CHATBOT

Abstract

Chatbot or conversational interfaces as they are also known, present a new way for individuals to interact with computer systems. Traditionally, to get a question answered by a software program involved using a search engine, or filling out a form. A chatbot allows a user to simply ask questions in the same manner that they would address a human. The most well known chatbots currently are voice chatbots: Alexa and Siri. However, chatbots are currently being adopted at a high rate on computer chat platforms. A simple chatbot can be created by loading an FAQ (frequently asked questions) into chatbot software.

Components

1) Arduino Uno [1]

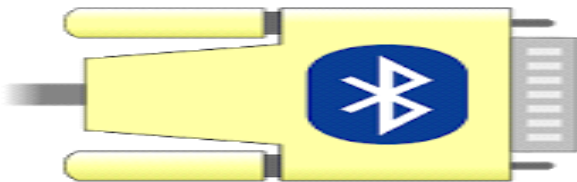

2) Bluetooth Module (HC-05) [1]

3)Jumper Wires [4]

4) Arduino Uno Software [1]

5)Serial Bluetooth Terminal [1]

This is an Android App controlled bot. This app is easily and freely available on Google PlayStore:

Working

This is an android app controlled bot. The app used is serial Bluetooth terminal Firstly we use HC-05 Bluetooth module. Connect tx pin of module to Rx pin of Arduino. This means Tx means transmit and Rx means receive. The data transmitted by the module will be received by the arduino and vice –versa . Connect the Rx pin of module to Tx pin of Arduino. As mentioned Above, a Chatbot are based upon either textual or auditory method and hence can be divided into two . They are so common now a days that there is hardly any one who is not aware of it. The conversations are in the form of written text.

Code

```cpp
#include<SoftwareSerial.h>

SoftwareSerial bt(10,11);

String data= "";

void setup()

{

    Serial.begin(9600);

    bt.begin(9600);

    //pinMode(3,OUTPUT);

    //pinMode(4,OUTPUT);


}

void loop()

{

        char a;

        while(bt.available()>0)

        {

            a=bt.read();

            data+=a;
```

```
    delay(5);

    //Serial.print(data);

    //Serial.println(data.length());

}

if(data == "hey\r\n")

{

    Serial.println(data);

    //delay(1000);

    bt.print("hello\n");

}

else if(data == "how are you? \r\n")

{

    Serial.println(data);

    bt.print("fine\n");

}

else if(data == "what are you doing? \r\n")

{

    Serial.println(data);

    bt.print("coding\n");

}
```

```
      else if(data == "what is your name? \r\n")

  {

    Serial.println(data);

    bt.print("Alenaaa!!!\n");

}

    else if(data == "who are you? \r\n")

{

    Serial.println(data);

    bt.print("I am Chat Bot!\n");

}

  else if(data == "do you like to talk? \r\n")

{

    Serial.println(data);

    bt.print("Yes I like to interact\n");

}

else if(data == "what is your status? \r\n")

{

    Serial.println(data);

    bt.print("Waiting for your Question \n");

}
```

```
        data ="";

}

  else if(data== " \r\n")

      {

          Serial.println(data);

          bt.print("INVALID\n");

          Serial.println("Bot :    INVALID\n");

      }
```

Block Diagram