\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*READ ME \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

This project aim is to compare the models which will help in automatically predicting the pneumonia from the chest X-rays provided to decide on which algorithm best accuracy. The models named ‘Base CNN’ and ‘ResNet50’ models are performed for image analysis and compared in this project.

The data set used is downloaded from link (<https://www.kaggle.com/praveengovi/coronahack-chest-xraydataset>). This is of size 1 GB. Since it consists of large number of images. It is important that the running system should have a higher GPU or the CPU processing power should be high.

To start the project download the dataset from the link

Then open the jupyter notebook by using command

>>Jupyter notebook

There are dependency libraries for running the code. So these libraries should be installed in your system:

* matplotlib
* numpy
* scikit-learn
* torch
* torchvision
* pandas
* imageio
* seaborn
* glob3
* scipy
* keras
* skimage

Follow the steps in the jupyter notebook attached or clone the notebook from the git hub repository link provided below.

GitHub repository link : <https://github.com/sravanikoneru/pneumonia-dataset-analysis>

The output will be the comparison of two models and their visualizations which helps us in deciding the best suited algorithm for image diagnosis with highest accuracy.