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pip install SpeechRecognition pytsx3

import speech_recognition as sr

import pytsx3

import datetime

recognizer = sr.Recognizer()

tts_engine = pytsx3.init()

def speak(text):

    """Convert text to speech and speak it."""

    tts_engine.say(text)

    tts_engine.runAndWait()

def listen():

    """Listen to the user's voice and return the recognized text."""

    with sr.Microphone() as source:

        print("Listening...")

        recognizer.adjust_for_ambient_noise(source)

        audio = recognizer.listen(source)

    try:

        print("Recognizing...")

        text = recognizer.recognize_google(audio)

        print(f"You said: {text}")

        return text.lower()

    except sr.UnknownValueError:

        speak("Sorry, I did not understand that.")

        return ""

    except sr.RequestError:

        speak("Sorry, my speech service is down.")

        return ""

def respond(text):

    """Generate responses based on the recognized text."""

    if "time" in text:
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current_time = datetime.datetime.now().strftime("%I:%M %p")
speak(f"The current time is {current_time}")

elif "date" in text:
current_date = datetime.datetime.now().strftime("%B %d, %Y")
speak(f"Today's date is {current_date}")

elif "your name" in text:
speak("I am your voice assistant.")

elif "exit" in text or "bye" in text:
speak("Goodbye!")

return False

else:
speak("I am not sure how to respond to that.")

return True

def main():
speak("How can I help you today?")

while True:
text = listen()

if not text:
continue

if not respond(text):
break

if __name__ == "__main__":
main()
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