

ICE 12

id:7

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wiki link: <https://github.com/Harshilpatel134/IOT/wiki/ICE-12>

[Document](#)

[Source](#)

[video](#)

objective

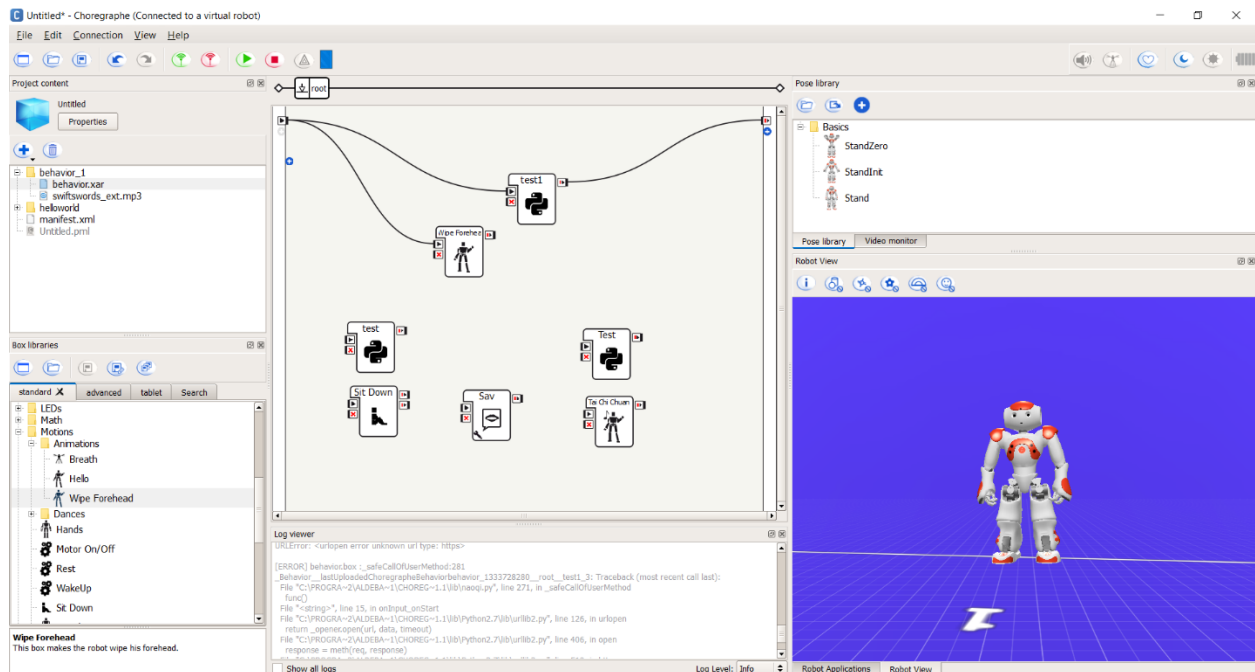
for this in class we are working with NAO robot

1. performe basic task.
2. communicate with NAO.
3. use rest API to get weather data using NAO robot.

Approaches

1. Construct flow for NOA.
2. Write python code to interact with NOA (use REST API call the get weather data from web service).
3. Add python code as module for NOA.

flow diagram



code

```

1  import json
2  import urllib2
3  class MyClass(GeneratedClass):
4      def __init__(self):
5          GeneratedClass.__init__(self)
6
7      def onLoad(self):
8          #put initialization code here
9          pass
10
11     def onUnload(self):
12         #put clean-up code here
13         pass
14
15     def onInput_onStart(self):
16         #self.onStopped() #activate the output of the box
17         result = json.loads(urllib2.urlopen(urllib2.Request("http://api.openweathermap.org/data/2.5/weather?q=kansas,us&mode=json&units=metrics&appid=907a0d541e90e08a4700053800659309"))
18         output_str = "Temperature is " + str(result["main"]["temp"]-273.15) + " and pressure is " + str(result["main"]["pressure"])
19         tts = ALProxy("ALTextToSpeech")
20         tts.say(str(output_str))
21
22     def onInput_onStop(self):
23         self.onUnload() #it is recommended to reuse the clean-up as the box is stopped
24         self.onStopped() #activate the output of the box

```

conclusion

with the help of this assignment we where able to learn...

1. how to performe basic task with NAO.
2. communicate with NAO.
3. using rest API to get weather data using NAO robot.

