Flower Recognition

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DATASET

We have obtained the dataset from Kaggle contributors, Alexander Mamaev and Bogdan Cretu. This dataset contains 5 types of flower images which are

- Daisy
- Dandelion
- Rose
- Sunflower
- Tulip

There are 4317 images in this dataset. However after analyzing each images, we have remove 517 corrupted or blur images.

In addition, we add another type of flower in this dataset, Hibiscus. There are a total of 616 images of Hibiscus flowers added.

Therefore, there are 6 type of flowers and a total images of **4416** used in this project.

CNN

01 Has high accuracy.

02 Can reduce the number of parameters without losing the quality of models. Especially in images as it has high dimensionality (Each pixel is considered as features).

03 Can automatically detects the important features without any human supervision

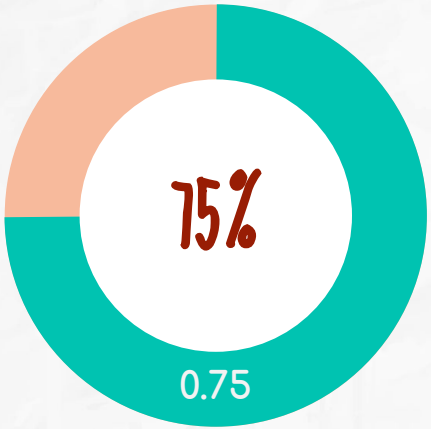
DEMO

On Google Collab

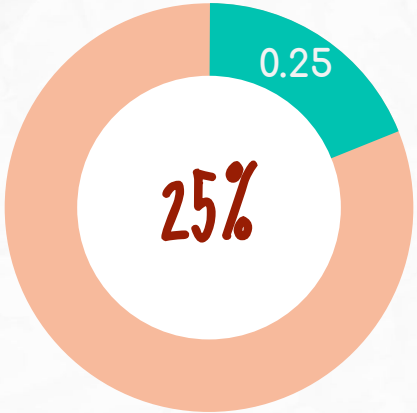
Split Train and Test

In this project, we used random split with ratio of :-

Train



Test

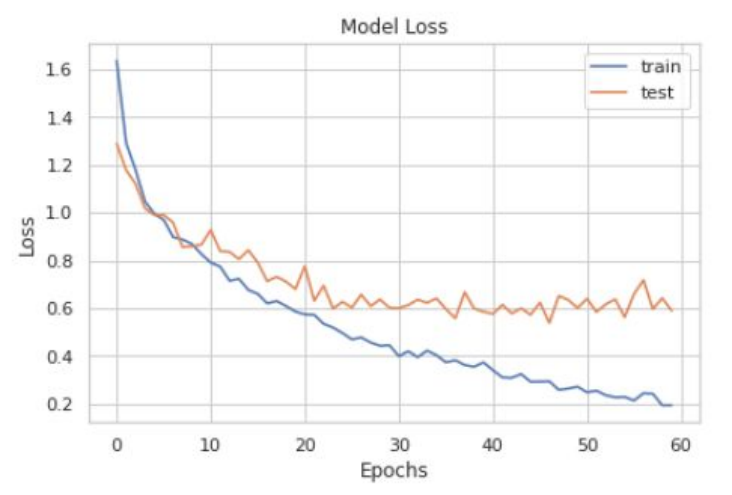


We decided to use this ratio because it produced the highest accuracy and best result.

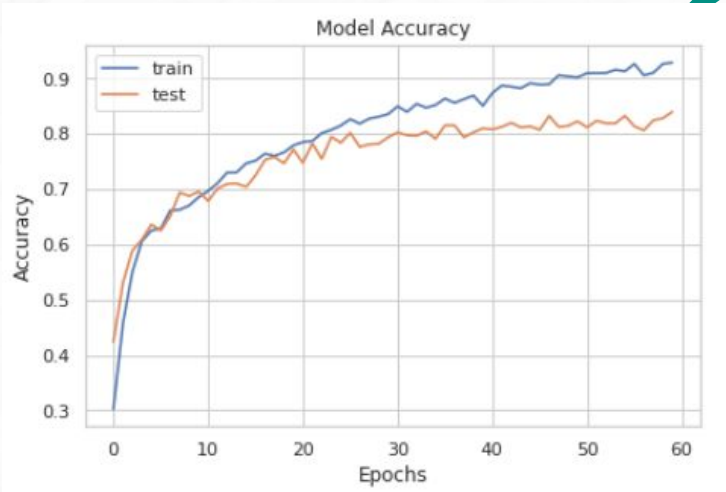
Result

This is the result we obtained from our previous runtime.

Model Loss

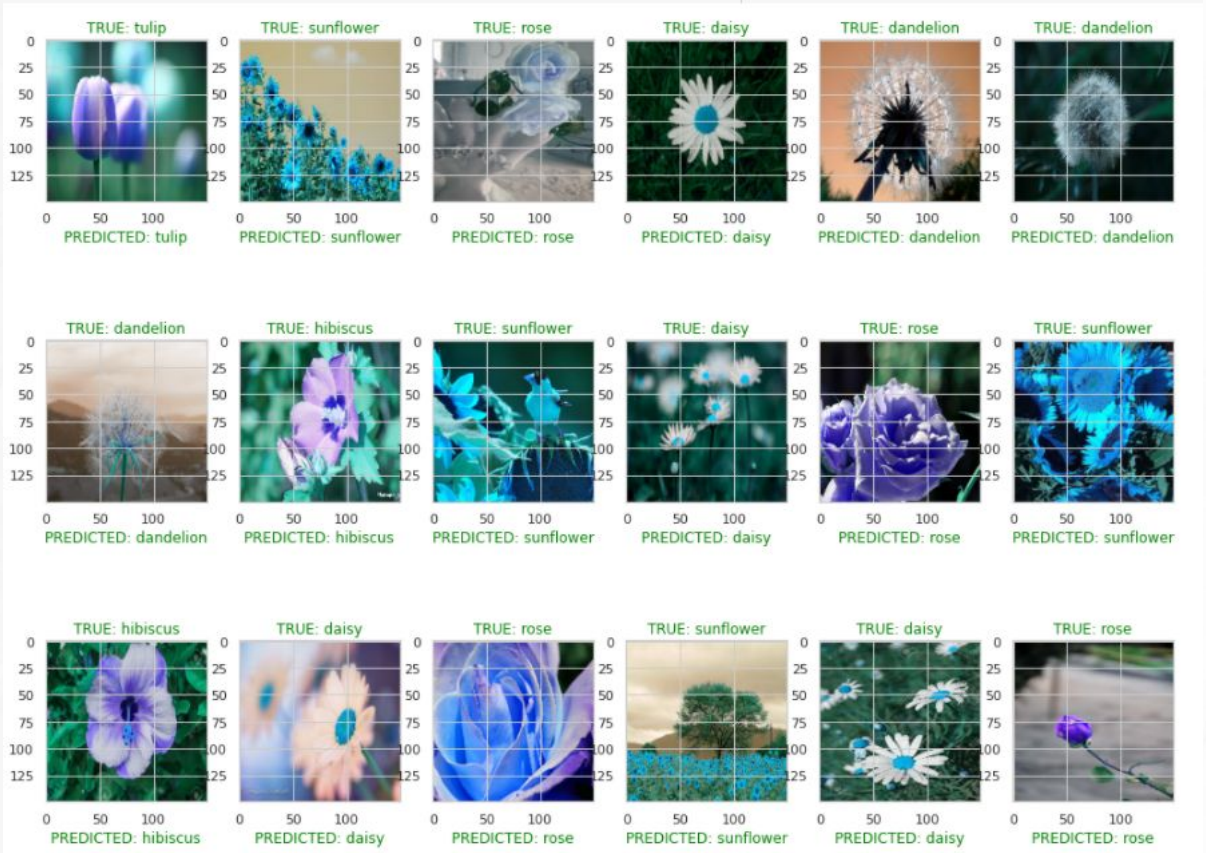


Model Accuracy

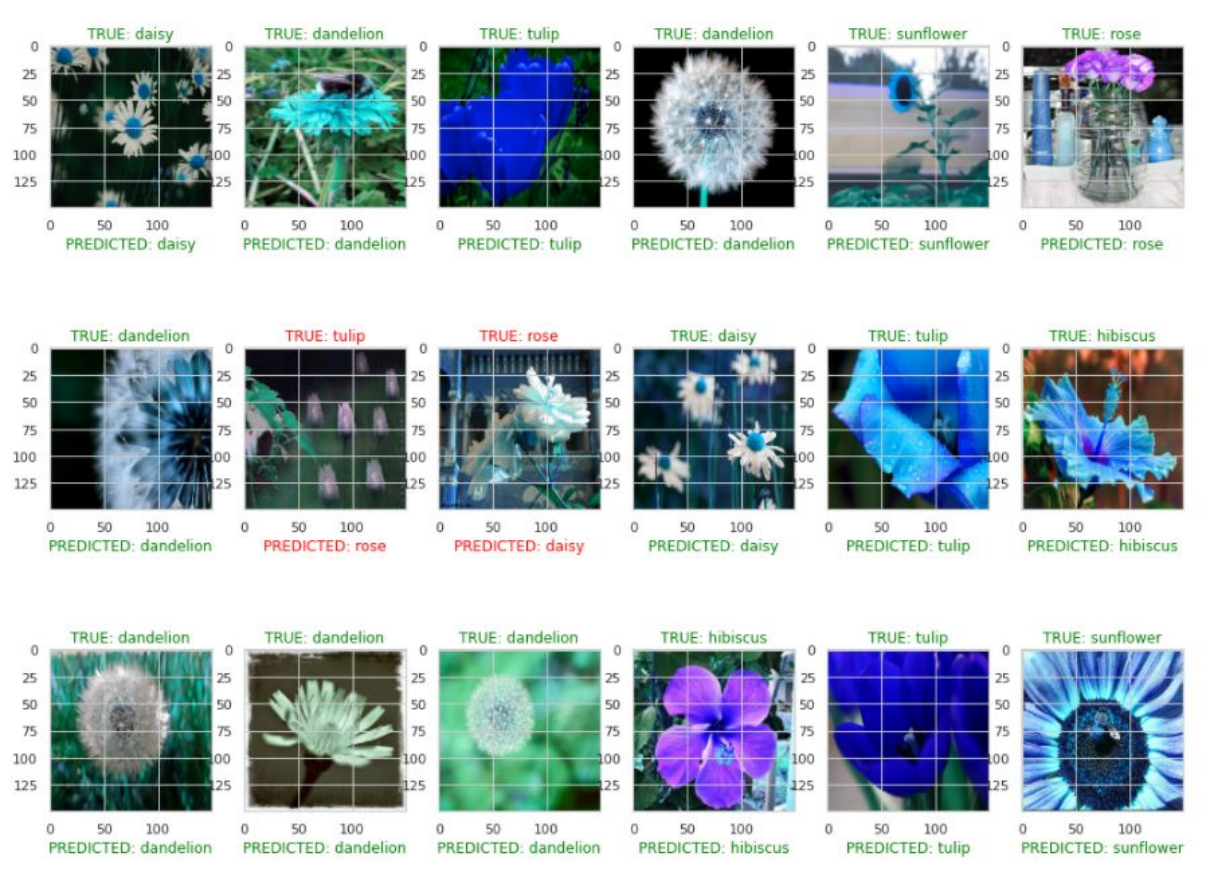


Result	Train	Test
Accuracy	0.9287	0.8397
Loss	0.1949	0.5897

Predictions Result

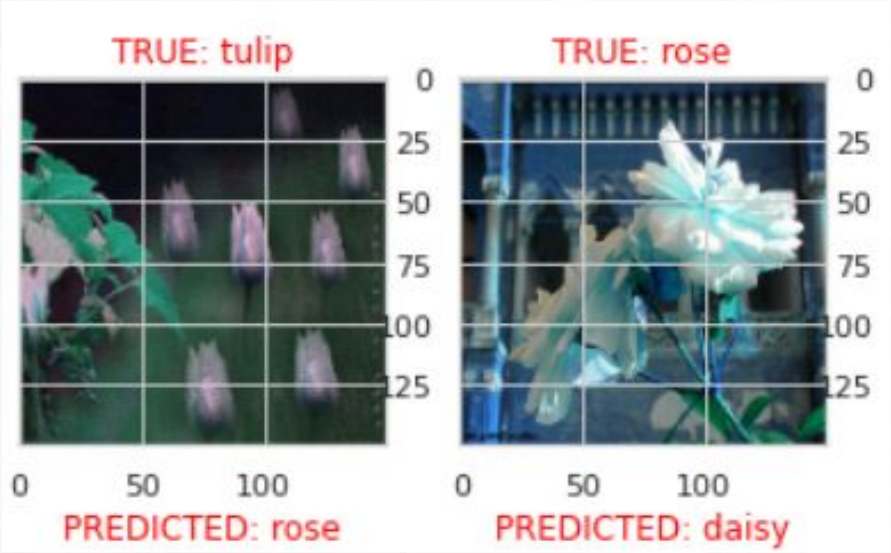


Predictions Result



Result

Misclassified Flower



The End