

```
pip install gradio
```



```
Requirement already satisfied: gradio in /usr/local/lib/python3.11/dist-packages (5.31.0)
Requirement already satisfied: aiofiles<25.0,>=22.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (24.1.0)
Requirement already satisfied: anyio<5.0,>=3.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (4.9.0)
Requirement already satisfied: fastapi<1.0,>=0.115.2 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.115.14)
Requirement already satisfied: ffmpeg in /usr/local/lib/python3.11/dist-packages (from gradio) (0.6.0)
Requirement already satisfied: gradio-client==1.10.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (1.10.1)
Requirement already satisfied: groovy~=0.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.1.2)
Requirement already satisfied: httpx>=0.24.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.28.1)
Requirement already satisfied: huggingface-hub>=0.28.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.33.2)
Requirement already satisfied: jinja2<4.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.1.6)
Requirement already satisfied: markupsafe<4.0,>=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.0.2)
Requirement already satisfied: numpy<3.0,>=1.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.0.2)
Requirement already satisfied: orjson~=3.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.10.18)
Requirement already satisfied: packaging in /usr/local/lib/python3.11/dist-packages (from gradio) (24.2)
Requirement already satisfied: pandas<3.0,>=1.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.2.2)
Requirement already satisfied: pillow<12.0,>=8.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (11.2.1)
Requirement already satisfied: pydantic<2.12,>=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.11.7)
Requirement already satisfied: pydub in /usr/local/lib/python3.11/dist-packages (from gradio) (0.25.1)
Requirement already satisfied: python-multipart>=0.0.18 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.0.20)
Requirement already satisfied: pyyaml<7.0,>=5.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (6.0.2)
Requirement already satisfied: ruff>=0.9.3 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.12.2)
Requirement already satisfied: safehttpx<0.2.0,>=0.1.6 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.1.6)
Requirement already satisfied: semantic-version~=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.10.0)
Requirement already satisfied: starlette<1.0,>=0.40.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.46.2)
Requirement already satisfied: tomkit<0.14.0,>=0.12.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.13.3)
Requirement already satisfied: typer<1.0,>=0.12 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.16.0)
Requirement already satisfied: typing-extensions~=4.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (4.14.1)
Requirement already satisfied: uvicorn>=0.14.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.35.0)
Requirement already satisfied: fsspec in /usr/local/lib/python3.11/dist-packages (from gradio-client==1.10.1->gradio) (2025.3.2)
Requirement already satisfied: websockets<16.0,>=10.0 in /usr/local/lib/python3.11/dist-packages (from gradio-client==1.10.1->gradio) (15.0.1)
Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.11/dist-packages (from anyio<5.0,>=3.0->gradio) (3.10)
Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/python3.11/dist-packages (from anyio<5.0,>=3.0->gradio) (1.3.1)
Requirement already satisfied: certifi in /usr/local/lib/python3.11/dist-packages (from httpx>=0.24.1->gradio) (2025.6.15)
Requirement already satisfied: httpcore==1.* in /usr/local/lib/python3.11/dist-packages (from httpx>=0.24.1->gradio) (1.0.9)
Requirement already satisfied: h11>=0.16 in /usr/local/lib/python3.11/dist-packages (from httpcore==1.*->httpx>=0.24.1->gradio) (0.16.0)
Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (3.18.0)
Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (2.32.3)
Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (4.67.1)
Requirement already satisfied: hf-xet<2.0.0,>=1.1.2 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (1.1.5)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2025.2)
Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (0.7.0)
Requirement already satisfied: pydantic-core==2.33.2 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (2.33.2)
Requirement already satisfied: typing-inspection>=0.4.0 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (0.4.1)
Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (8.2.1)
Requirement already satisfied: shellingham>=1.3.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (1.5.4)
Requirement already satisfied: rich>=10.11.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (13.9.4)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2->pandas<3.0,>=1.0->gradio) (1.17.0)
Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0,>=0.12->gradio) (3.0.0)
Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0,>=0.12->gradio) (2.19.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->huggingface-hub>=0.28.1->gradio) (3.4.2)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->huggingface-hub>=0.28.1->gradio) (2.4.0)
Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python3.11/dist-packages (from markdown-it-py>=2.2.0->rich>=10.11.0->typer<1.0,>=0.12->gradio) (0.1.2)
```

```
pip install google-generativeai
```



```
Requirement already satisfied: google-generativeai in /usr/local/lib/python3.11/dist-packages (0.8.5)
Requirement already satisfied: google-ai-generativelanguage==0.6.15 in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (0.6.15)
Requirement already satisfied: google-api-core in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (2.25.1)
Requirement already satisfied: google-api-python-client in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (2.175.0)
Requirement already satisfied: google-auth>=2.15.0 in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (2.38.0)
Requirement already satisfied: protobuf in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (5.29.5)
Requirement already satisfied: pydantic in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (2.11.7)
Requirement already satisfied: tqdm in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (4.67.1)
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.11/dist-packages (from google-generativeai) (4.14.1)
Requirement already satisfied: proto-plus<2.0.0dev,>=1.22.3 in /usr/local/lib/python3.11/dist-packages (from google-ai-generativelanguage==0.6.15->google-generativeai) (1.26.1)
Requirement already satisfied: googleapis-common-protos<2.0.0,>=1.56.2 in /usr/local/lib/python3.11/dist-packages (from google-api-core->google-generativeai) (1.70.0)
Requirement already satisfied: requests<3.0.0,>=2.18.0 in /usr/local/lib/python3.11/dist-packages (from google-api-core->google-generativeai) (2.32.3)
Requirement already satisfied: cachetools<6.0,>=2.0.0 in /usr/local/lib/python3.11/dist-packages (from google-auth>=2.15.0->google-generativeai) (5.5.2)
Requirement already satisfied: pyasn1-modules>=0.2.1 in /usr/local/lib/python3.11/dist-packages (from google-auth>=2.15.0->google-generativeai) (0.4.2)
Requirement already satisfied: rsa<5,>=3.1.4 in /usr/local/lib/python3.11/dist-packages (from google-auth>=2.15.0->google-generativeai) (4.9.1)
Requirement already satisfied: httplib2<1.0.0,>=0.19.0 in /usr/local/lib/python3.11/dist-packages (from google-api-python-client->google-generativeai) (0.22.0)
Requirement already satisfied: google-auth-httplib2<1.0.0,>=0.2.0 in /usr/local/lib/python3.11/dist-packages (from google-api-python-client->google-generativeai) (0.2.0)
Requirement already satisfied: uritemplate<5,>=3.0.1 in /usr/local/lib/python3.11/dist-packages (from google-api-python-client->google-generativeai) (4.2.0)
Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.11/dist-packages (from pydantic->google-generativeai) (0.7.0)
Requirement already satisfied: pydantic-core==2.33.2 in /usr/local/lib/python3.11/dist-packages (from pydantic->google-generativeai) (2.33.2)
Requirement already satisfied: typing-inspection>=0.4.0 in /usr/local/lib/python3.11/dist-packages (from pydantic->google-generativeai) (0.4.1)
Requirement already satisfied: grpcio<2.0.0,>=1.33.2 in /usr/local/lib/python3.11/dist-packages (from google-api-core[grpc]!=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,
Requirement already satisfied: grpcio-status<2.0.0,>=1.33.2 in /usr/local/lib/python3.11/dist-packages (from google-api-core[grpc]!=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,
Requirement already satisfied: pyparsing!=3.0.0,!=3.0.1,!=3.0.2,!=3.0.3,<4,>=2.4.2 in /usr/local/lib/python3.11/dist-packages (from httplib2<1.0.0,>=0.19.0->google-api-python-client->google-genera
Requirement already satisfied: pyasn1<0.7.0,>=0.6.1 in /usr/local/lib/python3.11/dist-packages (from pyasn1-modules>=0.2.1->google-auth>=2.15.0->google-generativeai) (0.6.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-core->google-generativeai) (3.4.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-core->google-generativeai) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-core->google-generativeai) (2.4.0)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-core->google-generativeai) (2025.6.15)
```

```
pip install gtts
```



```
Collecting gtts
  Downloading gTTS-2.5.4-py3-none-any.whl.metadata (4.1 kB)
Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.11/dist-packages (from gtts) (2.32.3)
Collecting click<8.2,>=7.1 (from gtts)
  Downloading click-8.1.8-py3-none-any.whl.metadata (2.3 kB)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (3.4.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (2.4.0)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (2025.6.15)
Downloading gTTS-2.5.4-py3-none-any.whl (29 kB)
Downloading click-8.1.8-py3-none-any.whl (98 kB)
98.2/98.2 kB 9.1 MB/s eta 0:00:00

Installing collected packages: click, gtts
  Attempting uninstall: click
    Found existing installation: click 8.2.1
    Uninstalling click-8.2.1:
      Successfully uninstalled click-8.2.1
  Successfully installed click-8.1.8 gtts-2.5.4
```

```
import google.generativeai as genai
import gradio as gr
from gtts import gTTS
import os
from pydub import AudioSegment
```

```

# Set up Gemini API key
genai.configure(api_key="AIzaSyCRthQNsWVqNNswt07_UctkkohZQ9zjEmc")

prompt = "Enter Your Query Here"

def api_calling(prompt):
    model = genai.GenerativeModel("gemini-1.5-flash")
    response = model.generate_content(prompt)
    text_response = response.text if response.text else "No response generated."

    # Convert text to speech
    tts = gTTS(text_response, lang='en')
    audio_path = "response.mp3"
    tts.save(audio_path)

    # Speed up the audio using pydub (increase playback speed)
    sound = AudioSegment.from_file(audio_path)
    faster_sound = sound.speedup(playback_speed=1.3) # 30% faster
    faster_sound.export(audio_path, format="mp3")

    return text_response, audio_path # Return both text and audio

def message_and_history(input, history):
    history = history or []
    s = list(sum(history, ()))
    s.append(input)
    inp = ' '.join(s)
    output, audio = api_calling(inp) # Get both text and audio

    history.append((input, output))
    return history, history, audio

block = gr.Blocks(theme=gr.themes.Monochrome())

with block:
    gr.Markdown("<h1><center>Chatbot with Gradio, Gemini API, and gTTS</center></h1>")
    chatbot = gr.Chatbot()
    message = gr.Textbox(placeholder=prompt)
    state = gr.State()
    submit = gr.Button("SEND")
    audio_output = gr.Audio() # Audio component for voice output

    submit.click(message_and_history, inputs=[message, state], outputs=[chatbot, state, audio_output])

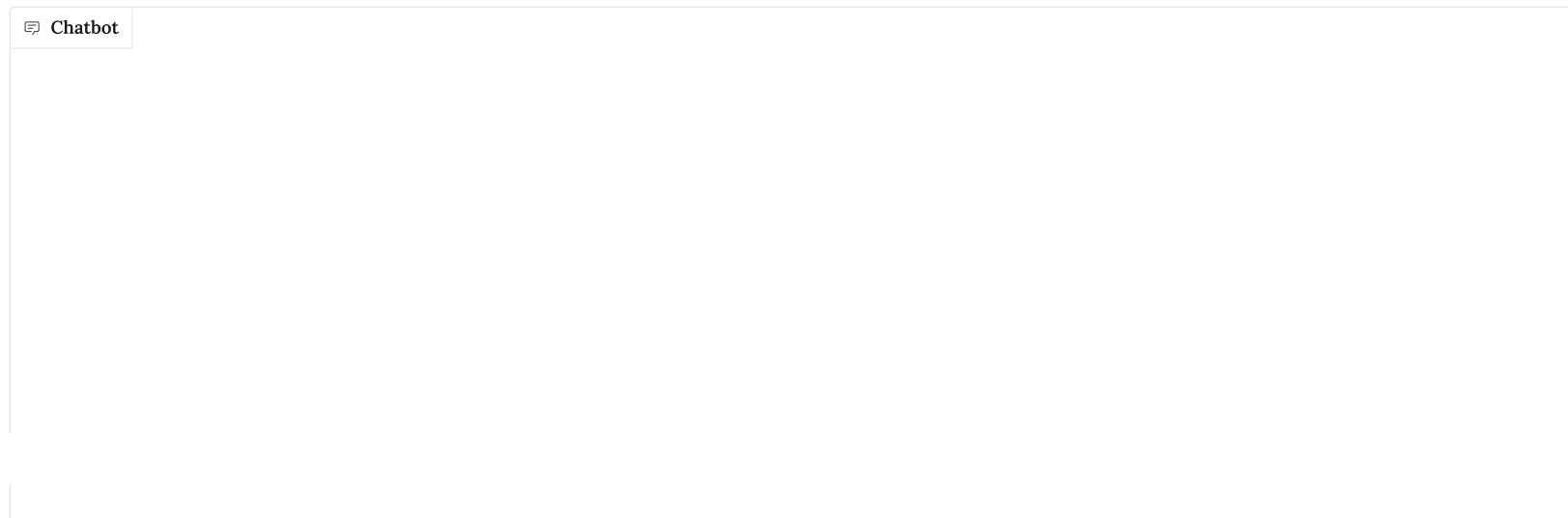
block.launch(debug=True)

```

```
↗ /tmp/ipython-input-4-4281476647.py:43: UserWarning: You have not specified a value for the `type` parameter. Defaulting to the 'tuples' format for chatbot messages, but this is deprecated and will
    chatbot = gr.Chatbot()
It looks like you are running Gradio on a hosted a Jupyter notebook. For the Gradio app to work, sharing must be enabled. Automatically setting `share=True` (you can turn this off by setting `share=False` in launch()).
Colab notebook detected. This cell will run indefinitely so that you can see errors and logs. To turn off, set debug=False in launch().
* Running on public URL: https://a1bbd27a56a9337d01.gradio.live

This share link expires in 1 week. For free permanent hosting and GPU upgrades, run `gradio deploy` from the terminal in the working directory to deploy to Hugging Face Spaces (https://huggingface.co/spaces/gradio/deploy-to-spaces)
```

Chatbot with Gradio, Gemini API, and gTTS



```
Keyboard interruption in main thread... closing server.
Killing tunnel 127.0.0.1:7860 <> https://a1bbd27a56a9337d01.gradio.live
```