Data preparation:

1. First step in the project is data preparation and we will be using labelimg for preparing data.
2. LabelImg is a graphical image annotation tool and  label object bounding boxes in images.
3. It is written in Python and uses Qt for its graphical interface.
4. Annotations are saved as XML files in PASCAL VOC and as txt in yolo.

Steps to install labelimg and use it for labeling:

Step1:

Download the labelimg zip file from google([https://github.com/tzutalin/labelImg](https://www.youtube.com/redirect?q=https%3A%2F%2Fgithub.com%2Ftzutalin%2FlabelImg&redir_token=QUFFLUhqblBXSWlPSUlKUU9ieXB1TEJEbnNRUDVRX1JFd3xBQ3Jtc0trTUpuTl9nZ0lVa1lVYkpITWU1c2VPTzZuSk1PMGdSenlia3VRYXFZWmt1UlI4WXJwSVRETVJTLTNUUmNDclczd2dtQmhEdUN3Yk5CTkFLT2NKSXozeTA4SkU2V3VEVW9fRFJFQkhoS1dEd3c0a1J4NA%3D%3D&v=fjynQ9P2C08&event=video_description)) and extract in a directory.

Step2:

Open anaconda prompt and Create a conda environment using the below command.

conda create -n "enter env name here"

Step3:

Activate the environment using the below command (remove double quotes before running)

Conda activate “env name”

Step4:

Install lxml and pyqt in conda using below commands

Conda install lxml

Conda install pyqt=5

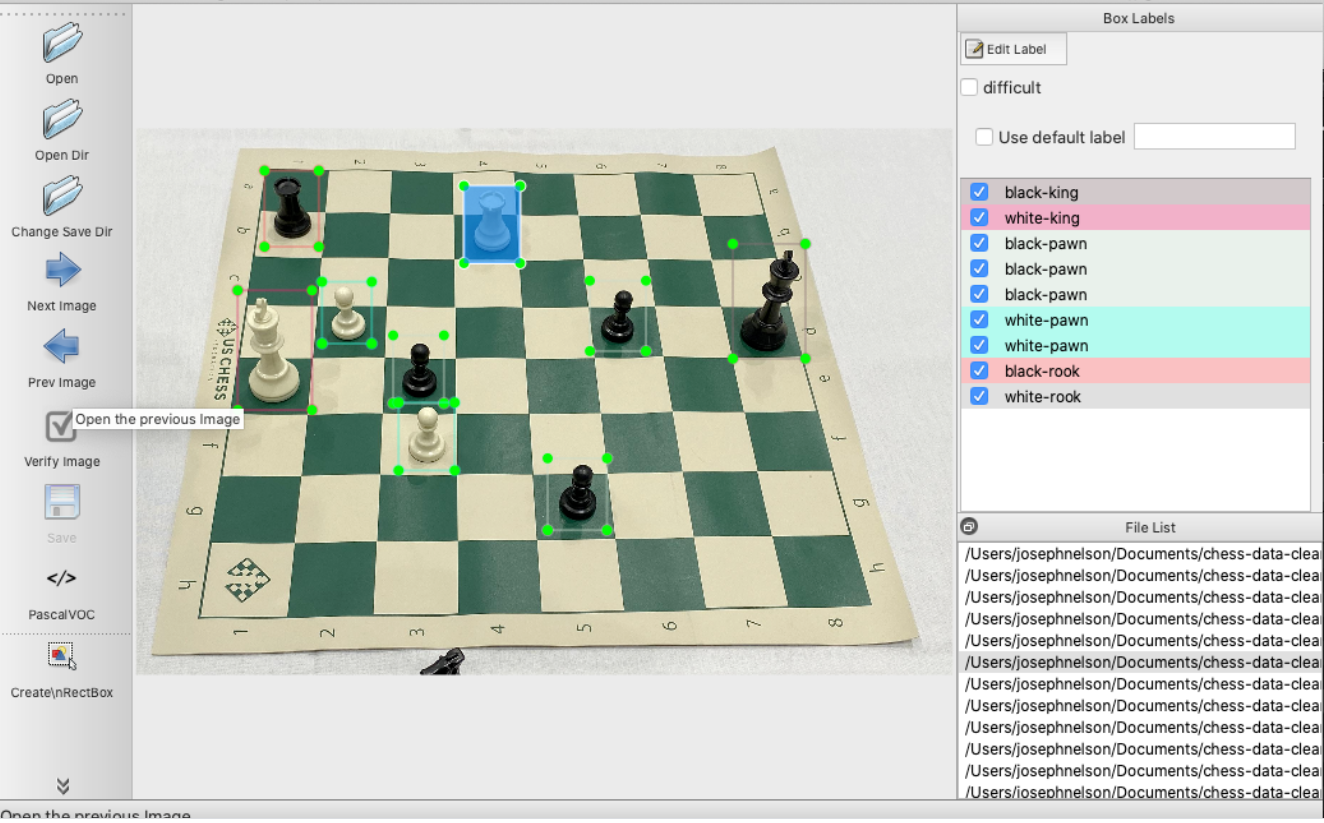
Step5:

Change the directory to the folder where the labelimg has been extracted and run the below commands.

1. pyrcc5 -o libs/resources.py resources.qrc
2. python labelImg.py

step6:

After running the above commands, you will be able to open labelimg in your system.



Click on open dir and select the folder which consists of all the images.

Click on change save dir and select the folder you want to store the label files (same as image dir)

Initially the format will be Pascal Voc change it to the format in which you want.

Click on create rectangle box and create a box on the image and give it a name and click on save and then click on next image

Follow the above step for all the images.

Recourses:

<https://medium.com/@sanghuynh_73086/how-to-install-labelimg-in-windows-with-anaconda-c659b27f0f>

<https://www.youtube.com/watch?v=fjynQ9P2C08>