Camera Testing

This file contains instructions to test the camera.

Required Hardware:

1. USB Camera
2. USB extension cable

Required Package:

1. usb_cam: This package contain the basic driver of the USB camera
2. If package is not installed run the following command to install the package

sudo apt-get install ros-kinetic-usb-cam

Testing instruction:

Please follow the given instruction to test the USB camera:

1. Connect the camera to PC/laptop using the USB extension cable.
2. Find the video device for the camera by typing the following command:

ls /dev/video*

```
simmu@simmu:/$ ls /dev/video*
/dev/video0  /dev/video1
simmu@simmu:/$
```

Figure 1: video device for camera

3. Navigate to the usb_cam package launch file and open the file in your favorite editor to edit the file.

```
simmu@simmu:/$ ls /dev/video*
/dev/video0  /dev/video1
simmu@simmu:/$ roscd usb_cam/launch
simmu@simmu:~/droneCop_ws/src/usb_cam/launch$ nano usb_cam-test.launch
```

Figure 2: Opening the launch file in editor

4. Edit the launch file with the new video device you have received in step 2 (Figure 1).

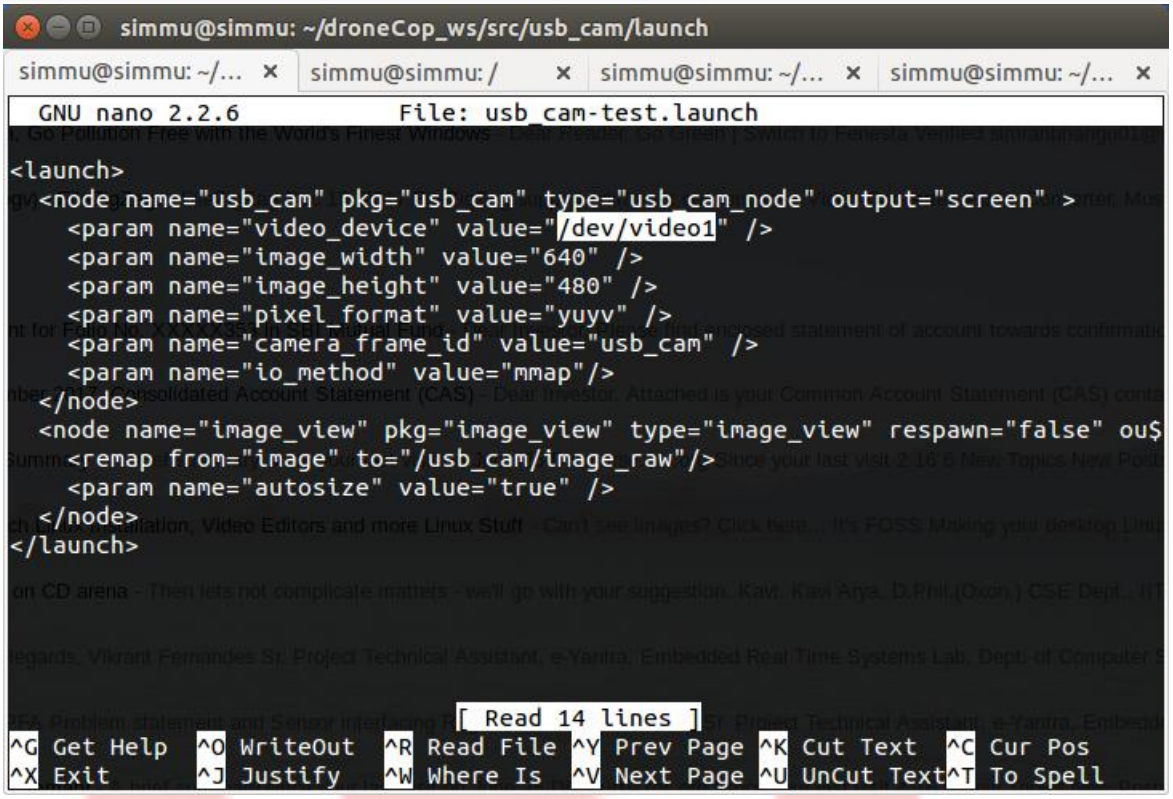

Figure 3: Editing the usb_cam-test.launch file

5. Source the ROS environment by executing the following command:

```
source /opt/ros/kinetic/setup.bash
```

6. Execute the launch file after editing and sourcing using the following command:

```
roslaunch usb_cam usb_cam-test.launch
```

The above command will launch a new window and show the output of the camera.

7. For more detail about the package please visit the wiki page of usb_cam