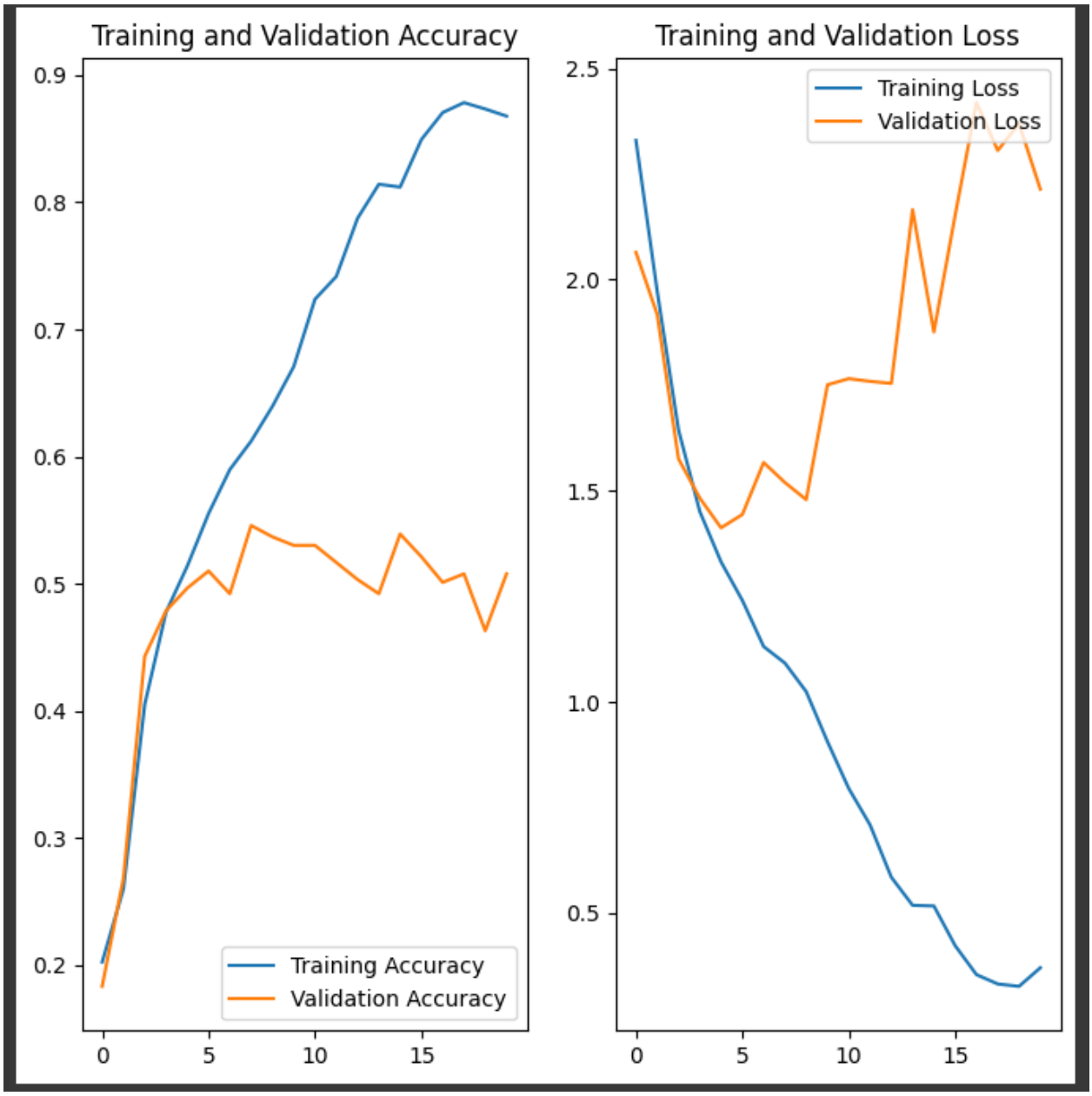
Melanoma Detection Assignment

Write your findings after the model fit, see if there is an evidence of model overfit or underfit. Do you think there is some improvement now as compared to the previous model run?



From the above plot , we can see that raining accuracy continues to improve, but validation accuracy plateaus and Training loss decreases, but validation loss starts to increase significantly

The training accuracy of both models is higher than the validation accuracy, which suggests that the models are not generalizing well to new data. The training loss of both models is lower than the validation loss, which is further evidence of overfitting. The training accuracy and loss curves for both models plateau after a certain number of epochs, which suggests that the models have learned as much as they can from the training data and that further training is not likely to improve their performance.

This shows signs of model overfitting

Which class has the least number of samples?

seborrheic keratosis with 3.439%

Which classes dominate the data in terms proportionate number of samples?

pigmented benign keratosis with 20.634 %

Analyze your results here. Did you get rid of underfitting/overfitting? Did class rebalance help?

The accuracy of both training and validation data increases over time, which is a good sign. However, the validation accuracy is slightly lower than the training accuracy, which suggests that the models may be overfitting the training data. For the second graph the loss of both training and validation data decreases over time, which is also a good sign. However, the validation loss is slightly higher than the training loss, which further confirms that the models may be overfitting the training data. However from the previous models we can definately see a better improvement