Creating an all knowing chatbot usually leaves the creators with too many options and possibilities, we will solve this problem by building ours to tend to a group of needs which our users will be made aware of.

Our chatbot will be able to

set reminders about appointments

1. **Time Query**

This routine is responsible for telling the user the current time. The output variable is ***TIME***

1. **Reminder/Appointment Query**

This routine is responsible for gathering the user’s appointments and reminders and saving it with a time stamp. The user is reminded when the assigned time arrives

The main input and output variables are reminder ***TOPIC*** and ***TIME***

The ***TOPIC*** iswhat ever the user wants to be reminded of (e.g. gym schedule, shift/work schedule etc.), the ***TIME*** variable describes when they wish to be reminded of the topic.

1. **Weather Query**

This function tells the user the weather in any location. The main input and output variables are ***LOCATION*** and ***TIME.***

1. **Atmospherics Query**

This function tells the user the atmospherics data in the room.

1. **Music Play Query (Alexa)**

Plays music for the user using Alexa (or any better platform).

1. **Version Query (Who are you, who made you)**

This routine handle input variables pertaining to the creator of the system, the version and the name of the system.

1. **Friendship Query (Friends list)**

This routine keeps a friend list of the friends, it primary purpose is to be used by the **security** routine to identify people and **mood** routine to cheer up a sad user.

1. **Mood Query (Makes user happy with music and stories)**

This routine is responsible for keeping the user in a good mood, it works with the **music** and **friendship** routine and its main aim is to keep the user in baseline emotionally.

1. **Greetings Query**

This routine handle greeting, welcomes the user home after a long time out. Works with the **time** routine

1. **Security query**

Uses the camera and other onboard sensors to keep tack of who is in the house/room. Alerts the user if there is an intruder.

This function will be used to listen for what the user is saying

**def listen ():**

**inpuText = microphone text to speech conversion result**

After the input text has been received, the system will search the text and compare the result with pre-programmed values. NLP will be used as a primary text analysis procedure while pre-programmed values will serve as a secondary.

**Time Query**

Keywords and response function

**if (inputText == ' what is the Time '):**

**tellTime ()**

**if (inputText == ' what the Time '):**

**tellTime ()**

**if (inputText == ' what is Time '):**

**tellTime ()**

**if (inputText == ' what Time '):**

**tellTime ()**

**if (inputText == ' Time '):**

**tellTime ()**

**if (inputText == ' tell me the time '):**

**tellTime ()**

**if (inputText == ' tell the time '):**

**tellTime ()**

**if (inputText == ' tell time '):**

**tellTime ()**

**if (inputText == ' the time '):**

**tellTime ()**

**if (inputText == ' me the time '):**

**tellTime ()**

**Reminder/Appointment Query**

Keywords and response function

**if (inputText == ' when is my appointment '):**

**remindAppointment ()**

**if (inputText == 'when my appointment '):**

**remindAppointment ()**

**if (inputText == ' my appointment '):**

**remindAppointment ()**

**if (inputText == 'appointment'):**

**remindAppointment ()**

**if (inputText == ' is my appointment '):**

**remindAppointment ()**

**if (inputText == ' is appointment '):**

**remindAppointment ()**

**if (inputText == ' book my appointment '):**

**doYouWantAppointment ()**

**if (inputText == ' book appointment '):**

**doYouWantAppointment ()**

**if (inputText == ' I want to cancel an appointment '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' want to cancel an appointment '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' to cancel an appointment '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' cancel an appointment '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' cancel appointment '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' appointment cancel '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' when is my reminder '):**

**remindAppointment ()**

**if (inputText == 'when my reminder '):**

**remindAppointment ()**

**if (inputText == ' my reminder '):**

**remindAppointment ()**

**if (inputText == ' reminder '):**

**remindAppointment ()**

**if (inputText == ' is my reminder '):**

**remindAppointment ()**

**if (inputText == ' is reminder '):**

**remindAppointment ()**

**if (inputText == ' book my reminder '):**

**doYouWantAppointment ()**

**if (inputText == ' book reminder '):**

**doYouWantAppointment ()**

**if (inputText == ' I want to cancel a reminder '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' want to cancel a reminder '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' to cancel a reminder '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' cancel a reminder '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' cancel reminder '):**

**doYouWantCancelAppointment ()**

**if (inputText == ' reminder cancel '):**

**doYouWantCancelAppointment ()**

**if (inputText == 'set reminder for'):**

**doYouWantSetAppointment ()**

**if (inputText == 'set reminder'):**

**doYouWantSetAppointment ()**

**if (inputText == 'reminder'):**

**doYouWantSetAppointment ()**

**if (inputText == 'cancel the reminder'):**

**doYouWantCancelAppointment ()**

As part of the **remindAppointment()** function, the user will be asked if they want to set a new appointment or reminder using the **doYouWantSetAppointment (),** if the response is yes, then the **setAppointment()** function will run.

**Weather** **Query**

Keywords and response function

**if (inputText == ' what is the weather '):**

**whatIsTheWeather ()**

**if (inputText == ' what the weather '):**

**whatIsTheWeather ()**

**if (inputText == ' what is weather '):**

**whatIsTheWeather ()**

**if (inputText == ' what weather '):**

**whatIsTheWeather ()**

**if (inputText == ' weather '):**

**whatIsTheWeather ()**

**if (inputText == ' tell me the weather '):**

**whatIsTheWeather ()**

**if (inputText == ' tell the weather '):**

**whatIsTheWeather ()**

**if (inputText == ' tell weather '):**

**whatIsTheWeather ()**

**if (inputText == ' the weather '):**

**whatIsTheWeather ()**

**if (inputText == ' me the weather '):**

**whatIsTheWeather ()**

The **whatIsTheWeather ()** function will first tell the user the weather in their current location, then ask if the user is interested in the weather in some other location

**Atmospherics Query**

Keywords and response function

**if (inputText == ' what is the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' what the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' what is temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' what temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' tell me the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' tell the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' tell temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' me the temperature '):**

**sayTempPreHumid ()**

**if (inputText == ' It is hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' what is the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' what the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' what is pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' what pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' tell me the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' tell the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' tell pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' me the pressure '):**

**sayTempPreHumid ()**

**if (inputText == ' what is the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' what the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' what is humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' what humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' tell me the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' tell the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' tell humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' me the humidity '):**

**sayTempPreHumid ()**

**if (inputText == ' I am feeling hot '):**

**sayTempPreHumidRec ()**

**if (inputText == ' am feeling hot '):**

**sayTempPreHumidRec ()**

**if (inputText == ' hot feeling '):**

**sayTempPreHumidRec ()**

**if (inputText == ' hot '):**

**sayTempPreHumidRec ()**

**if (inputText == ' I am hot '):**

**sayTempPreHumidRec ()**

**if (inputText == ' hot am '):**

**sayTempPreHumidRec ()**

**if (inputText == ' am hot '):**

**sayTempPreHumidRec ()**

**if (inputText == ' It is hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' is hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' It’s hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' It is hot in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' I am feeling cold '):**

**sayTempPreHumidRec ()**

**if (inputText == ' am feeling cold '):**

**sayTempPreHumidRec ()**

**if (inputText == ' cold feeling '):**

**sayTempPreHumidRec ()**

**if (inputText == ' cold '):**

**sayTempPreHumidRec ()**

**if (inputText == ' I am cold '):**

**sayTempPreHumidRec ()**

**if (inputText == ' cold am '):**

**sayTempPreHumidRec ()**

**if (inputText == ' am cold '):**

**sayTempPreHumidRec ()**

**if (inputText == ' It is cold in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' is cold in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' cold in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' It’s cold in here'):**

**sayTempPreHumidRec ()**

**if (inputText == ' It is hot in here'):**

**sayTempPreHumidRec ()**

A function will be used to search for some keywords in recorded speech. E.g. If the words cold, hot, here are found in a sentence, the **sayTempPreHumidRec()** will be run.

greet the user when they enter the house

talk to the user about; love, work, friendship

find out the weather

find out the location

Greetings = [' Hello Ecko ', ' Good morning ecko ', ' Greetings ', ' Hey Ecko ', ' Ecko ']

GreatWords = ['great', 'nice', 'love it', 'good', 'fab']

HelloWords = ['hello','greetings', 'Howdy']

AgeWords = ['how old', 'your age', 'your up time', 'you activated']

NameWords = ['you called', 'your name', 'call you', 'you are called']

MadeWords = ['who made you', 'wrote you', 'designed you', 'created you', 'your creator', 'your designer']

timeWords = ['what is the time', 'what is time', 'what time', 'is time', 'is it time', 'when', 'the time', 'what time', 'is time', 'is it time', 'when']

**Super Variables**

Weather

Time

Time

Day

Year

Atmospherics

Temperature

Humidity

Pressure

Position

City

Province

Country

**Brake One**

When the user returns to the house after being away for more than 6 hours, the unit will run the brakeOneProtocol

**Brake Two**

When the user returns to the house after being away for more than 24 hours (A day), the unit will run the brakeTwoProtocol

**Brake Three**

When the user returns to the house after being away for more than 168 hours (A week), the unit will run the brakeThreeProtocol

|  |  |
| --- | --- |
| Questions | Possible paraphrase |
| How are you? | How are you doing, Are you alright |
| How was your day | What is the |
| Who are you |  |
| What are you |  |
| What can you do |  |
| Are you a robot |  |
| Who is Emmanuel |  |
| What is a phone |  |
| Who is a doctor |  |
| What do doctors do |  |
| What is your mood |  |
| Are you angry |  |
| Are you happy |  |