2 chatbot creations

CREATING A CUSTOMIZED CHATBOT IN HUGGINGFACE*

WEBSITE: [HuggingChat - Assistants](#)

* [PRIVACY POLICY](#): Data not used for research or model training; all assistants are public.

To begin, click the “+Create New assistant” button (upper right-hand corner)

+ Create New assistant

- **Avatar**: upload an image to display as the “face” of the chatbot/assistant
- **Name**: the assistant’s name
- **Description**: explain what the assistant knows and does
- **Model**: choose from 6 LLMs to run the assistant

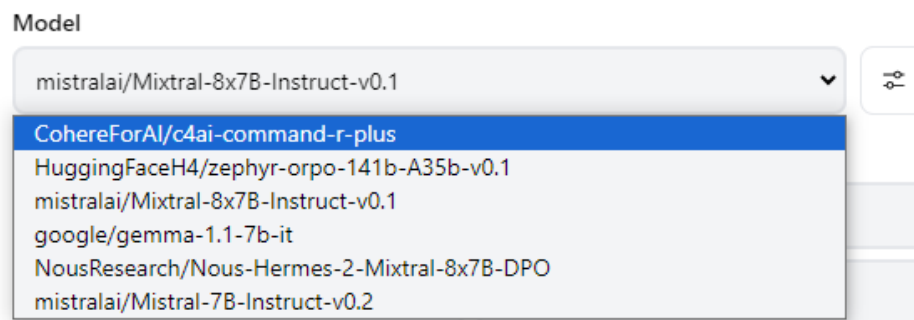


Figure 1 Large Language Model (LLM) options as of 04.17.24

- **User start messages**: the statement(s) you want to the assistant to use when greeting a user; multiple messages can be supplied
- **Internet access (experimental feature as of 04.17.24)**:
 - Only one of the listed reference methods can be checked
 - Default: “Assistant will not use internet to do information retrieval and will respond faster. Recommended for most Assistants”
 - Web search: the assistant will reference online sources
 - Domains search: the specific domains an assistant should refer to when answering a prompt
 - Specific links: the specific hyperlinks an assistant should refer to when answering a prompt

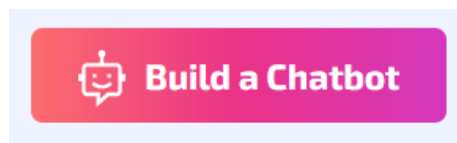
- **Dynamic Prompt:** “Allow the use of template variables {{url=https://example.com/path}} to insert dynamic content into your prompt by making GET requests to specified URLs on each inference”
- **Instructions (System Prompt):** explain, with as much detail as possible, the assistant’s role, expertise, objectives, tone, etc.

CREATING A CUSTOMIZED CHATBOT IN MIZOU*

WEBSITE: <https://mizou.com/bot>

* [PRIVACY POLICY](#): Abides by FERPA; collects user-AI interaction data; does not share user data with OpenAI for training or improving GPT models; data collected via OpenAI’s API saved for 30 days and then deleted.

To begin, click the “My Chatbots” button (left-hand column) > “Build a Chatbot” button



- **Mode of chatbot creation:**
 - Custom: “You will create the prompt from scratch”
 - AI-Generated: “Mizou will create the prompt based on your learning objectives”
- **Learning Objectives:** “Describe the specific skill or knowledge that the student is expected to acquire by the end of the interaction”
- **Grade Level:** “Specify the grade level to adapt the interaction appropriately”
- **“Get Ideas” button:** AI generates prompts a quiz, discussion, multiple choice quiz, interactive story or an essay > select the preferred prompt and click the “Generate” button

Chatbot Instructions

- **Title:** “Add a title to represent the chatbot experience. It should be explanatory and engaging for the student to motivate them to start”
- **AI Instructions:** “Clearly define the roles and responsibilities for both the chatbot and the student, including what they should do, how they should do it, when these actions should take place etc.”
 - An initial set of directions is automatically-generated for the assistant
 - If a user wishes to change those, they can manually be re-written or re-generated via AI (click the “Generate” button)

- o 1,000 character limit on written instructions
- **Grade level:** choose the grade level (from “Kindergarten” to “University”)
- **Picture:** the chatbot image shown to users (upload a different image file by clicking the pencil icon)
- **AI Name:** AI-generates a name that can be changed

More options

- Click the “Generate all fields” button to have AI draft responses for the remaining fill-in fields
- **Welcome message:** “Add a welcoming message that the chatbot should always start with”
 - o 250 character limit
- **Rules:** “Delineate the guidelines for actions that the chatbot and student should or should not undertake”
 - o 1,000 character limit
- **Knowledge File:** “By uploading files, you enable the chatbot to use the content from these files. The Chatbot automatically decides when to retrieve content based on user interaction”
 - o This feature is only available with a paid subscription
- **Audio:** choose either “Emma” or “John” as the voice for reading the chatbot material
 - o Clicking the triangle play button plays the audio in the chosen voice
 - o Clicking on the three-dot horizontal bar allows for changing the playback speed
 - o Clicking the microphone icon (lower right-hand corner) allows the user to record their prompt (speech-to-text)
 - To stop a voice recording click the square stop button
 - To approve of the recording click the checkmark icon
 - To discard a recording click the trashcan icon



Figure 2 Chatbot screen showing audio features.

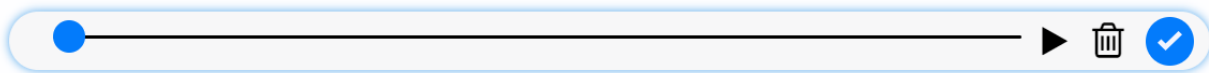


Figure 3 Options for keeping or deleting a speech-to-text prompt message.

Discovery

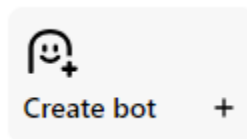
- **Thumbnail:** upload an image to associate with your assistant (upload a different image file by clicking the pencil icon)
 - **Short description:** “Provide a concise yet informative description that introduces and defines the chatbot's experience and purpose to the student”
 - 500 character limit
 - **Subject:** select the academic subject area that best reflects your chatbot

CREATING A CUSTOMIZED CHATBOT IN POE*

WEBSITE: https://poe.com/create_bot

* **USAGE POLICY:** Poe’s chatbots may be powered by 3rd parties, and thus fall under the policies associated with those operations; [OpenAI privacy policy](#); [Anthropic privacy information](#); [Google privacy policy](#); [Meta \(Llama 2?\) privacy policy](#)

To begin, click the “+Create bot” button (upper left-hand corner)



- **Edit picture:** click the picture to upload an image file
- **Handle:** chatbot’s name/title

Bot behavior: select “Use prompt”

- **Bot base:** select the LLM (capable of either text or image generation) to run your chatbot
- **Prompt:** “Tell your bot how to behave and how to respond to user messages”
- **Show prompt in bot profile toggle**

- **Knowledge Base:** “Provide custom knowledge that your bot will access to inform its responses. Your bot will retrieve relevant sections from the knowledge base based on the user message. The data in the knowledge base may be made viewable by other users through bot responses or citations”
- Click the “+ Add knowledge source” button to provide
 - the chatbot’s reference material
 - The chatbot accepts PDFs and (editable) text entered by the user
 - Maximum file size 50 MB

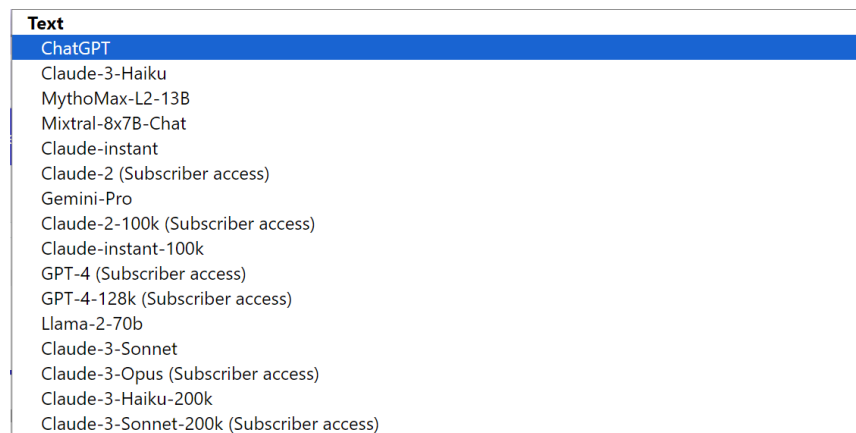


Figure 4 A portion of the drop-down menu sharing the AI models (for generative text tasks) available via Poe.

- If the chatbot cannot answer a user’s prompt = it lacks the necessary training information to do so, it states: “I am unable to answer your question because the information you provided does not include [x] . . .”
 - Once content is shared to the “Knowledge Base” the option “Cite sources” appears and can be toggled on (“yes”) or off (“no”)
- **Greeting message:** how you want the chatbot to greet a user at the start of each conversation
- **Advanced**
 - **Suggest replies:** it will suggest additional replies
 - **Render markdown content:**
 - **Custom temperature:** “Controls the creativity of the bot's responses. Higher values produce more varied but unpredictable replies, lower values generate more consistent responses”
 - The default varies by model > if you are concerned about answers being too restrictive or too wild, check different LLMs
- When engaging with the chatbot user can upload files as well as use voice-to-text

Bot profile: “Describe what your bot does and what people can expect from it”

- o 4,000 character limit
- **Access**
 - o **Make bot publicly accessible:** “If this setting is enabled, the bot will be added to your profile and will be publicly accessible. Turning this off will make the bot private”
 - o **Related bot recommendations:** “When enabled, your bot will be eligible to be recommended on other bots' pages. Related bots will also be displayed on your bot's page”
 - o **Show prompt in bot profile:** the text prompt will be visible to all users when they engage with the chatbot

CREATING A CUSTOMIZED CHATBOT IN RIFFBOT.AI*

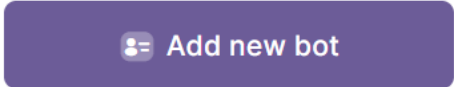
WEBSITE: <https://riffbot.ai/>

* [PRIVACY POLICY](#): Data is collected “for the purposes of providing our services” but is not shared with third parties.

TUTORIAL: [Riff Onboarding Tutorial](#)

OFFICIAL STATEMENT OF PURPOSE: “Unlike other AI chatbots, Riff is designed to help people reflect by asking questions. The framing of the initial question is important so that the response it gets from the user is a good starting point for the conversation. We have provided a default question, which you can edit or replace completely to fit your goals. Do the same for the remaining fields, including the content of a follow up email Riff will offer to send at the end of the conversation.”

To begin, click the “Add new bot” button (left-hand column)

A purple rectangular button with rounded corners. On the left, there is a white icon of a person with a plus sign. To the right of the icon, the text "Add new bot" is written in white.

- **Bot alias:** the bot's name or handle
 - o 150 character limit
- **Ask user's name and email:** function available through subscription only
- **Language:** 19 languages are available
- **Intro text:** “This is the introductory text displayed by the bot, right after saying hi. You may want to describe your bot's mission here”
 - o 400 character limit

- **Opening question:**
 - 400 character limit
- **Context:** “Inform Riff about your learners and/or about the experience/activity to reflect on”
 - 1,000 character limit
- **Chat Preview:** interact with the chatbot
- **Activity Log:** see how many users have engaged with the chatbot

Chatbot Summary page:

- **Edit:** lets the user edit chatbot preferences
- **Share:** shares the chatbot via multiple methods
 - QR code, QR code icon download, a hyperlink
 - Embedding it into a webpage or app via generated JavaScript for fullpage, Standard (webpage), Livechat, or Custom (requires a “custom integration”)
- **Three-dot horizontal bar:** lets the user disable, duplicate, or delete the chatbot

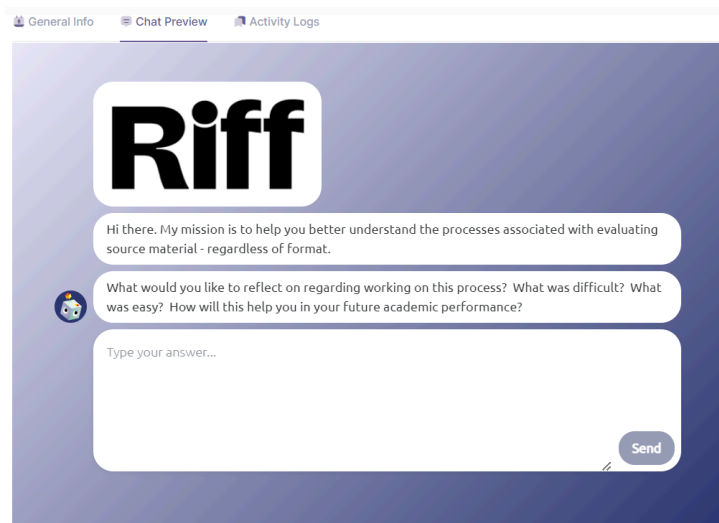


Figure 5 Preview of Riff.ai chatbot.

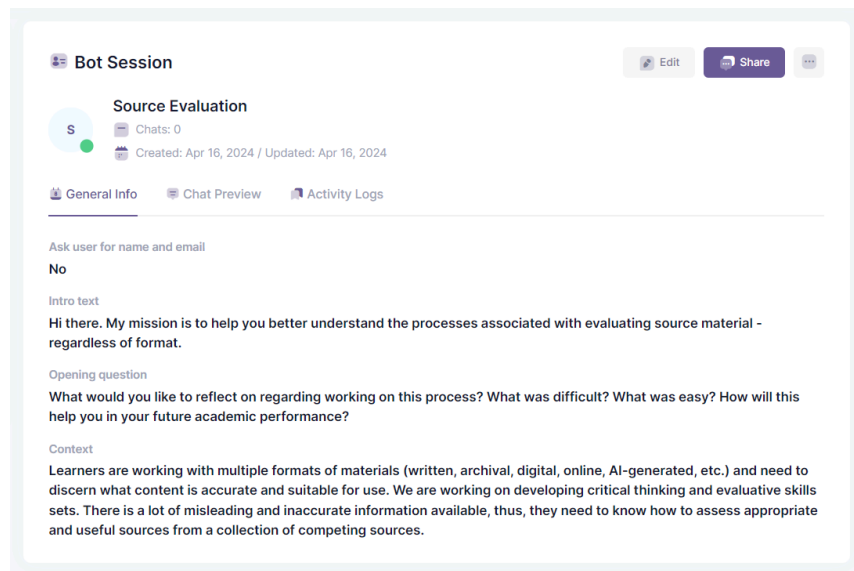


Figure 6 Chatbot summary page.



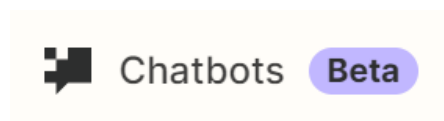
Figure 7 Upper right-hand menu displayed on the chatbot summary page.

CREATING A CUSTOMIZED CHATBOT IN ZAPIER*

WEBSITE: <https://zapier.com/app/chatbots> (Beta)

* [PRIVACY POLICY](#): chatbot conversations are stored for 60 days ([Data Retention/Deletion/Export policies](#)).

To begin, click the “Chatbots” button (left-hand menu) > “+Create” button (upper right-hand corner)



Setup

- **Name:** choose your chatbot’s name

- **Greeting type:**
 - o Static: user-generated and the same for every conversation
 - o Ai-generated: “Use AI to create a unique greeting for every conversation”
- **Greeting prompt:** the standard text greeting a user when in “Static” mode
- **User input placeholder:** the shadow text in the prompt window every user sees

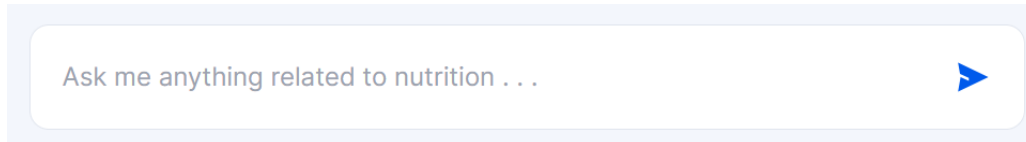


Figure 8 A prompt window containing the given input placeholder.

- **Model:** OpenAI’s GPT-3.5 is the only model available on the free plan
- **Creativity:** you can set it from “Predictable” to “Random”
- **Display disclosure message in greeting:** when this is toggled “on” the following appears: “This is an automated chatbot response. [Learn more](https://zapier.com/legal/terms-of-service)”

Advanced options

- o **Browser title:** default is “chat” but this can be changed/edited
- o **Subdomain:** chatbot’s name plus the “.zapier.app/” subdomain
- o **Display the “Built on Zapier” label:** upgrade to hide the label

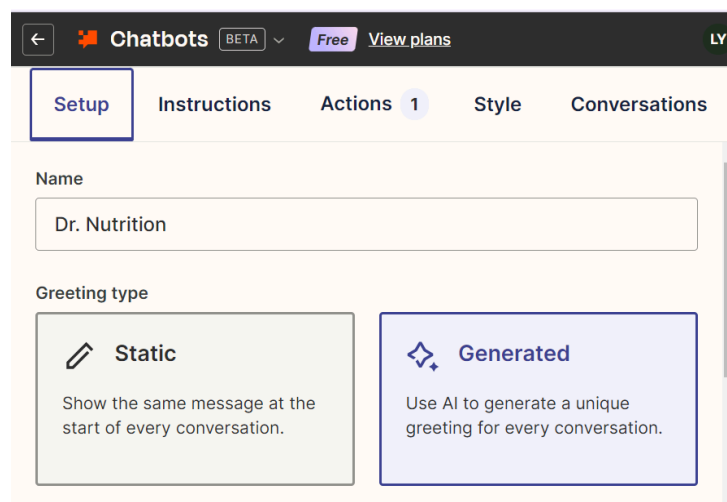


Figure 9 Zapier’s chatbot main creation menu.

Instructions

- **Directive:** “Tell the bot how you’d like it to respond. Include style, tone, accent, and more” (to increase the size of the window, click on the “pop” icon Opening arrows; to close click on the closing arrows)
 - Directive template: provides key categories including: Role, Objective, Engagement Steps, Audience, Context, Resources, and Style
 - Other Rules: If a user asks questions beyond the scope of {x} do not address these queries directly. Instead, guide them back to the topics you can assist with by providing a list of relevant subjects or redirecting them to the appropriate resources

Actions

- **Collect leads:** a feature available through a subscription
- **Zap button:** “Display button that triggers a Zap”
- **Copy response:** the default in a free version
 - Click the “Add action” button
 - Collect info – “Request info from the user” that is
- **Suggestions:** “Give users default prompts to use”

Style (a feature available through a subscription)

Conversations

- The free default version allows developers to see the most recent 7 days of the chat history

Sharing

- The chatbot can be shared via: a hyperlink, a “Share” button (which provides a hyperlink and user access control), and an “Embed” button (whose features are available through a subscription)

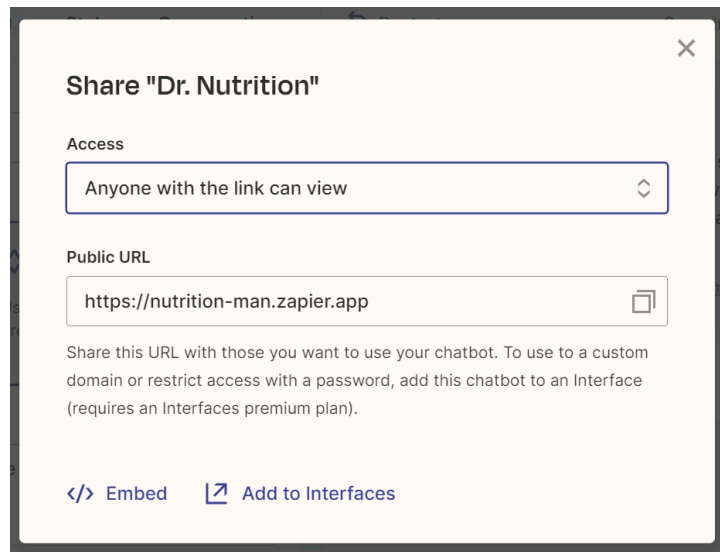


Figure 10 Sharing options for a Zapier chatbot via the “Share” button.