

Final Working Alexa Voice Assistant in Python

This PDF contains a clean, beginner-friendly version of the Alexa Voice Assistant code in Python. It includes proper error handling, better speech output, and works smoothly when required packages are installed.

```
import speech_recognition as sr
import pyttsx3
import pywhatkit
import wikipedia
import pyjokes
import datetime

# Initialize the recognizer and text-to-speech engine
listener = sr.Recognizer()
engine = pyttsx3.init()

# Set female voice (optional)
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id) # You can use [0] for male voice

def talk(text):
    # Convert text to speech
    print("Alexa:", text)
    engine.say(text)
    engine.runAndWait()

def take_command():
    # Listen to user's voice and recognize the command
    command = ""
    try:
        with sr.Microphone() as source:
            print("Listening...")
            listener.adjust_for_ambient_noise(source)
            voice = listener.listen(source)
            command = listener.recognize_google(voice)
            command = command.lower()
            if 'alexa' in command:
                command = command.replace('alexa', '').strip()
                print("You said:", command)
    except sr.UnknownValueError:
        print("Sorry, I didn't understand that.")
    except sr.RequestError:
        print("Network error. Check your internet connection.")
    return command

def run_alexa():
    # Process the command and respond accordingly
    command = take_command()

    if 'play' in command:
        song = command.replace('play', '').strip()
        talk("Playing " + song)
        pywhatkit.playonyt(song)

    elif 'time' in command:
        time = datetime.datetime.now().strftime('%I:%M %p')
        talk("The current time is " + time)

    elif 'who is' in command or 'who the heck is' in command:
        person = command.replace('who the heck is', '').replace('who is', '').strip()
        info = wikipedia.summary(person, 1)
        print(info)
        talk(info)

    elif 'date' in command:
```

```
talk("Sorry, I have a headache today.")

elif 'are you single' in command:
    talk("I am in a relationship with Wi-Fi.")

elif 'joke' in command:
    talk(pyjokes.get_joke())

elif command != "":
    talk("Please say the command again.")
else:
    pass # No voice detected, ignore silently

# Run Alexa continuously
while True:
    run_alexa()
```

Setup Instructions:

1. Install the required libraries using this command:
pip install SpeechRecognition pytsx3 pywhatkit wikipedia pyjokes pyaudio
2. If pyaudio gives an error, install it this way:
pip install pipwin
pipwin install pyaudio
3. Ensure your microphone works properly and internet is connected.
4. Run the script in your terminal or any Python IDE.
5. Stop the program anytime using Ctrl + C.