Introduction:

The project is about classification of images. The python file requires some libraries to be installed.

Requirements:

This project requires the following modules/libraries:
- Python 3
- Jupyter notebook
- OpenCV (for image processing)
- Scikit-learn (for machine learning models)
- Keras (for convolutional neural network and image augmentation)
- Pandas (for data handling)
- Numpy (to flatten images and handle arrays)
- Matplotlib (to plot the images and to analyze through graphs)

Recommended Modules:

- Weka (for feature selection)

Installation:

This project requires the installation of all above mentioned modules. The process to install them is mentioned below.

Python 3:
https://www.python.org/downloads/

OpenCV:
http://docs.opencv.org/2.4/doc/tutorials/introduction/linux_install/linux_install.html

Numpy:
https://scipy.org/install.html

Scikit-learn:
http://scikit-learn.org/stable/install.html

Jupyter Notebook:

http://jupyter.org/install.html

Pandas:

http://pandas.pydata.org/pandas-docs/stable/install.html

Keras:

https://keras.io/#installation

Matplotlib:

http://matplotlib.org/1.3.1/users/installing.html

Weka:

http://www.cs.waikato.ac.nz/ml/weka/downloading.html