Kaggle Documentation

There are two scripts, one for training (*main.py*) and the other (*predict.py*) for using a saved model to classify the data.

In-depth comments are found directly in the code even tho it's quite simple, load data, train, load data, predict, using a **Keras CNN** model:

```
model = tf.keras.models.Sequential([
          tf.keras.layers.Conv2D(32, (3, 3), activation="relu",
input_shape=(IMG_WIDTH,IMG_HEIGHT,3)),
          tf.keras.layers.MaxPooling2D(pool_size=(2, 2)),
          tf.keras.layers.Conv2D(32, (3, 3), activation="relu"),
          tf.keras.layers.MaxPooling2D(pool_size=(2, 2)),
          tf.keras.layers.Flatten(),
          tf.keras.layers.Dense(128, activation="relu"),
          tf.keras.layers.Dropout(0.5),
          tf.keras.layers.Dense(NUM_CATEGORIES, activation="softmax")
])
```

Model built by weaving the <u>Conv</u> layer and <u>MaxPooling</u> followed by the 2 <u>Dense</u> layers using mainly <u>relu activation</u> function and a <u>softmax</u> for the last layer.