

```

# for speech-to-text
import speech_recognition as sr

# for text-to-speech
from gtts import gTTS
from playsound import playsound

# for language model
import transformers
import os
import time

# for data
import datetime
import numpy as np

# Building the AI
class ChatBot:
    def __init__(self, channel):
        print(f"----- Starting up {channel} -----")
        self.channel = channel

    def speech_to_text(self, only_text=False):
        if only_text:
            print("Me --> ", end="")
            self.text = input()
            return

        recognizer = sr.Recognizer()
        with sr.Microphone() as mic:
            recognizer.adjust_for_ambient_noise(mic)
            print("Listening...")
            audio = recognizer.listen(mic)
            self.text = "ERROR"

        try:
            self.text = recognizer.recognize_google(audio)
            print("Me --> ", self.text)
        except:
            print("Me --> ERROR")

    def text_to_speech(self, text, only_text=False):
        print(f"{self.channel} --> {text}")

```

```

    if only_text:
        return

    speaker = gTTS(text=text, lang="en", slow=False)
    speaker.save("res.mp3")
    statbuf = os.stat("res.mp3")
    mbytes = statbuf.st_size / 1024
    duration = mbytes / 200
    playsound("res.mp3")
    time.sleep(int(50 * duration))
    os.remove("res.mp3")

def wake_up(self, text):
    return True if self.channel.lower() in text.lower() else False

@staticmethod
def action_time():
    return datetime.datetime.now().time().strftime("%H:%M")

# Running the AI
if __name__ == "__main__":
    channel = "Dev"
    ai = ChatBot(channel=channel)
    nlp = transformers.pipeline("conversational",
model="microsoft/DialoGPT-medium")
    os.environ["TOKENIZERS_PARALLELISM"] = "true"
    ex = True
    while ex:
        ai.speech_to_text(only_text=True)
        ## wake up
        if ai.wake_up(ai.text) is True:
            res = "Hello I am Dave the AI, what can I do for you?"
        ## action time
        elif "time" in ai.text:
            res = ai.action_time()
        ## respond politely
        elif any(i in ai.text for i in ["thank", "thanks"]):
            res = np.random.choice(
                [

```

```

        "You're welcome!",
        "Anytime!",
        "No problem!",
        "Cool!",
        "I'm here if you need me!",
        "Mention not",
    ]
)
elif any(i in ai.text for i in ["exit", "close", "bye"]):
    res = np.random.choice(
        [
            "Tata",
            "Have a good day",
            "Bye",
            "Goodbye",
            "Hope to meet soon",
            "Peace out!",
        ]
    )
    ex = False
## conversation
else:
    if ai.text == "ERROR":
        res = "Sorry, come again?"
    else:
        chat = nlp(transformers.Conversation(ai.text),
pad_token_id=50256)
        res = str(chat)
        res = res[res.find("bot >> ") + 6 :].strip()
    try:
        ai.text_to_speech(res, only_text=False)
    except:
        pass
print(f"----- Closing down {channel} -----")

```

OUTPUT :-

----- Starting up Dev -----

All the layers of TFGPT2LMHeadModel were initialized *from* the model checkpoint at microsoft/DialoGPT-medium.

If your task *is* similar to the task the model of the checkpoint was trained on, you can already use TFGPT2LMHeadModel *for* predictions without further training.

Me --> Hey

Dev --> Hey! How are you?

Me --> I'm *fine*. *what about you?*

Dev --> I'm *fine* too.

Me --> what day *is* today?

Dev --> Today *is* the day.

Me --> nice joke

Dev --> I'm *not sure if you're* being serious *or not*.

Me --> what *is* current time?

Dev --> *20:43*

Me --> who *is* the first president of india?

Dev --> I think it was Rajendra Prasad.

Me --> wrong

Dev --> I'm *not sure what you mean*.

Me --> who *is* the first prime minister of britain?

Dev --> Robert Walpole

Me --> bye

Dev --> Peace out!

----- Closing down Dev -----