Assignment 5

Adarsh T Shah, 19473

The input data directory is modified to extract training and test data for convenience.

Results:

On Test Data (80 Images)

Loss	0.0277
True Positives	80
True Negatives	0
False Positives	80
False Negatives	0
Categorical Accuracy	1

The pretrained model used is VGG16 for multi-label classification. The test data are classified correctly.

Summary:

1. Generate one-hot vectors for each class of image
2. Resize image to 224x224x3
3. Import VGG16 data from KERAS framework
4. Freeze the inner layer from training
5. Extract output from second last fully connected layer
6. Implemented a Neural Network Multilabel classifier.
7. Train the NN on training data.
8. Generate metrics from test data.