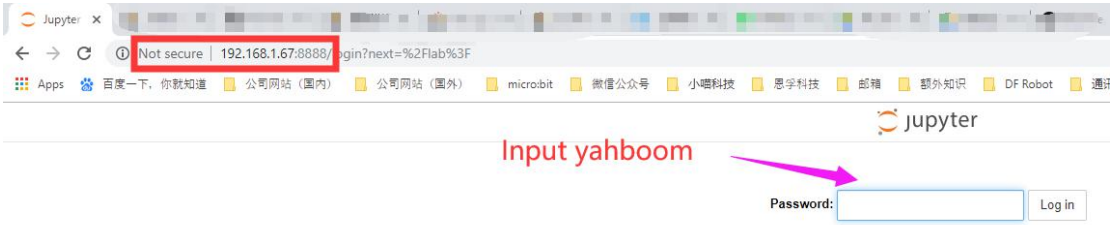
How run program of JetBot-Mini robot car

1.connect JetBot-Mini to your computer.

①If our JetBot-Mini is connected to the same LAN as the PC network via WIFI, we can log in directly on the PC-side Google Chrome or other browser (JetBot-Mini IP address): 8888 to JetBot-Mini's Jupyter Lab, for example: http://192.168.1.67:8888

As shown below:



(My IP address is 192.168.1.67, you must us your IP address)

②If there is no network environment support, we can use JetBot-Mini's "headless mode" to connect to the network channel established by the PC via USB, and log in to the browserhttp://192.168.55.1:8888

More details about JetBot-Mini's "headless mode" :

You can refer to 【2.3 Software Setting】---【Connecting to JetBot-Mini by headless (head-free) mode】

!!!Note:

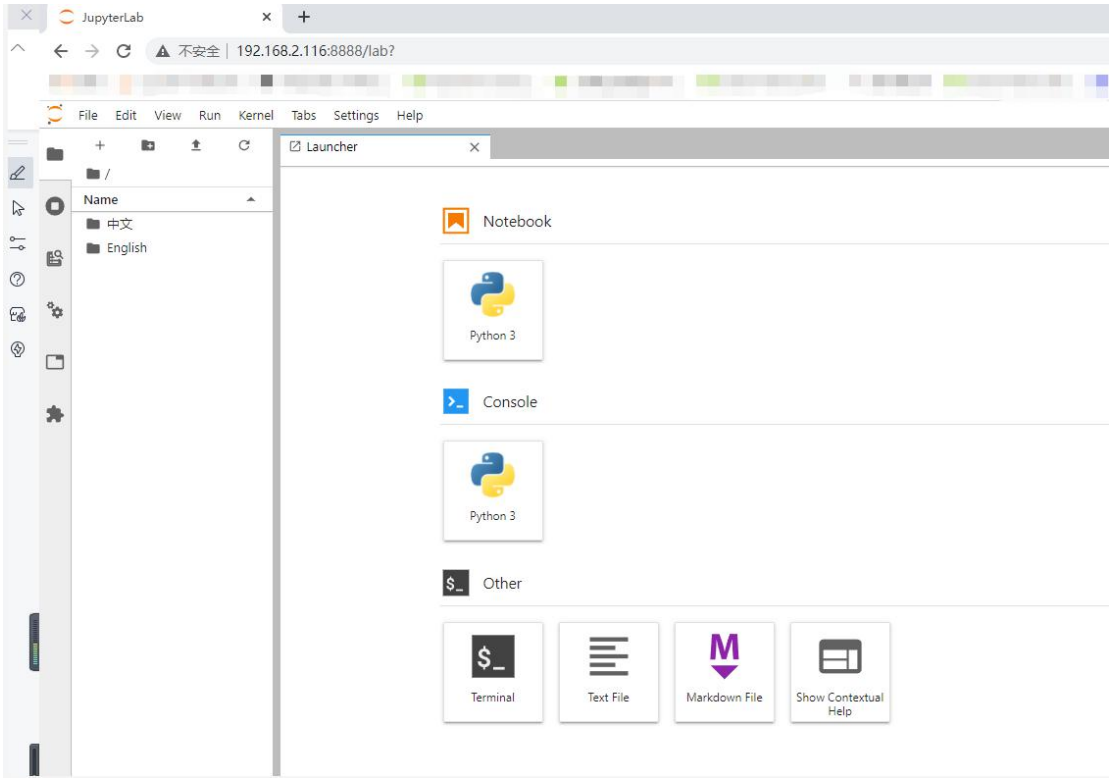
To Jupyter Lab of JetBot-Mini robot car , if we are using the current PC environment to log in to JetBot-Mini for the first time, we need to enter the password for verification.

The password is 【2.4 Install JetBot-Mini】---【5.Install Jupyter Lab】the password set when Jupyter Lab installed.

If you are using **Yahboom_JetBot-Mini_car_image** our official JetBot-Mini image, the default password is yahboom.

③When you enter the password once in this environment, Jupyter Lab will record the current environment. You will not need to enter the password here next time.

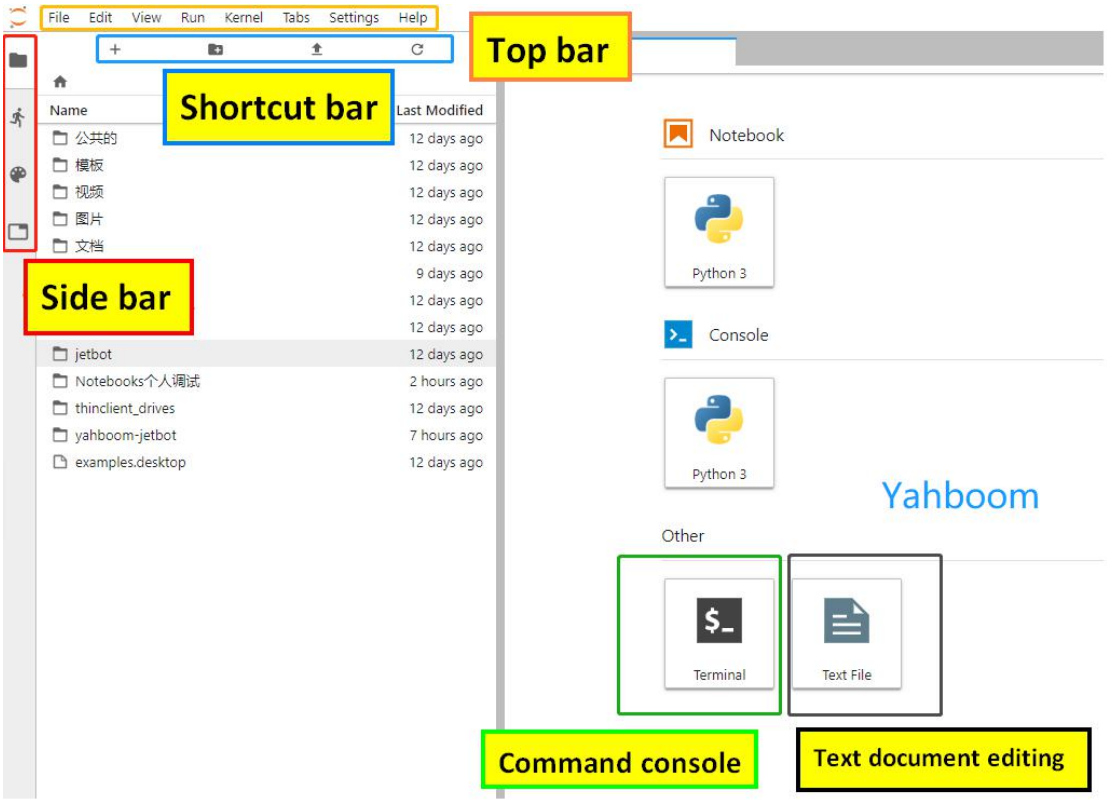
④The interface after login is as shown below:



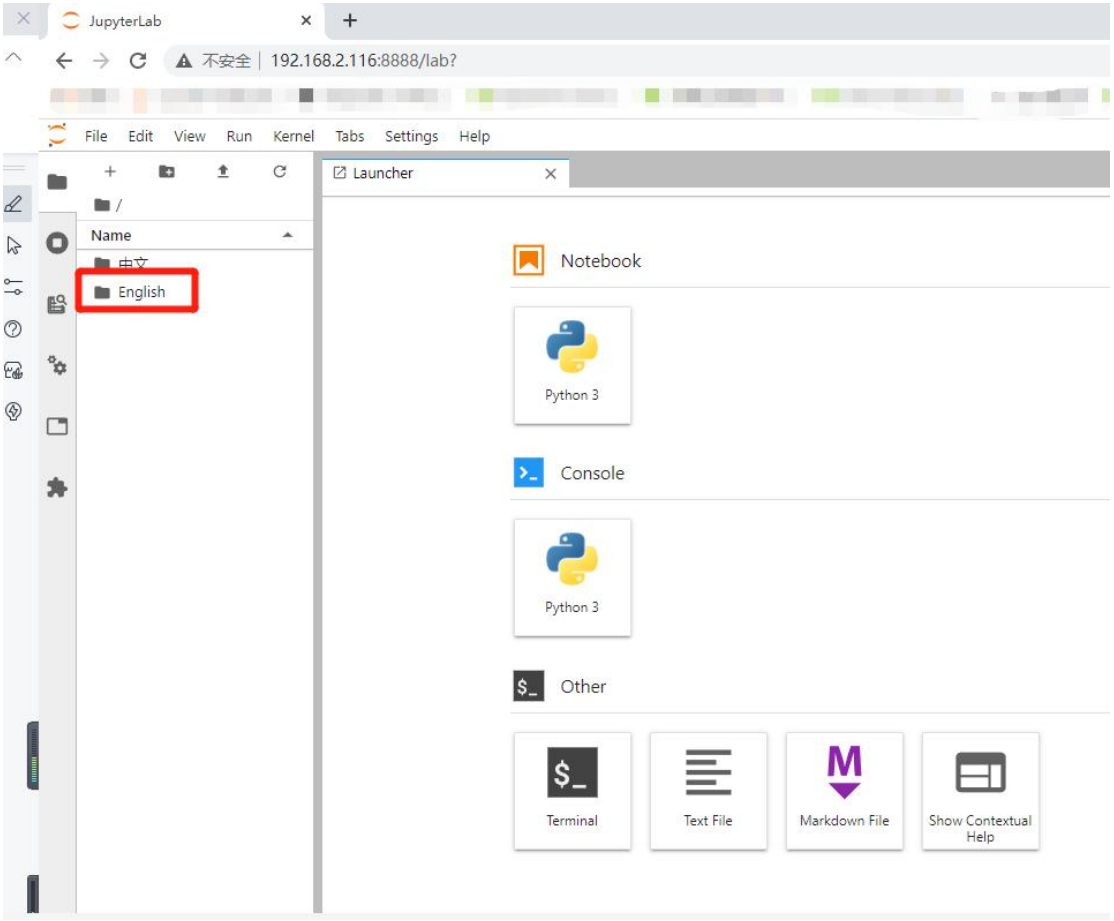
2. Run program by JupyterLab

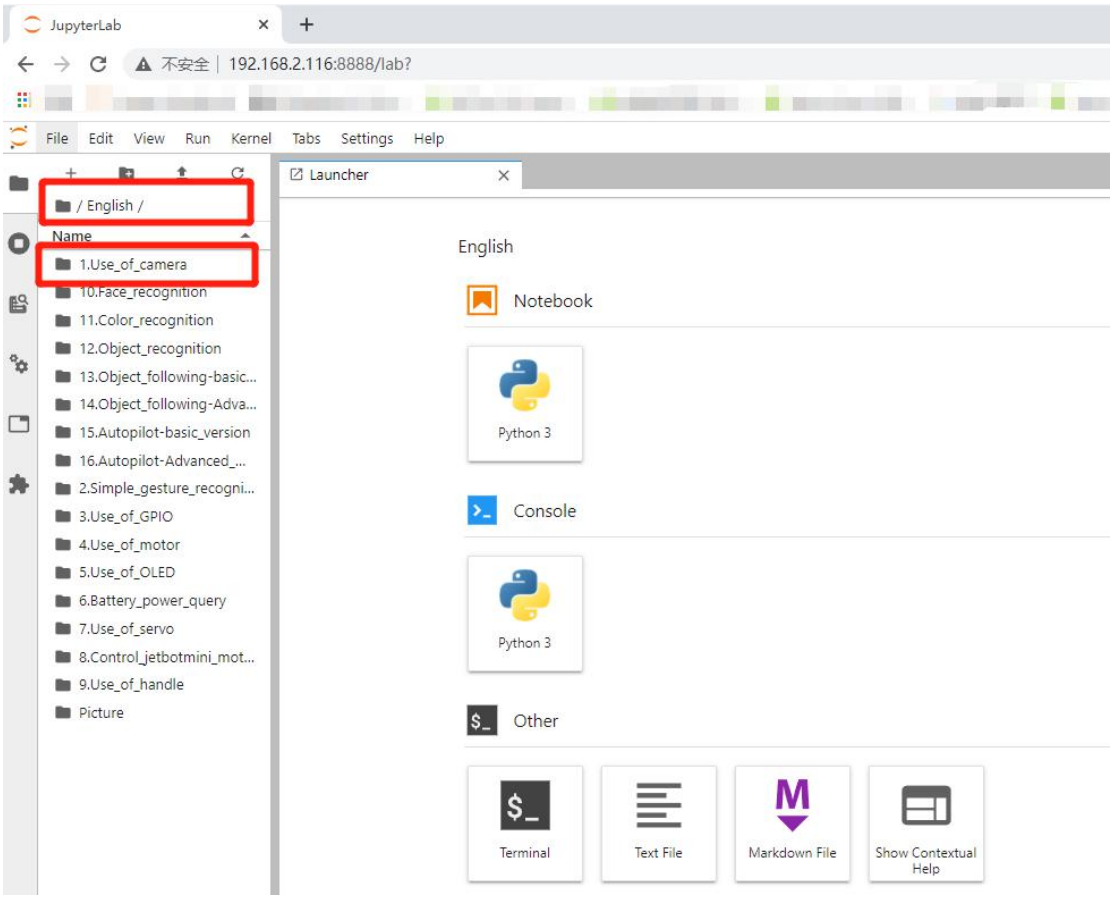
①The JupyterLab interface is a dashboard that provides access to interactive iPython notebooks, as well as JetBot-Mini's folder structure and terminal windows into the Ubuntu operating system. The interface shown below includes the menu bar at the top, the directory tree in the left sidebar, and the main workspace that was originally opened to the Launcher page.

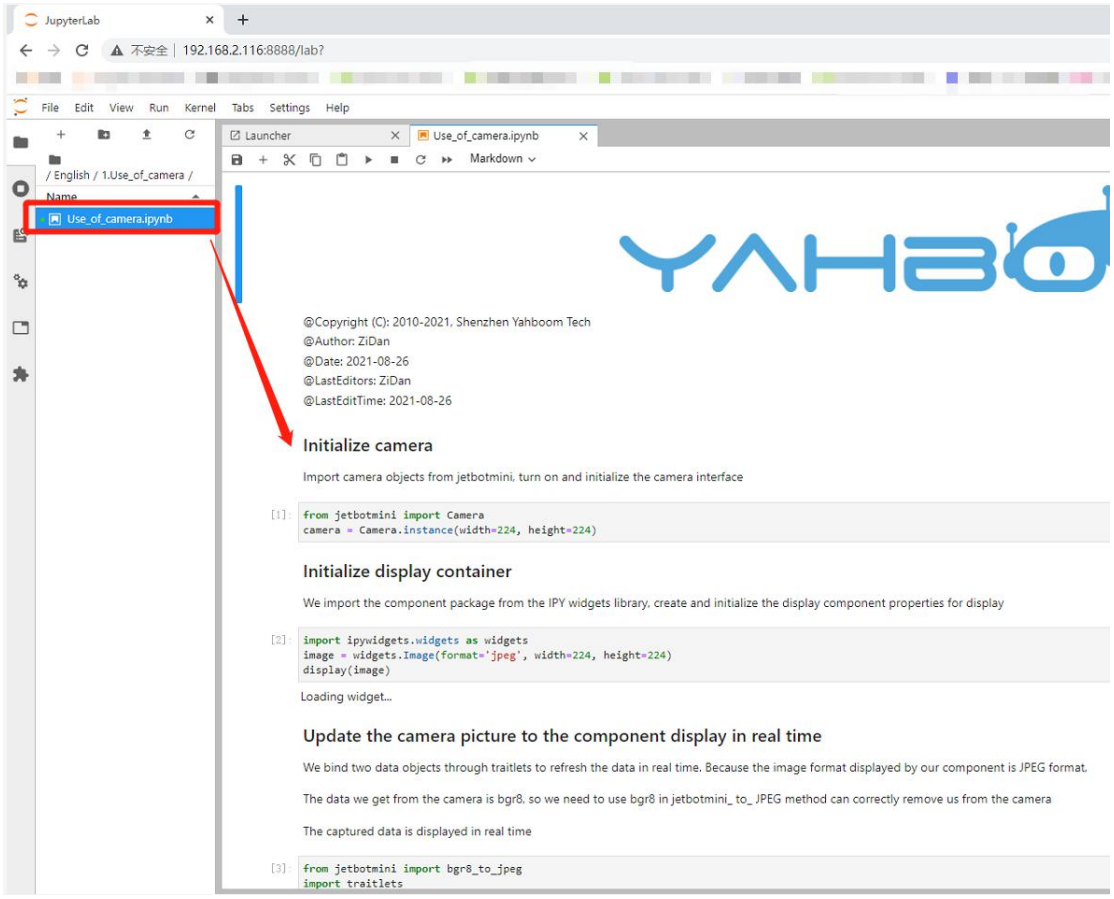
As shown below:



②Click “English” folder. The “English” folder contains all the control sources for the car we provided.




JupyterLab
不安全 | 192.168.2.116:8888/lab?
File Edit View Run Kernel Tabs Settings Help
/ English /
Name
1.Use_of_camera
10.Face_recognition
11.Color_recognition
12.Object_recognition
13.Object_following-basic...
14.Object_following-Adva...
15.Autopilot-basic_version
16.Autopilot-Advanced_...
2.Simple_gesture_recogni...
3.Use_of_GPIO
4.Use_of_motor
5.Use_of_OLED
6.Battery_power_query
7.Use_of_servo
8.Control_jetbotmini_mot...
9.Use_of_handle
Picture
Launcher
English
Notebook
Python 3
Console
Python 3
Other
Terminal
Text File
Markdown File
Show Contextual Help


JupyterLab
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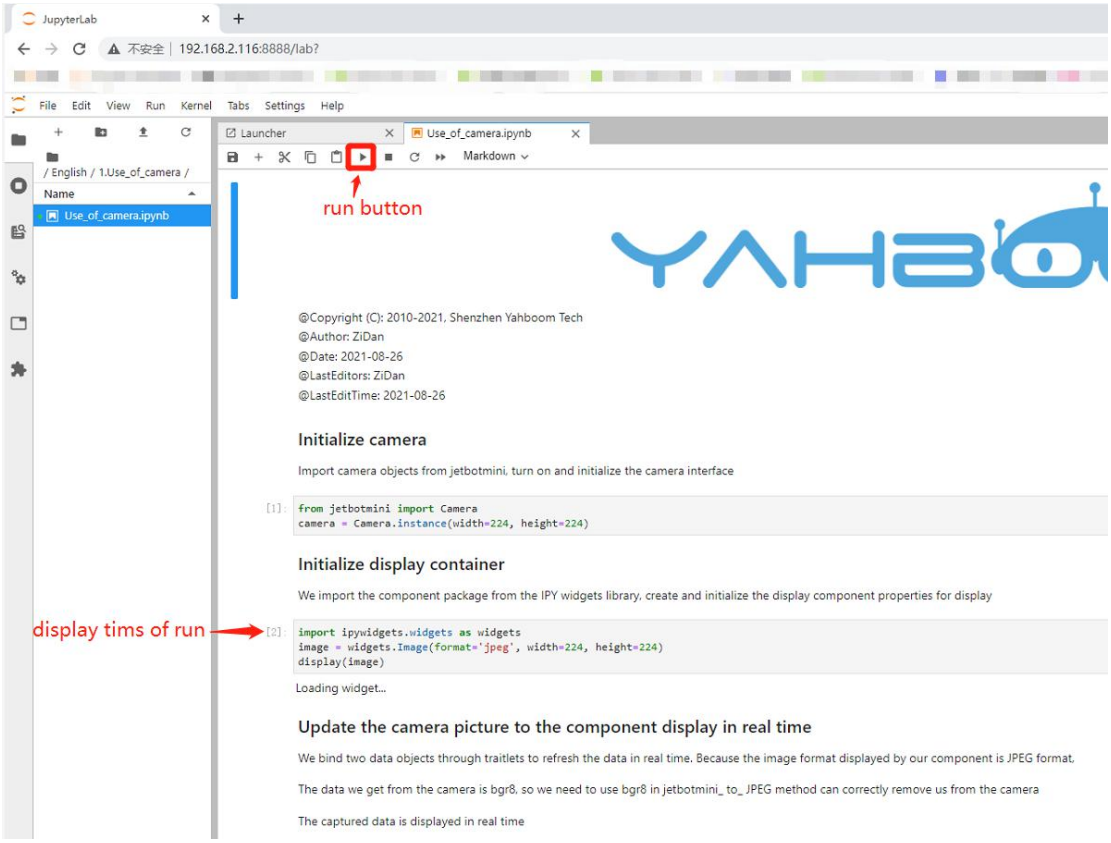
File Edit View Run Kernel Tabs Settings Help
/ English / 1.Use_of_camera /
Name
Use_of_camera.ipynb
Launcher
Use_of_camera.ipynb
Markdown
@Copyright (C): 2010-2021, Shenzhen Yahboom Tech
@Author: ZiDan
@Date: 2021-08-26
@LastEditors: ZiDan
@LastEditTime: 2021-08-26
Initialize camera
Import camera objects from jetbotmini, turn on and initialize the camera interface
[1]:
from jetbotmini import Camera
camera = Camera.instance(width=224, height=224)
Initialize display container
We import the component package from the IPY widgets library, create and initialize the display component properties for display
[2]:
import ipywidgets.widgets as widgets
image = widgets.Image(format='jpeg', width=224, height=224)
display(image)
Loading widget...
Update the camera picture to the component display in real time
We bind two data objects through traitlets to refresh the data in real time. Because the image format displayed by our component is JPEG format,
The data we get from the camera is bgr8, so we need to use bgr8 in jetbotmini_ to_ JPEG method can correctly remove us from the camera
The captured data is displayed in real time
[3]:
from jetbotmini import bgr8_to_jpeg
import traitlets



!Note: Before you run other program, you must kill big process running.