**A screen shot of a black screen

Description automatically generated**

## Dataset Overview**:**

* **Training Images**: 179 images
* **Validation Images**: 43 images
* **Number of Classes**: 3

## Training Statistics:

**Epoch 1/10:**

* **Training Loss**: 200.7306
* **Training Accuracy**: 35.20%
* **Validation Loss**: 72.8723
* **Validation Accuracy**: 58.14%

**Epoch 2/10:**

* **Training Loss**: 36.9102
* **Training Accuracy**: 63.13%
* **Validation Loss**: 21.9842
* **Validation Accuracy**: 60.47%

**Epoch 3/10:**

* **Training Loss**: 10.7052
* **Training Accuracy**: 77.09%
* **Validation Loss**: 20.1890
* **Validation Accuracy**: 74.42%

**Epoch 4/10:**

* **Training Loss**: 2.7796
* **Training Accuracy**: 92.74%
* **Validation Loss**: 8.1621
* **Validation Accuracy**: 62.79%

**Epoch 5/10:**

* **Training Loss**: 0.6733
* **Training Accuracy**: 94.41%
* **Validation Loss**: 4.3680
* **Validation Accuracy**: 90.70%

**Epoch 6/10:**

* **Training Loss**: 0.7283
* **Training Accuracy**: 95.53%
* **Validation Loss**: 4.1545
* **Validation Accuracy**: 88.37%

**Epoch 7/10:**

* **Training Loss**: 0.5252
* **Training Accuracy**: 95.53%
* **Validation Loss**: 3.7660
* **Validation Accuracy**: 81.40%

**Epoch 8/10:**

* **Training Loss**: 0.0412
* **Training Accuracy**: 98.88%
* **Validation Loss**: 4.0825
* **Validation Accuracy**: 86.05%

**Epoch 9/10:**

* **Training Loss**: 0.0738
* **Training Accuracy**: 98.32%
* **Validation Loss**: 4.3885
* **Validation Accuracy**: 76.74%

**Epoch 10/10:**

* **Training Loss**: 0.0033
* **Training Accuracy**: 100.00%
* **Validation Loss**: 3.5222
* **Validation Accuracy**: 86.05%

## Summary:

* **Final Training Accuracy**: 100.00%
* **Final Validation Accuracy**: 86.05%
* **Final Training Loss**: 0.0033
* **Final Validation Loss**: 3.5222

## Observations:

1. **Training Accuracy**: The training accuracy improved significantly over the epochs, reaching 100% by the last epoch. This indicates that the model is learning well from the training data.
2. **Validation Accuracy**: The validation accuracy increased initially but showed some fluctuation in the later epochs. It reached a peak of 90.70% in Epoch 5 and stabilized around 86.05% in the final epochs.
3. **Loss**: Training loss decreased substantially, indicating that the model's predictions are becoming more accurate on the training data. Validation loss also decreased initially but became somewhat unstable towards the end of training.
4. **Overfitting**: The large gap between training accuracy (100%) and validation accuracy (up to 90.70%) might suggest overfitting. The model performs exceptionally well on the training data but does not generalize as well on the validation data.