Installation Guide:

Prerequisites:

Python 3.9 and JupyterLab with supporting libraries: Keras, pandas, numpy, sklearn, cv2, Tensorflow, Matplotlib

1. For easy installation install Anaconda from their website https://www.anaconda.com/.
2. Once Anaconda has been installed, navigate to the newly installed Anaconda Navigator
3. Be sure that Jupyter Notebook and JupyterLab is installed.
   a. When Anaconda Navigator is launched, check the environments included. Double check that the additional environments mentioned above are installed. (Keras, pandas, numpy, sklearn, cv2, Tensorflow, Matplotlib).
4. Launch JuptyerLab
5. Download and unzip the provided zip file.
6. Click the upload file found at the top left of the JupyterLab window that has now opened. (See Fig. 7)
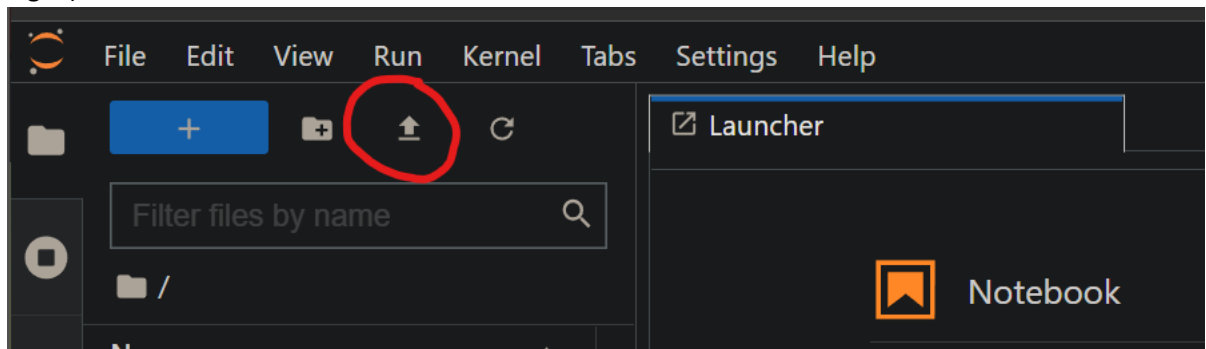

Figure 7

7. Upload the two files located in the provided zip file named 'CatsandDogs.ipynb' and 'microsoft-catsvsdogs-dataset'
8. Launch the CatsandDogs.ipynb from with JupyterLab by double-clicking on the uploaded file.
9. Press the 'restart the kernel, then re-run the whole notebook' button (see Fig 8). This may take some time for the program to run through to completion.
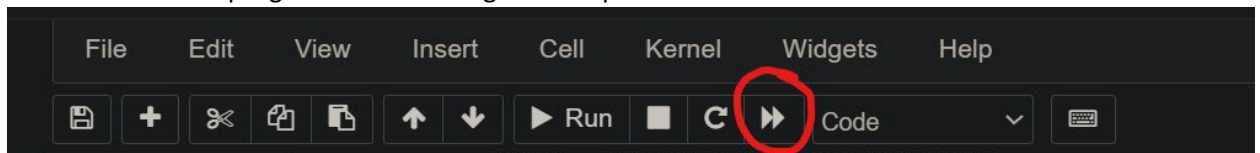

Figure 8

10. Throughout the running process you will see progress made such as progress bars, two data visualizations populated, and a final operation on a test file. This shows how the program runs on additional images it has received no training on.