e-Yantra Robotics Competition (eYRC 2019-20)

Camera Testing

This file contains instructions to test only the camera.

Required Hardware:

1. USB Camera
2. USB Extension Cable

Required Package:

1. usb_cam: This package contains 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`

3. Next install "guvcview", this software is used here as a webcam viewer.

   >> `sudo apt-get install guvcview`

Testing instruction:

Please follow the given instruction to test the USB camera:
1. Connect the camera to your system using the USB extension cable.
Note: Find the video device for the camera by typing the following command and note it for future debugging:
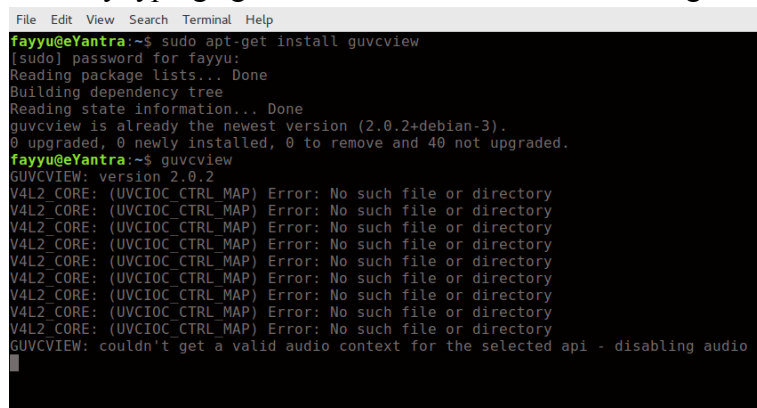
`>> ls /dev/video*`

Figure 1: video device for camera

2. Start guvcview by typing "guvcview" in the terminal. Refer Figure 2.

Figure 2: Installation and Starting guvcview

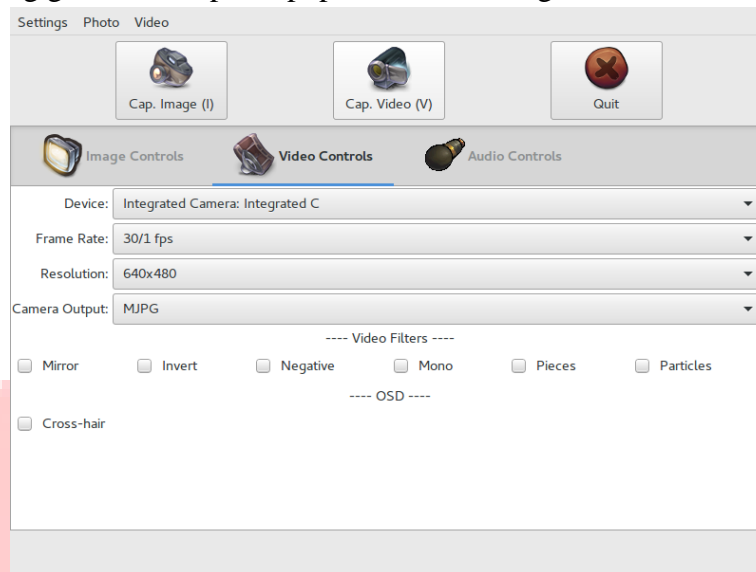3. After launching guvcview, a panel pop, as shown in Figure 3.

Figure 3: guvcview Panel

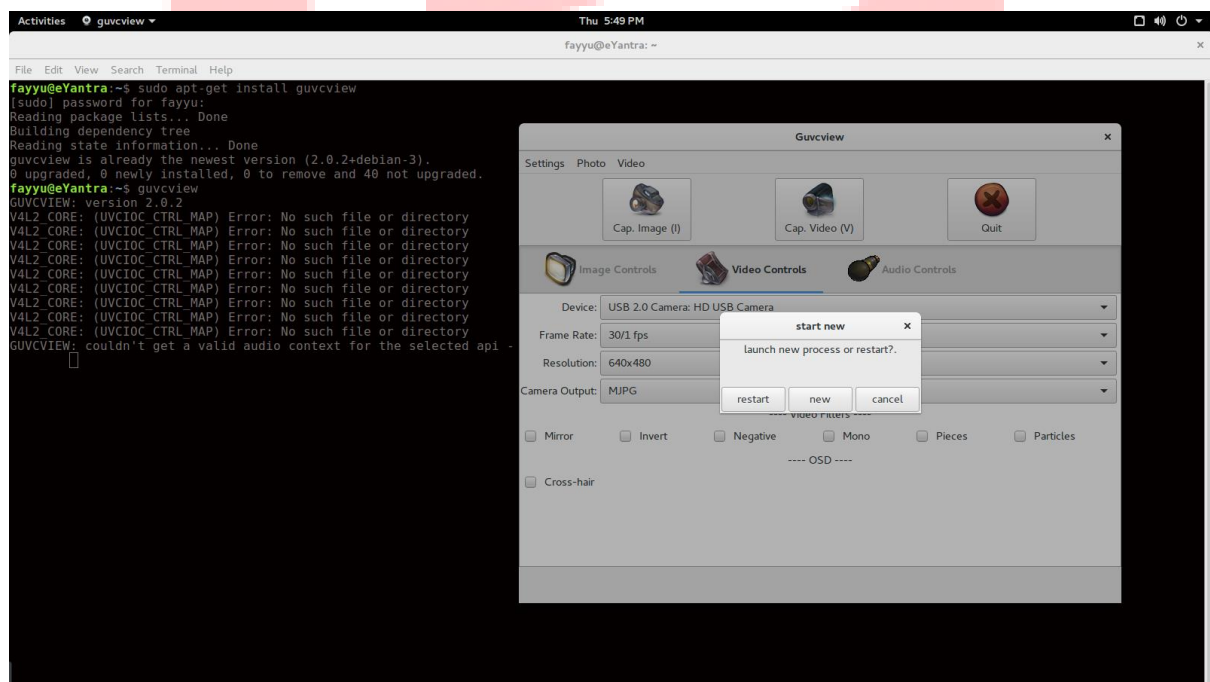4. Select Device, "USB 2.0 Camera: HD USB Camera". as shown in Figure 4:

Figure 4: Device List Inside guvcview

5. After selecting the appropriate option, press *restart* option from the drop box as seen in Figure 3. Now, you should view video feed from the USB Camera.

6. For more details about the package please visit the wiki page of usb_cam