

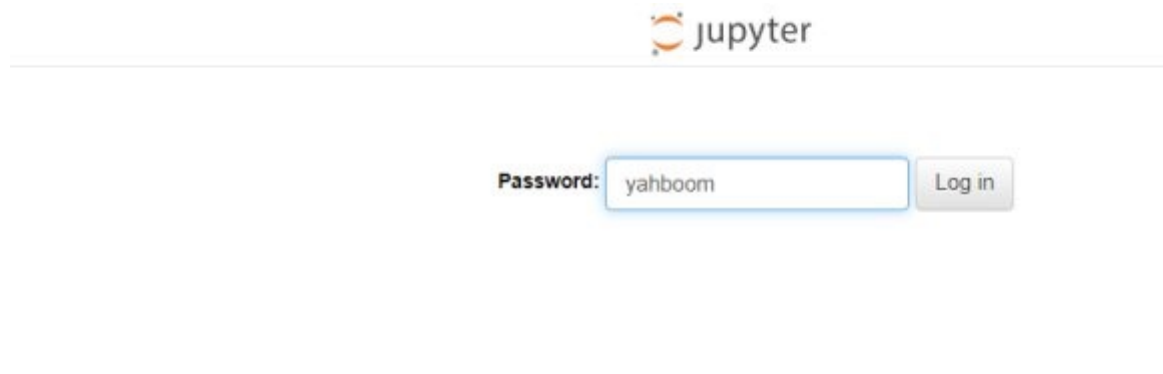
Attitude angle reading

1. Purpose of the experiment

Realize the reading of dog's posture angle.

2. Experimental path source code

Enter the dog's system, end the dog program, enter "ip (ip is the dog's ip): 8888" in the browser, enter the password "yahboom"



and log in. Enter the path of `cd ~/DOGZILLA_Lite_class/2.Base Control/09.Read attitude angle` and run **Read attitude angle.ipynb**.

3. Experimental Phenomenon

After running the code, the underlying IMU data can be printed out

```
[1]: from xgolib import XGO
import time
import ipywidgets as widgets
from IPython.display import display
from ipywidgets import interact, widgets, Button, VBox, IntSlider

dog = XGO("xgolite")
```

```
[2]: while True:
    print('yaw',dog.read_yaw())
    print('roll',dog.read_roll())
    print('pitch',dog.read_pitch())
    time.sleep(1)
```

```
yaw 190.12
roll -0.86
pitch -0.28
yaw 190.12
roll -0.82
pitch -0.26
yaw 190.12
roll -0.82
pitch -0.36
..... 190.12
```

4. Main source code analysis

```
while True:
    print('yaw',dog.read_yaw())
    print('roll',dog.read_roll())
    print('pitch',dog.read_pitch())
    time.sleep(1)
```

Through the API interface, read the underlying IMU data and print it out.