KAGGLE CASES, Summer 2019
Project – 2

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There were three steps involved in this project:

1. Data processing
2. Modeling
3. Prediction

Data Processing:

Separate methods were written for processing train and test data. For processing training data, each image was fetched, resized and converted to an array and stored. The corresponding labels were also stored along with. The same was carried out for processing test data.

Modeling:

The model was developed with the following layers:

1. **Conv2D**: A 64 neuron layer with ReLU activation function.
2. **Max Pooling** : A max pooling layer with a size of 2,2 is added.
3. **Flatten**: This is added to be compatible with the Dense output layer
4. **Dense** : Two Dense layers with ReLU and Sigmoid functions were employed.

Prediction:

The model was then compiled with an **adam** optimizer, with a **binary_crossentropy** loss and evaluated on **accuracy** metric. Now, the model was trained with a batch size of 32, validation split of 0.2% and 10 Epochs. With this model, the prediction was carried out and the submission file was generated. Since there was no way to submit and see the score, the test score is unknown.

References:

1. https://www.kaggle.com/ruchibahl18/cats-vs-dogs-basic-cnn-tutorial
2. https://www.kaggle.com/uysimty/keras-cnn-dog-or-cat-classification