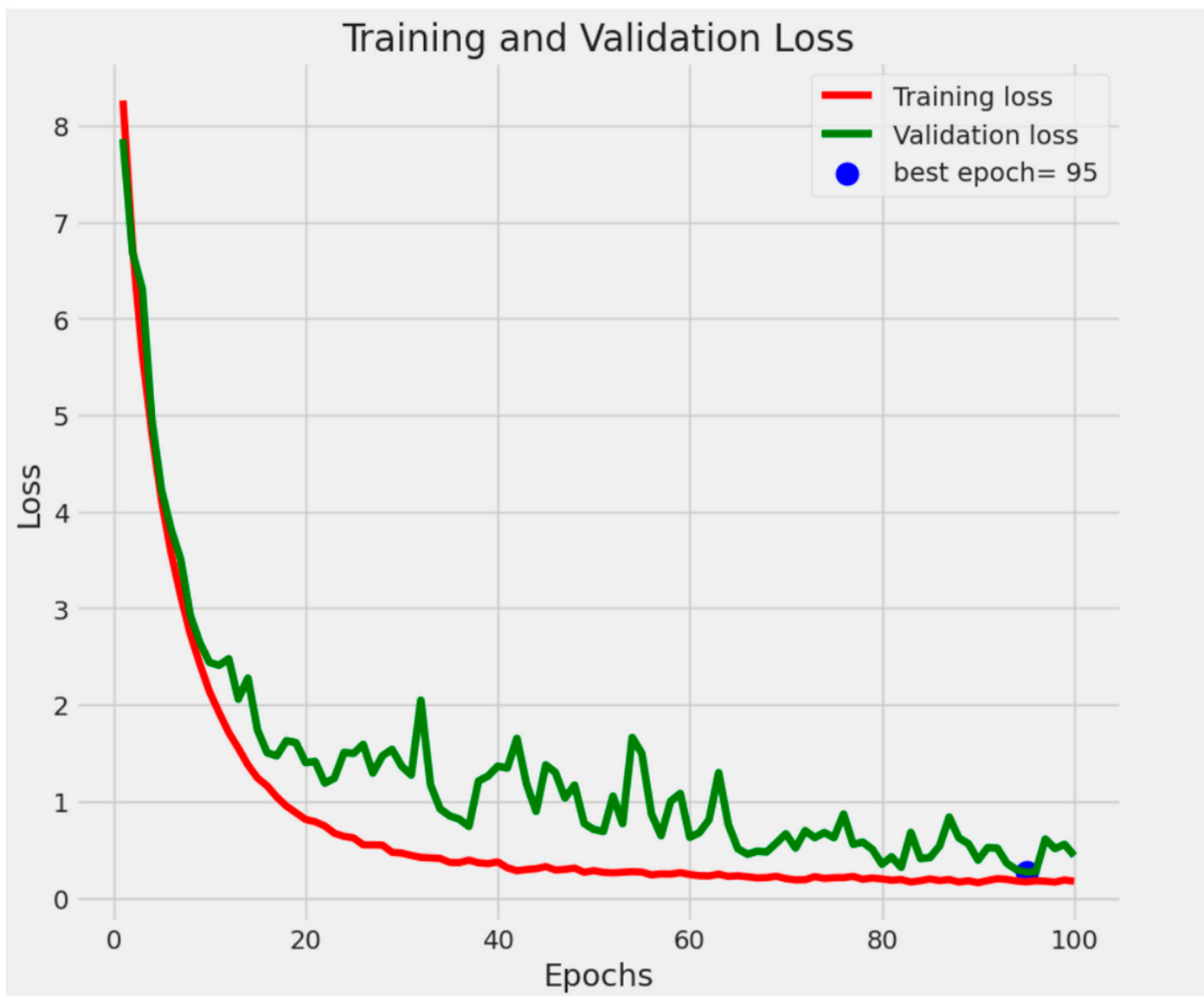
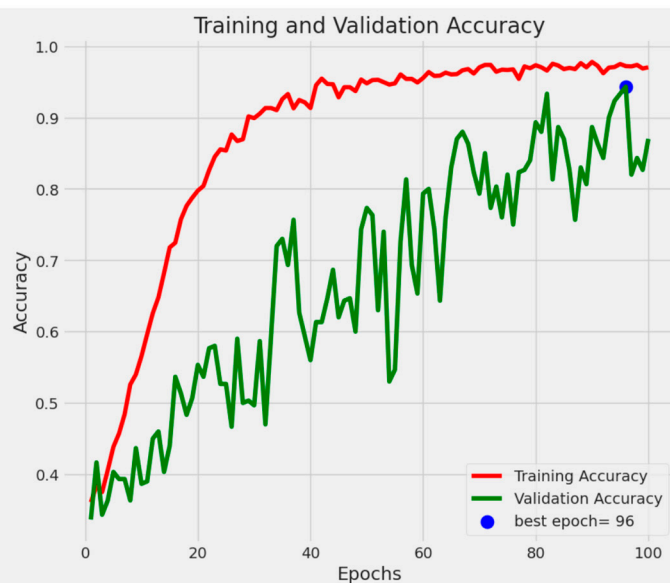
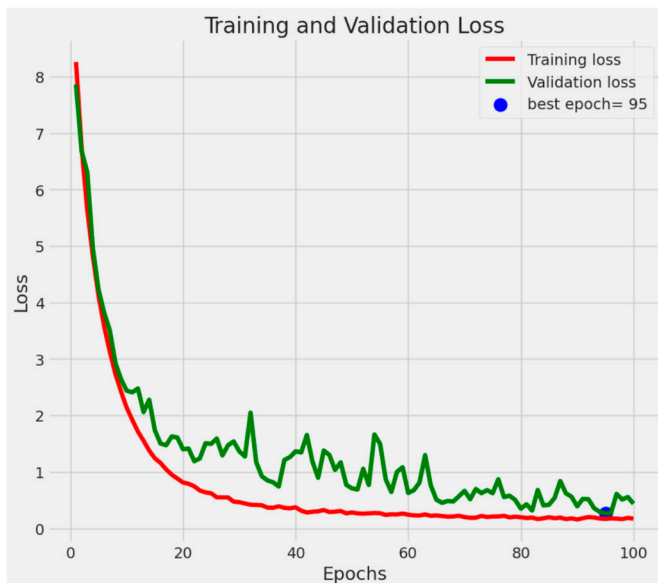
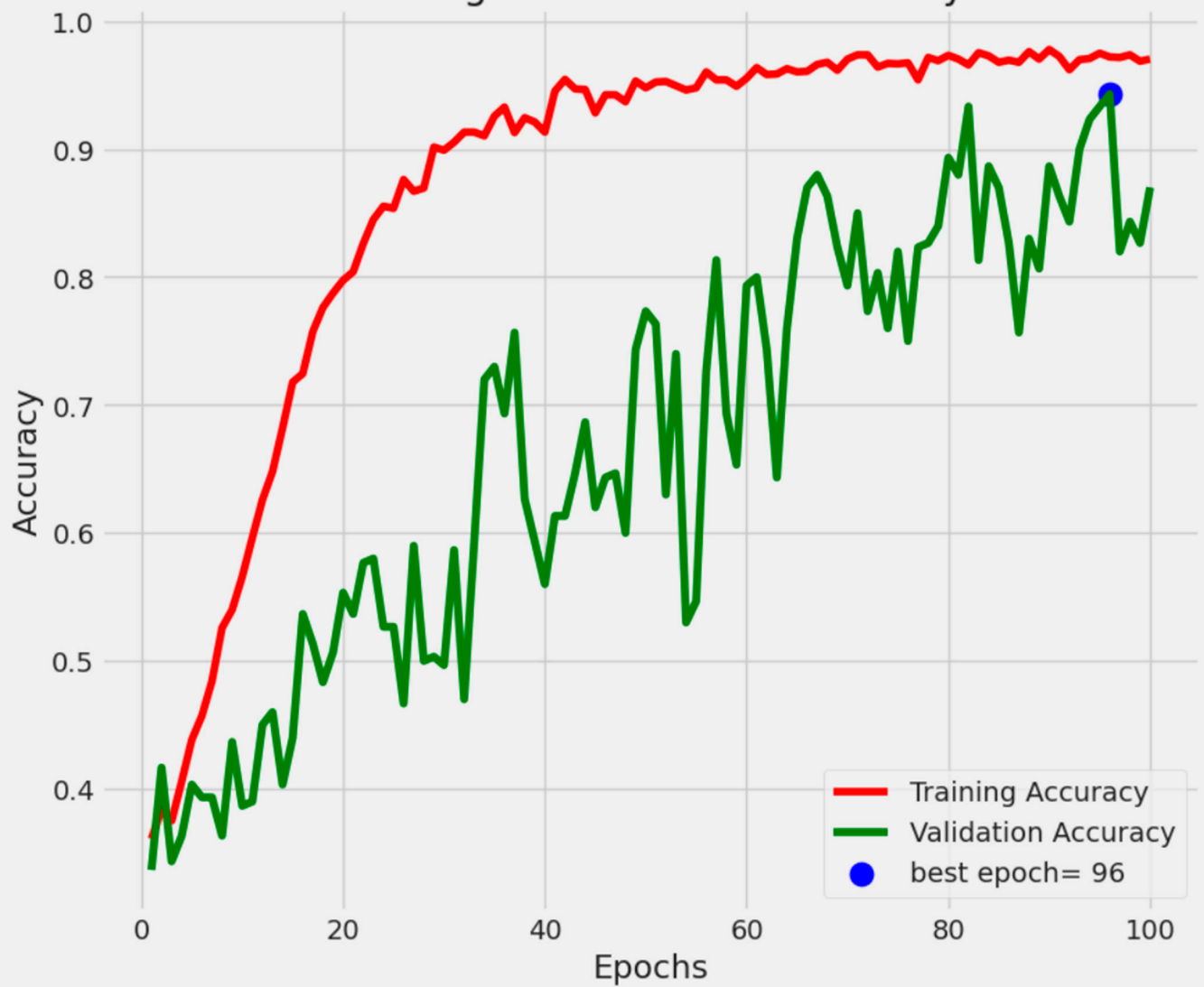
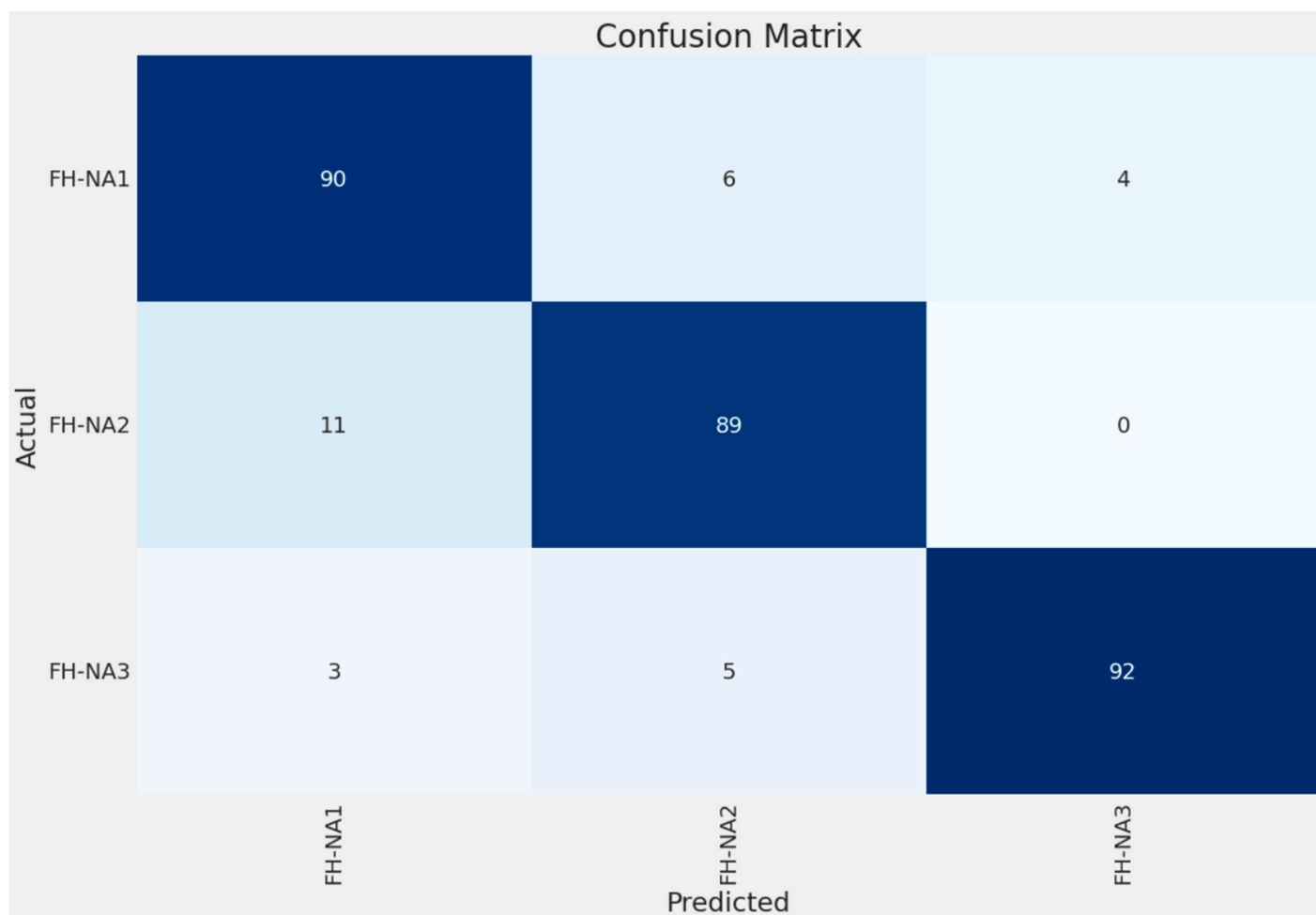


MOBILENET V2



Training and Validation Accuracy





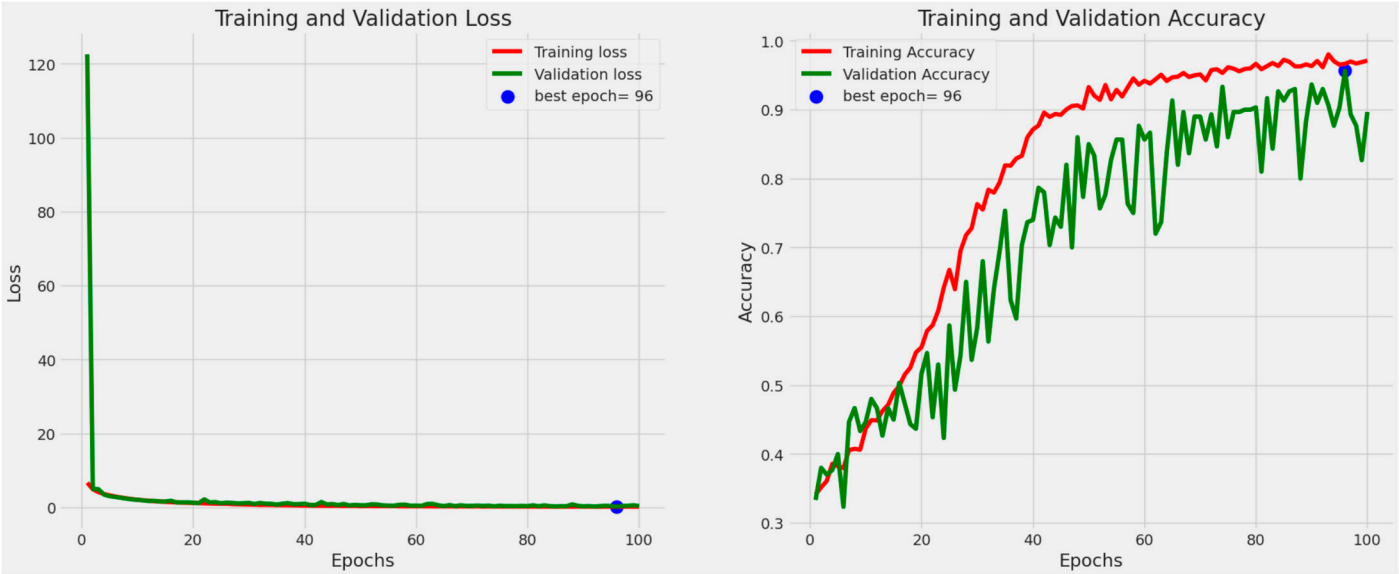
there were 29 errors in 300 tests for an accuracy of 90.33

Classification Report:

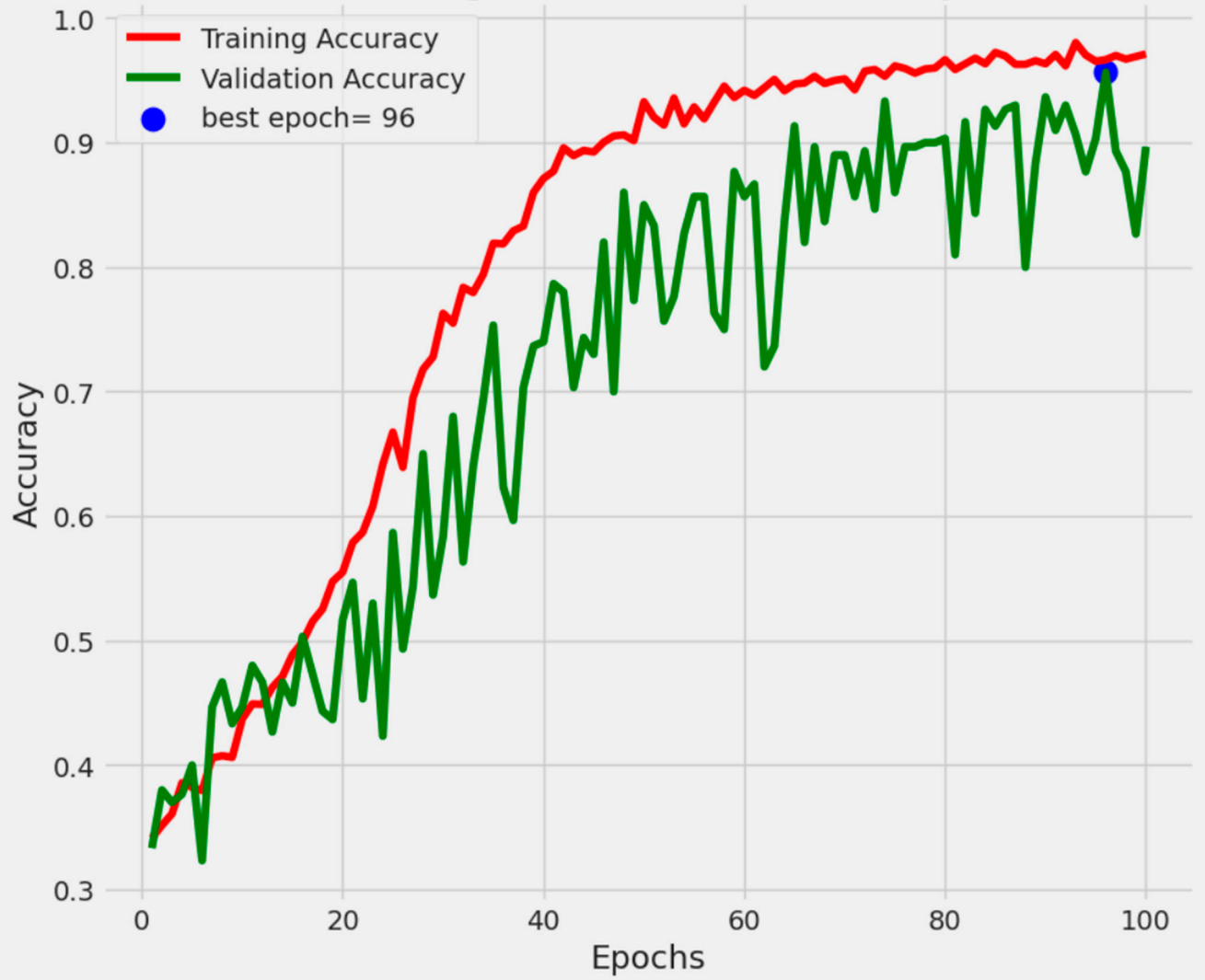
	precision	recall	f1-score	support
FH-NA1	0.8654	0.9000	0.8824	100
FH-NA2	0.8900	0.8900	0.8900	100
FH-NA3	0.9583	0.9200	0.9388	100
accuracy			0.9033	300
macro avg	0.9046	0.9033	0.9037	300
weighted avg	0.9046	0.9033	0.9037	300

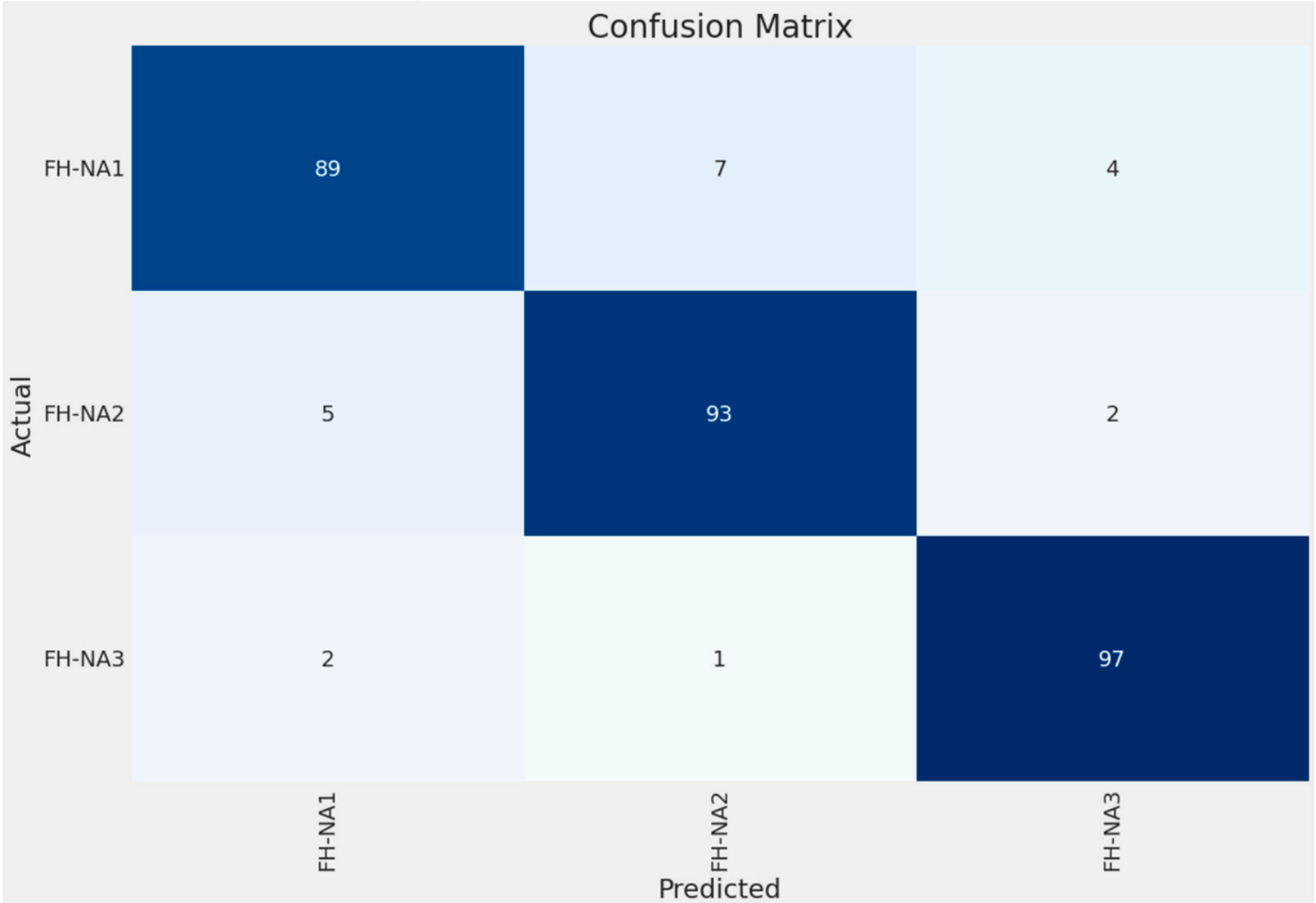
INCEPTION V3: 36.37

DENSENET 121



Training and Validation Accuracy



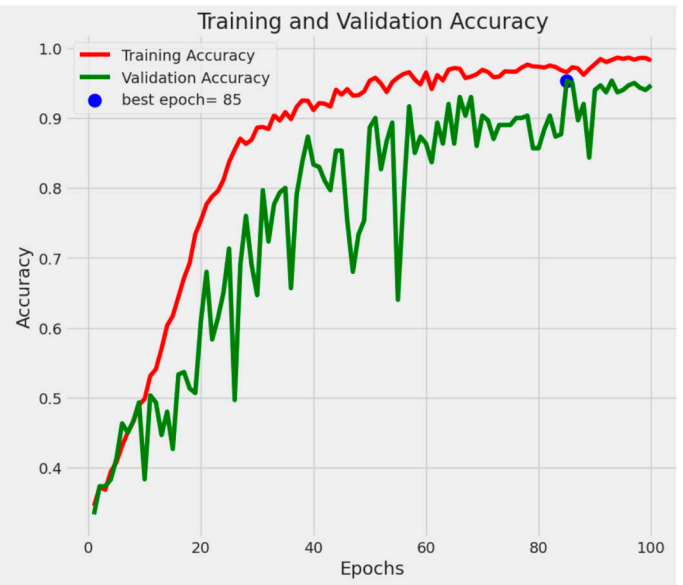
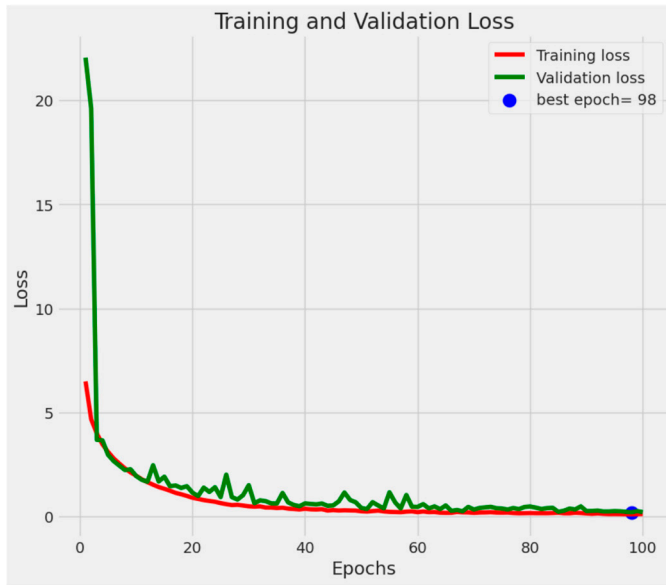


there were 21 errors in 300 tests for an accuracy of 93.00

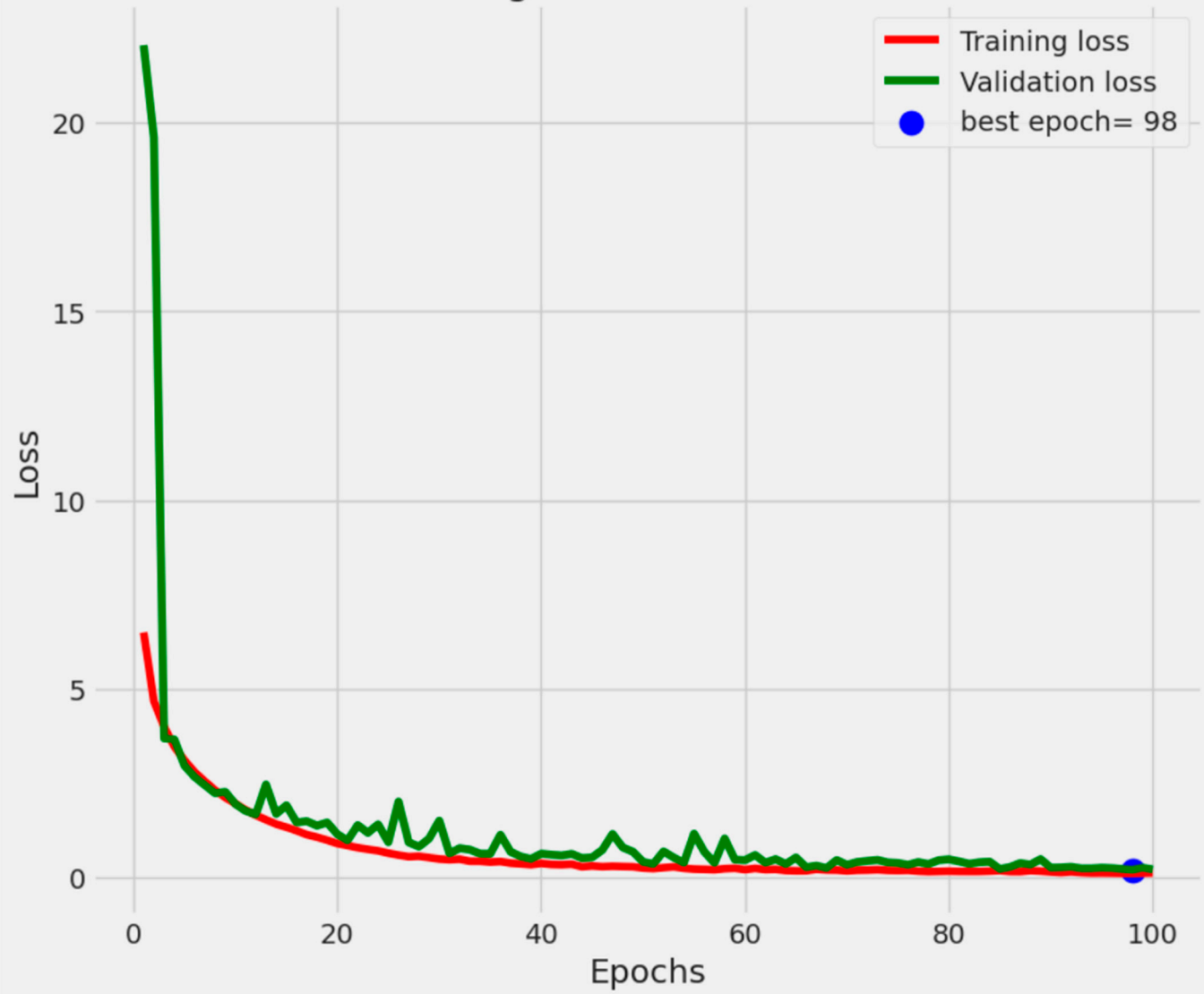
Classification Report:

	precision	recall	f1-score	support
FH-NA1	0.9271	0.8900	0.9082	100
FH-NA2	0.9208	0.9300	0.9254	100
FH-NA3	0.9417	0.9700	0.9557	100
accuracy			0.9300	300
macro avg	0.9299	0.9300	0.9297	300
weighted avg	0.9299	0.9300	0.9297	300

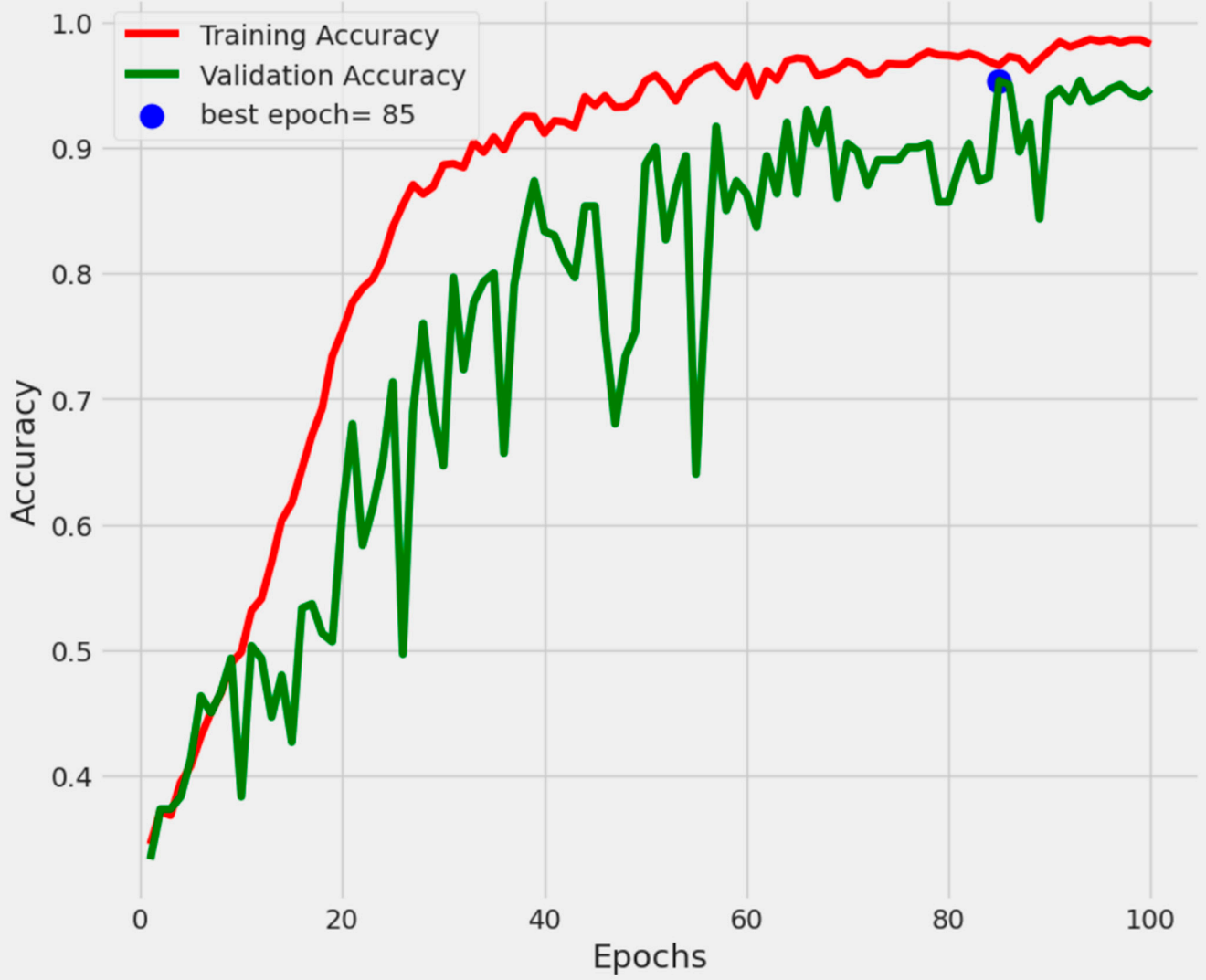
DENSENET 169

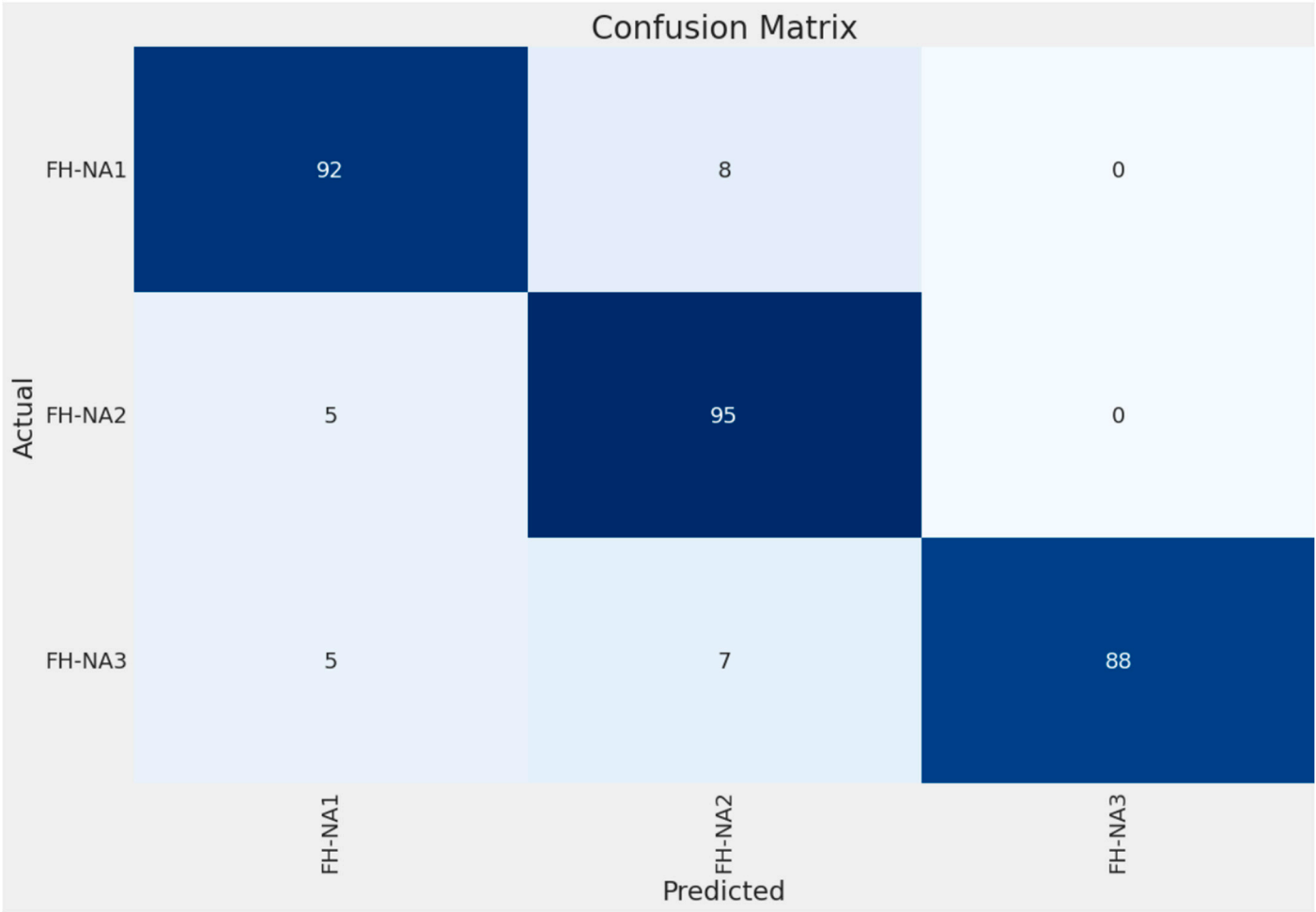


Training and Validation Loss



Training and Validation Accuracy



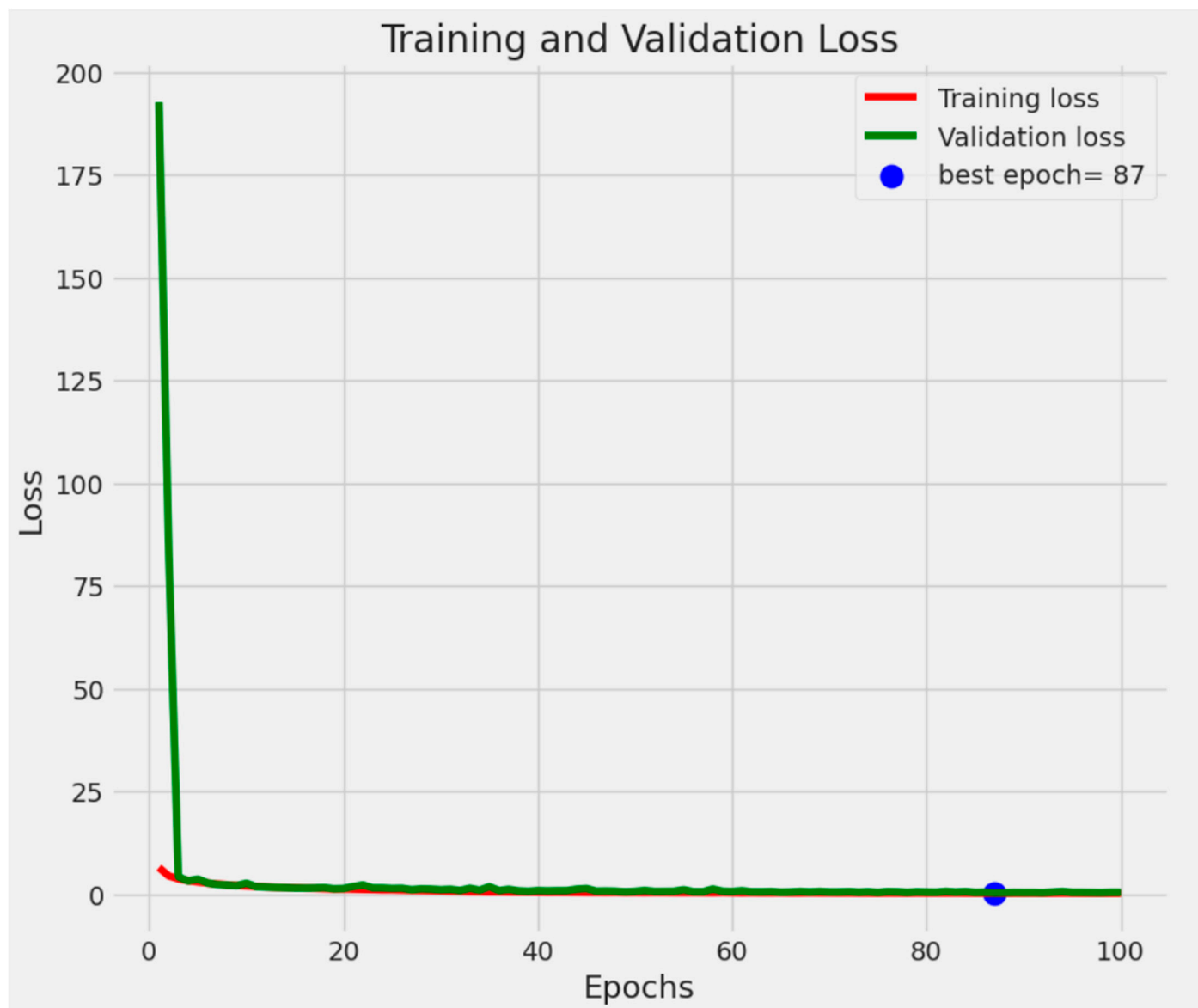
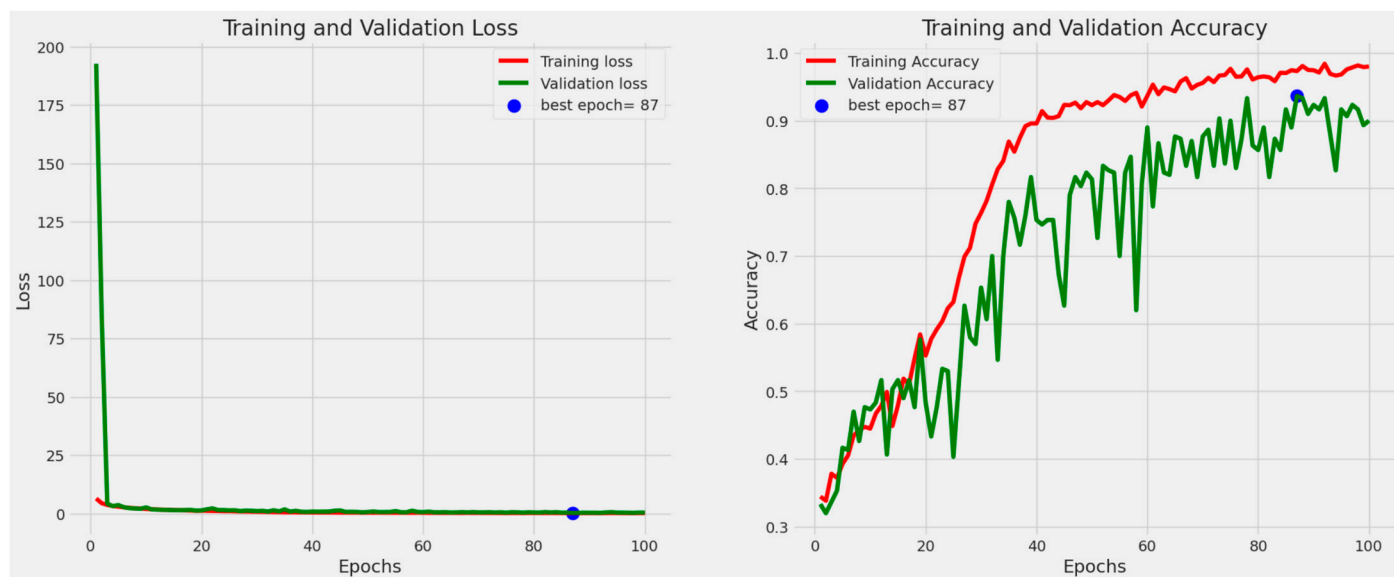


there were 25 errors in 300 tests for an accuracy of 91.67

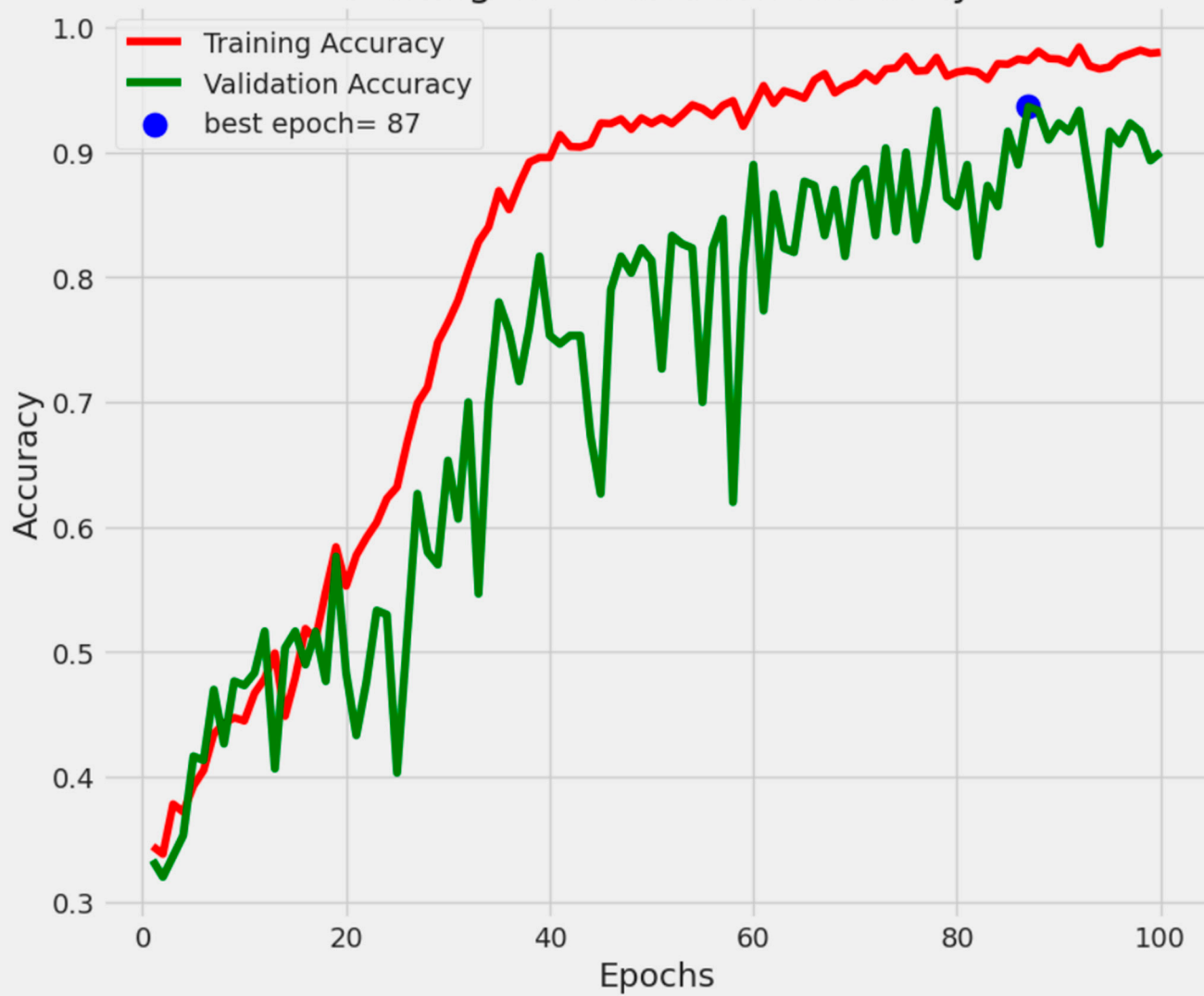
Classification Report:

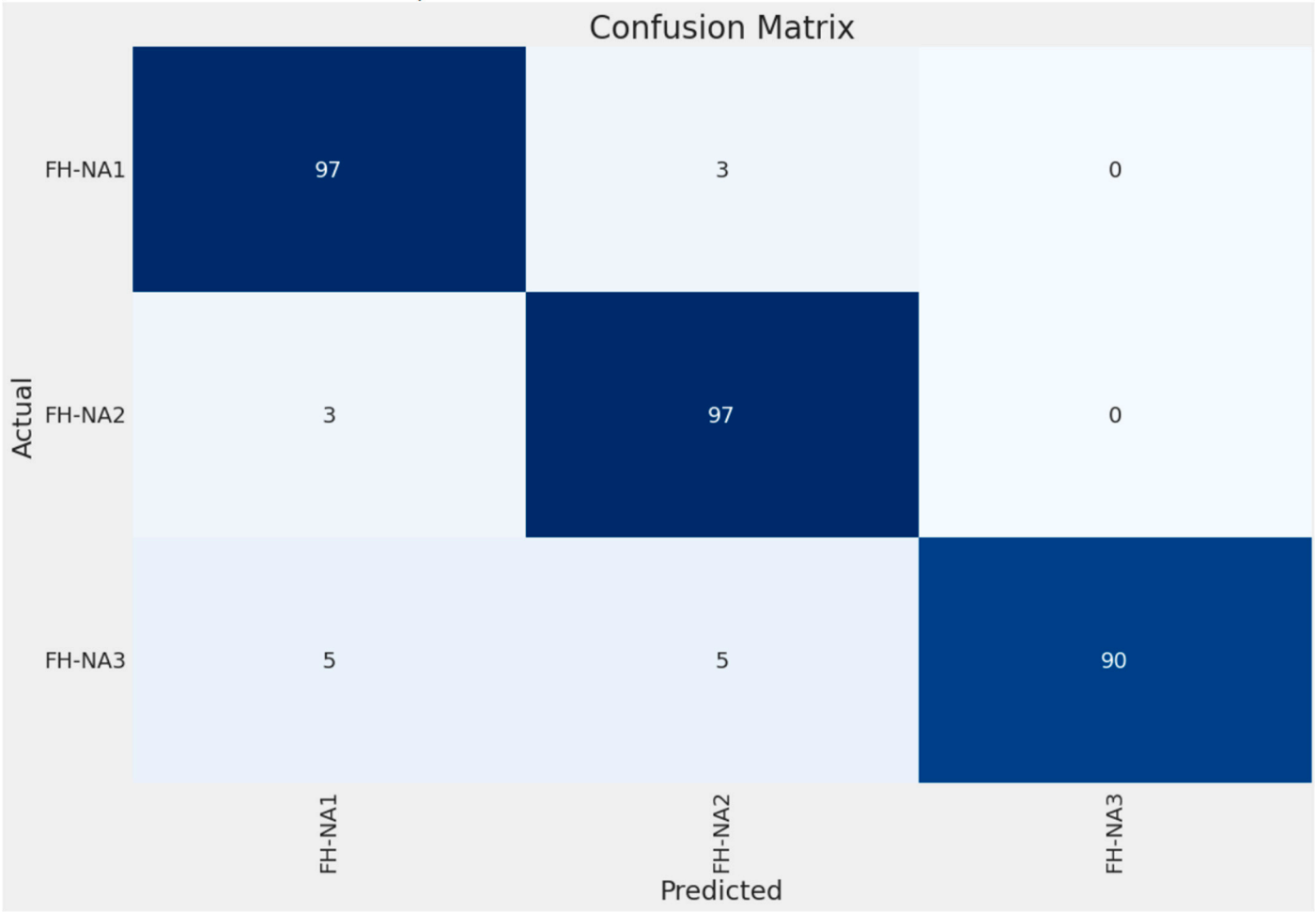
	precision	recall	f1-score	support
FH-NA1	0.9020	0.9200	0.9109	100
FH-NA2	0.8636	0.9500	0.9048	100
FH-NA3	1.0000	0.8800	0.9362	100
accuracy			0.9167	300
macro avg	0.9219	0.9167	0.9173	300
weighted avg	0.9219	0.9167	0.9173	300

DENSENET 201



Training and Validation Accuracy



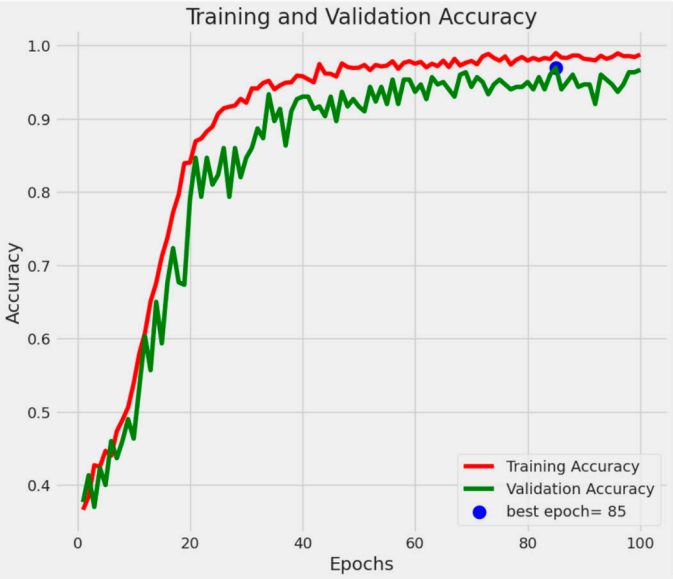
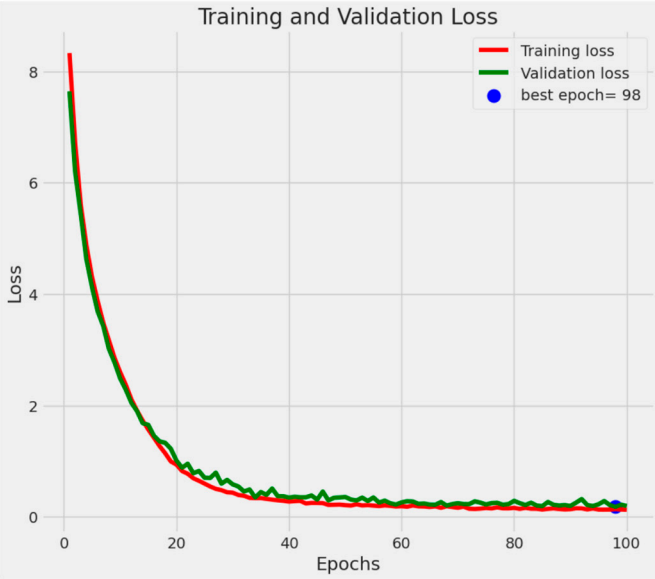


there were 16 errors in 300 tests for an accuracy of 94.67

Classification Report:

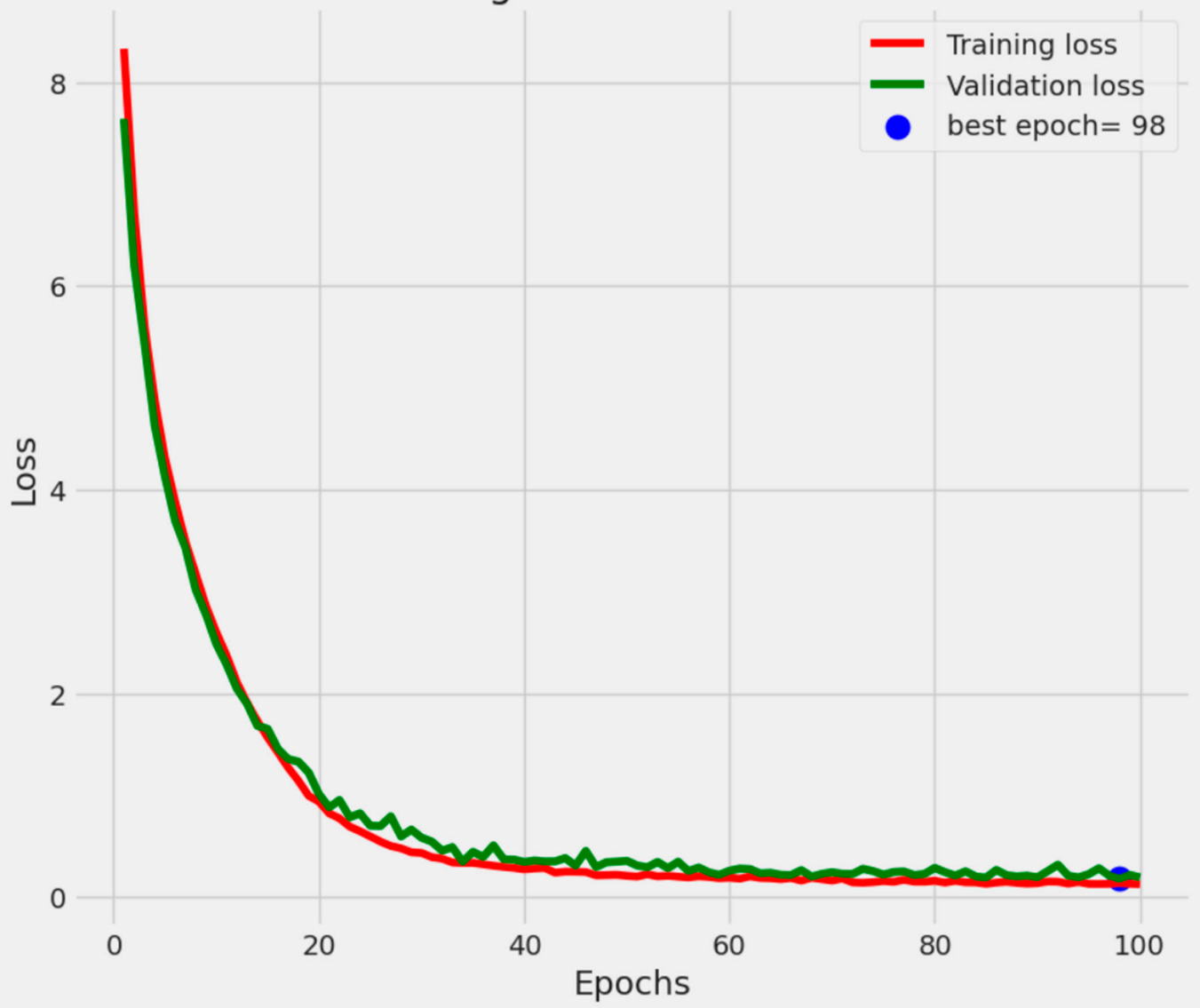
	precision	recall	f1-score	support
FH-NA1	0.9238	0.9700	0.9463	100
FH-NA2	0.9238	0.9700	0.9463	100
FH-NA3	1.0000	0.9000	0.9474	100
accuracy			0.9467	300
macro avg	0.9492	0.9467	0.9467	300
weighted avg	0.9492	0.9467	0.9467	300

EFFICIENTNET B0

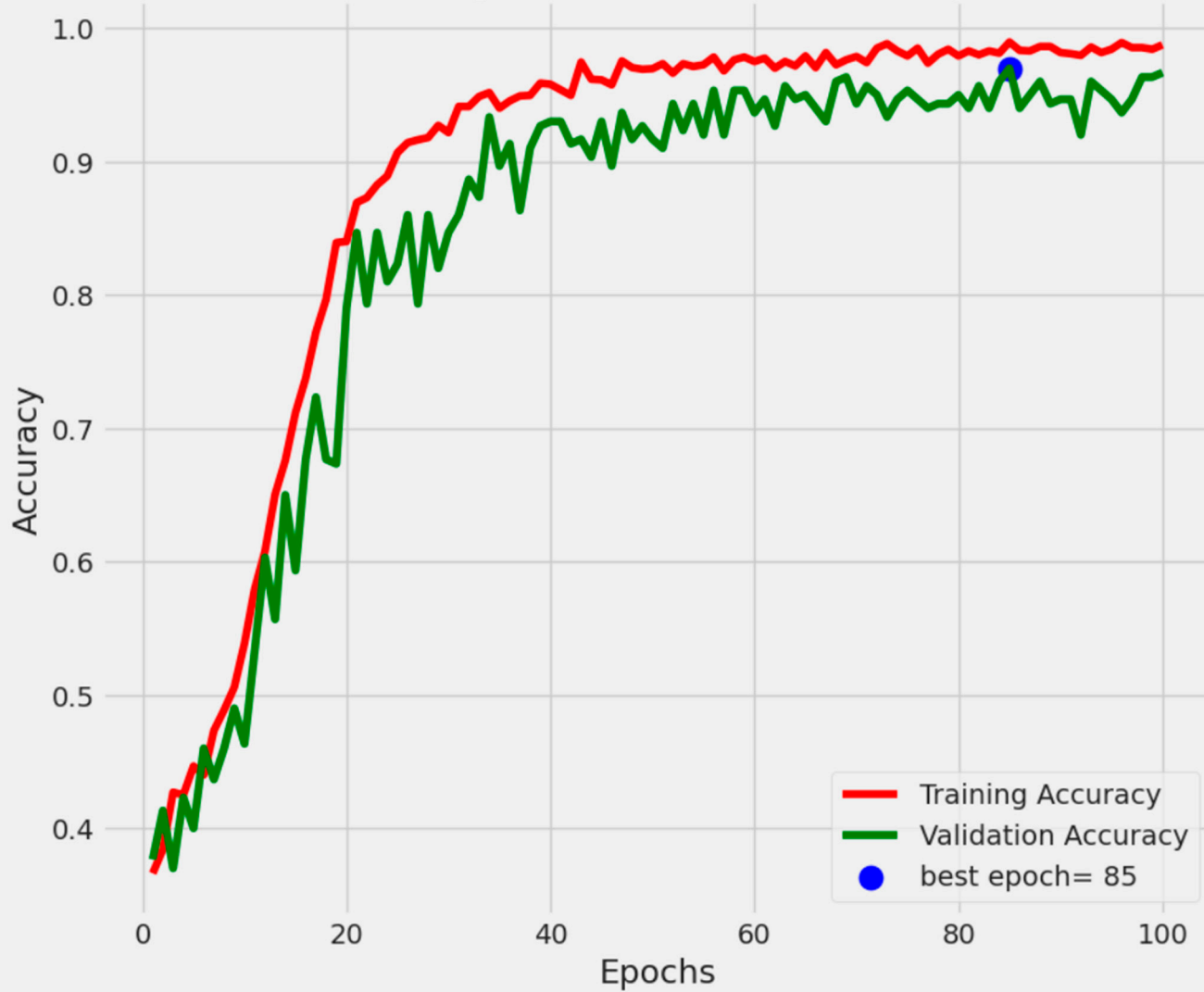


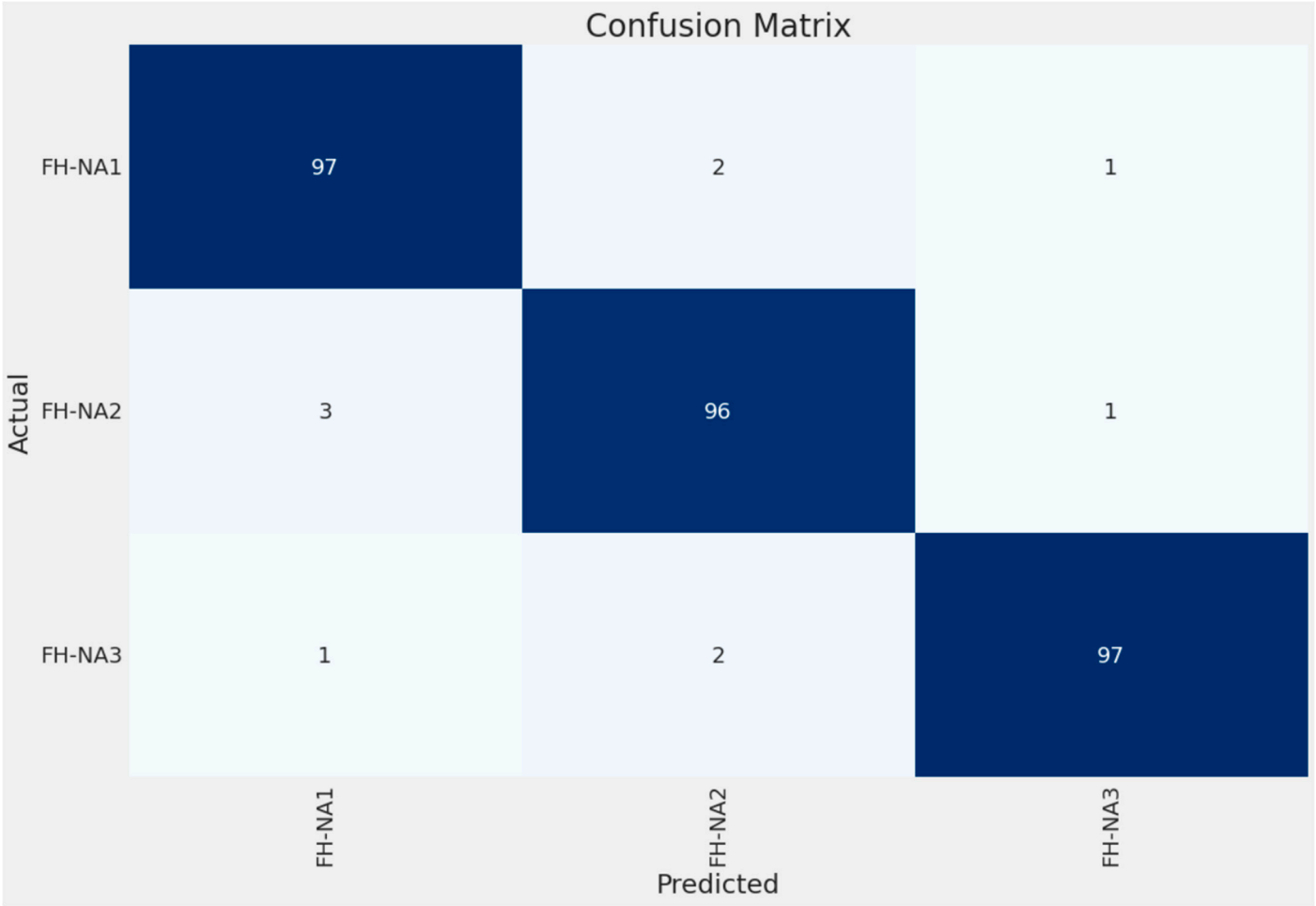
Training and Validation Loss

- Training loss
- Validation loss
- best epoch= 98



Training and Validation Accuracy



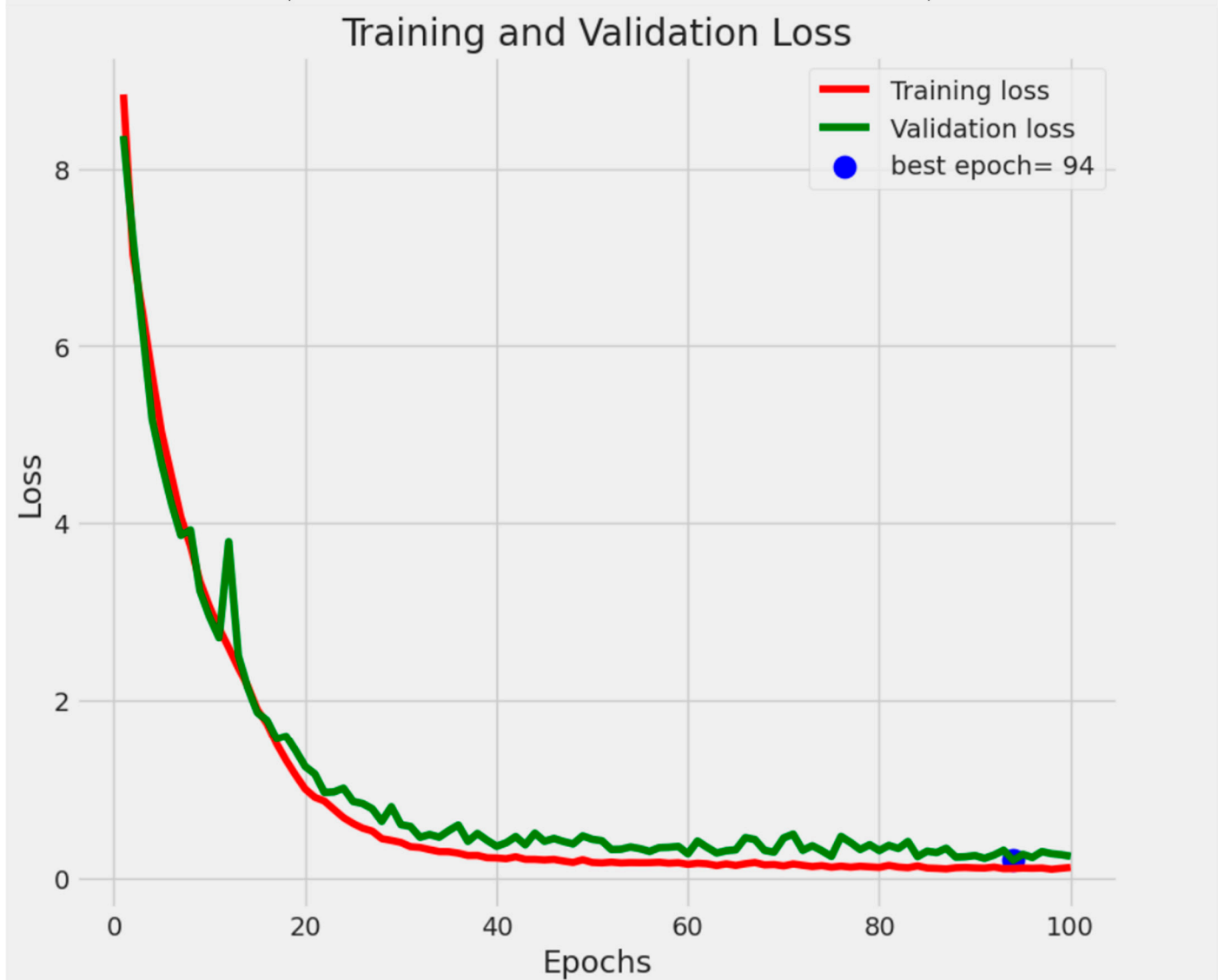
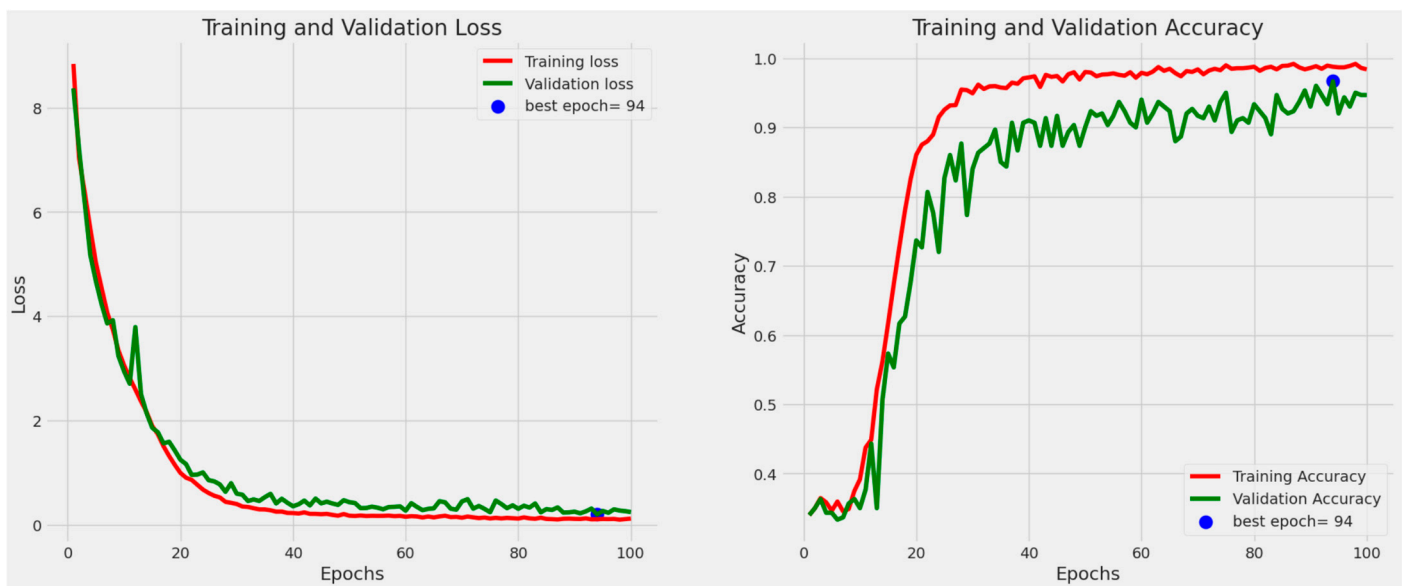


there were 10 errors in 300 tests for an accuracy of 96.67

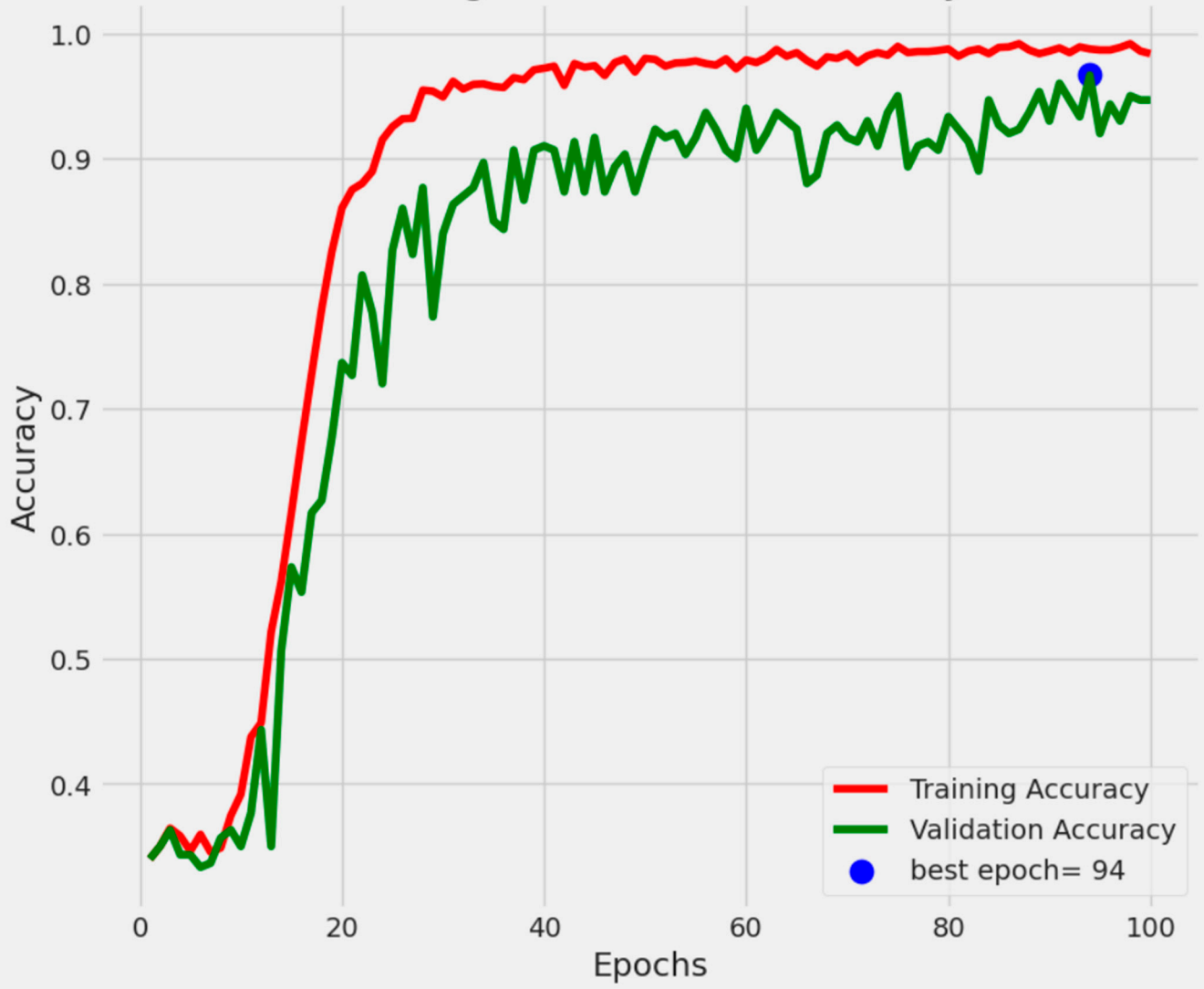
Classification Report:

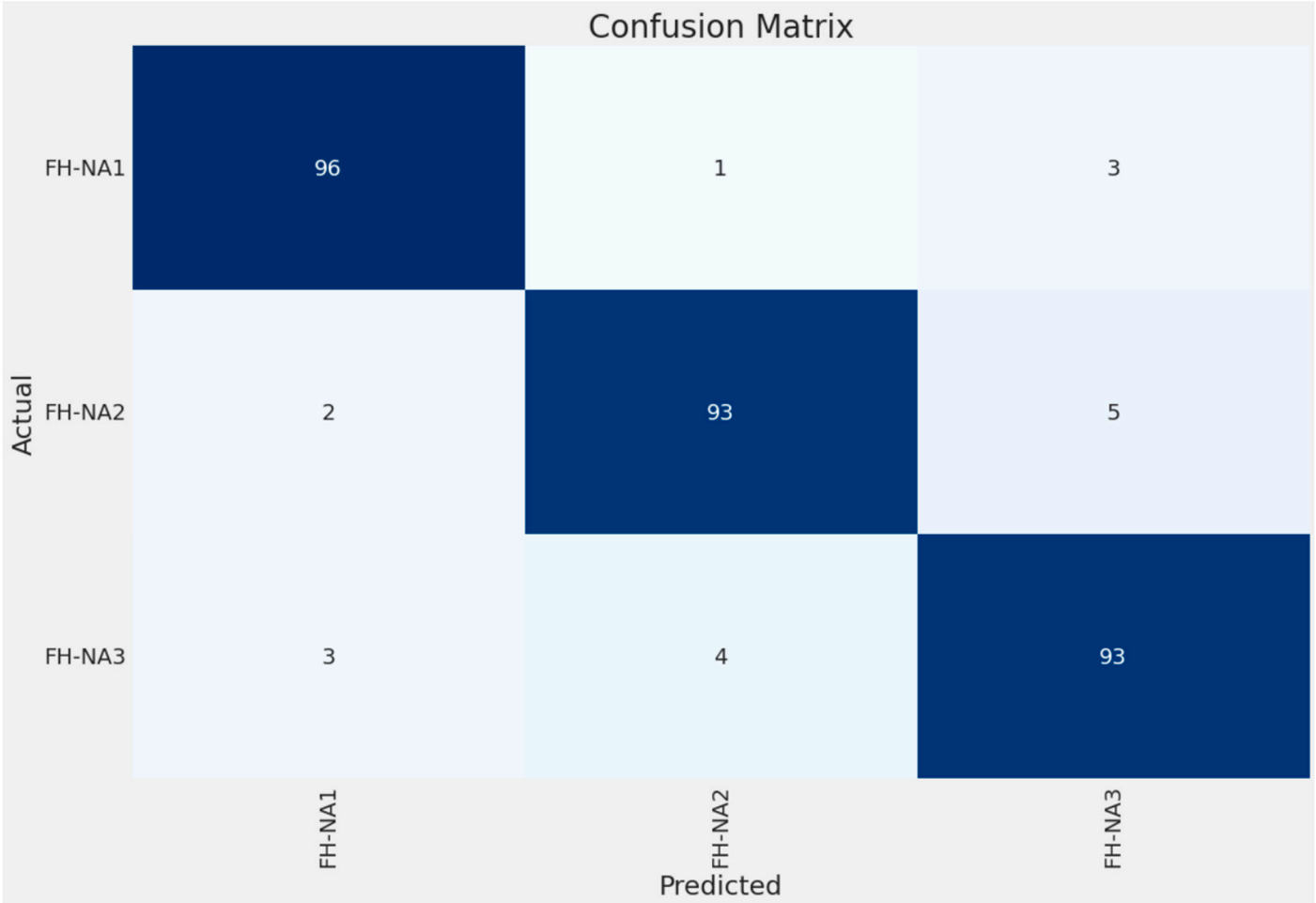
	precision	recall	f1-score	support
FH-NA1	0.9604	0.9700	0.9652	100
FH-NA2	0.9600	0.9600	0.9600	100
FH-NA3	0.9798	0.9700	0.9749	100
accuracy			0.9667	300
macro avg	0.9667	0.9667	0.9667	300
weighted avg	0.9667	0.9667	0.9667	300

XCEPTION



Training and Validation Accuracy





there were 18 errors in 300 tests for an accuracy of 94.00

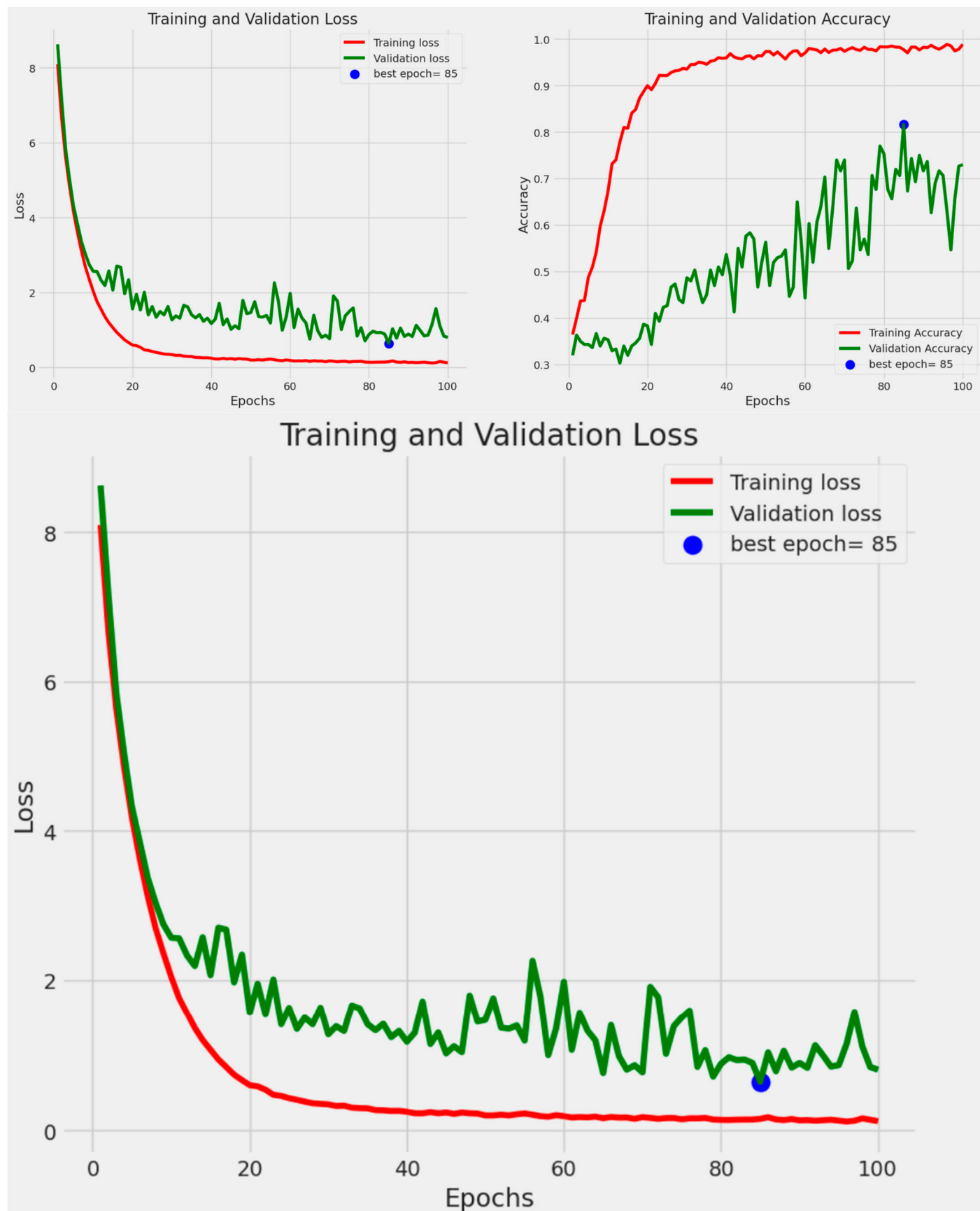
Classification Report:

	precision	recall	f1-score	support
FH-NA1	0.9505	0.9600	0.9552	100
FH-NA2	0.9490	0.9300	0.9394	100
FH-NA3	0.9208	0.9300	0.9254	100
accuracy			0.9400	300
macro avg	0.9401	0.9400	0.9400	300
weighted avg	0.9401	0.9400	0.9400	300

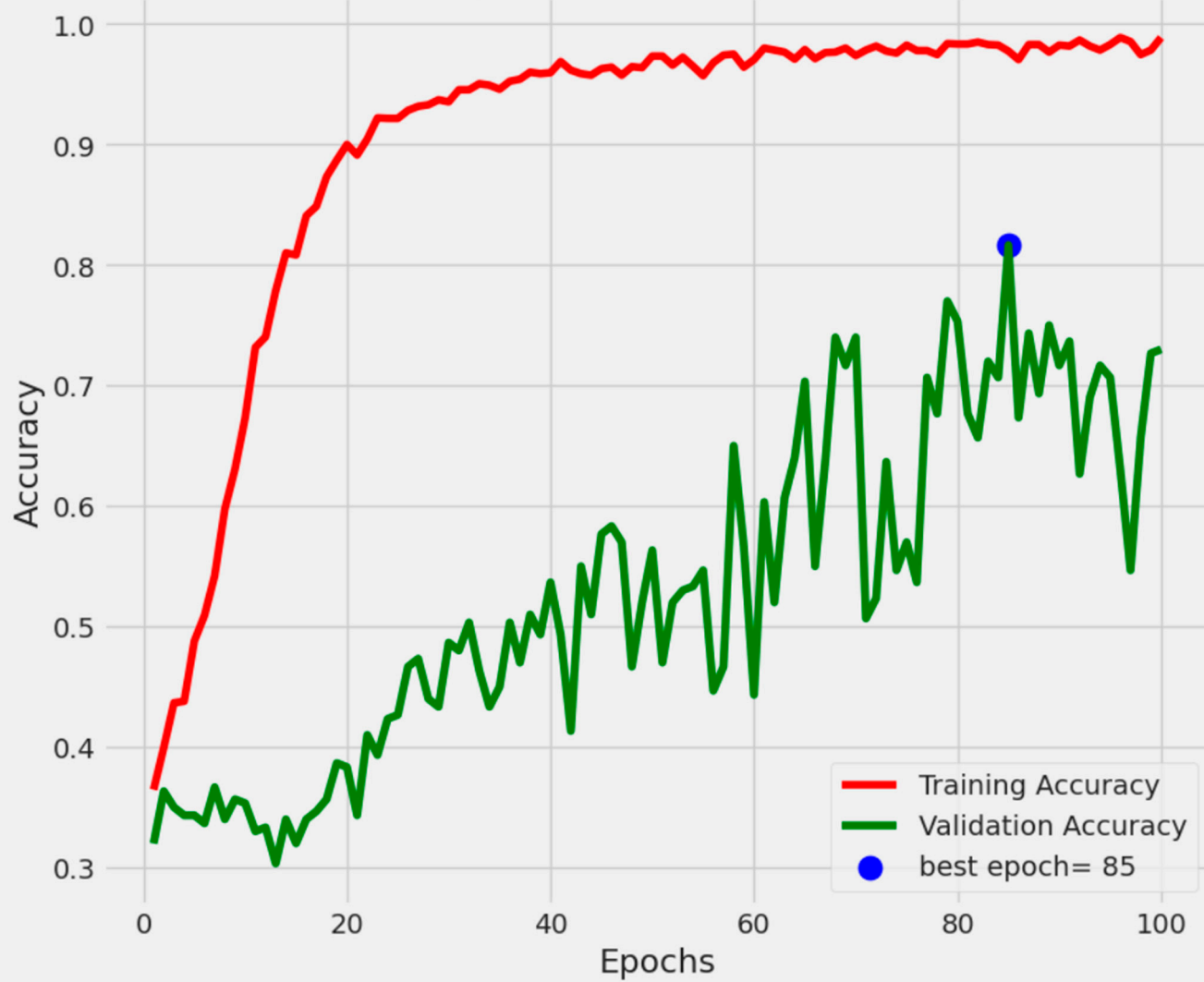
VGG16: 30.67

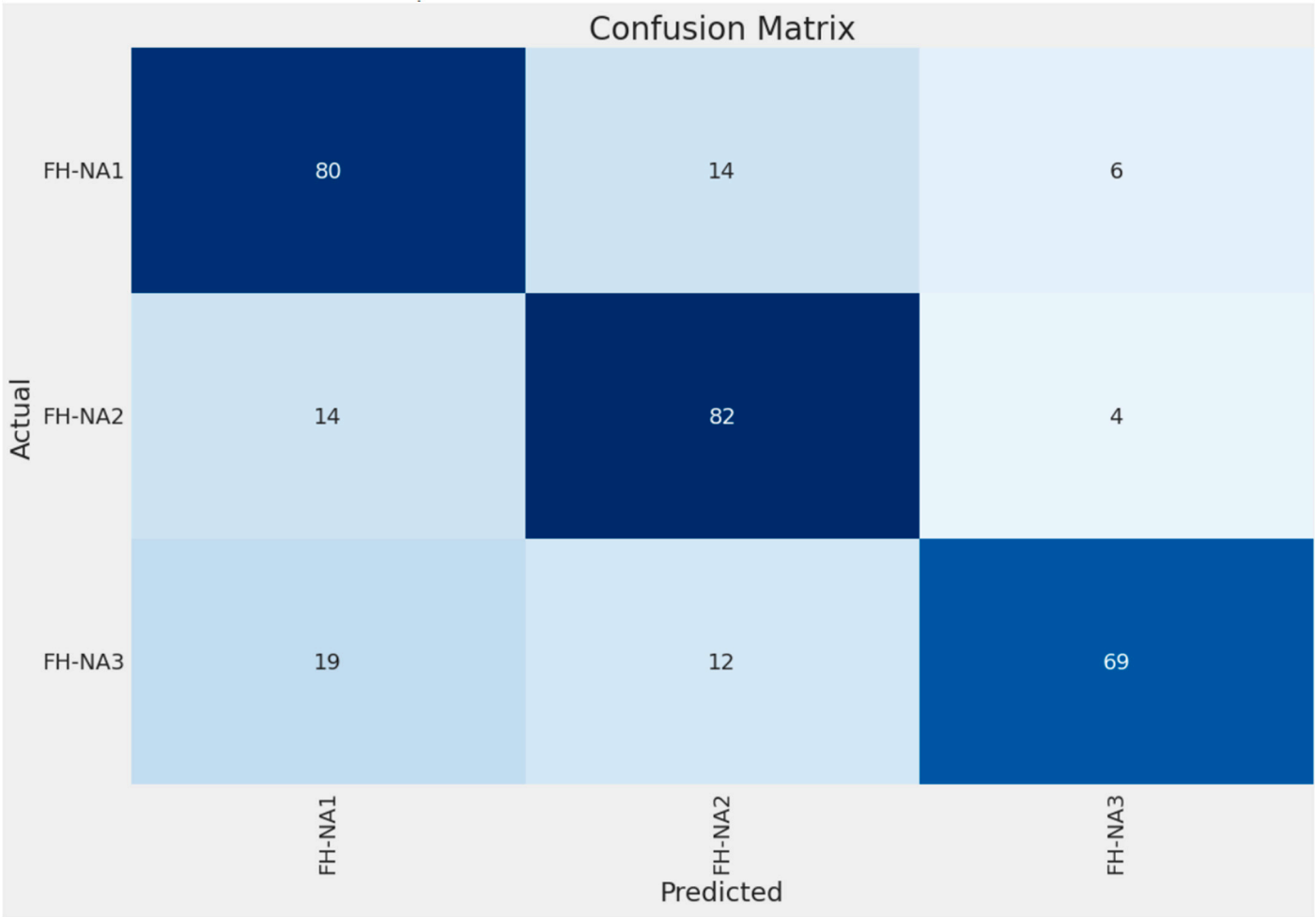
VGG19:34.33

NASNETMOBILE



Training and Validation Accuracy



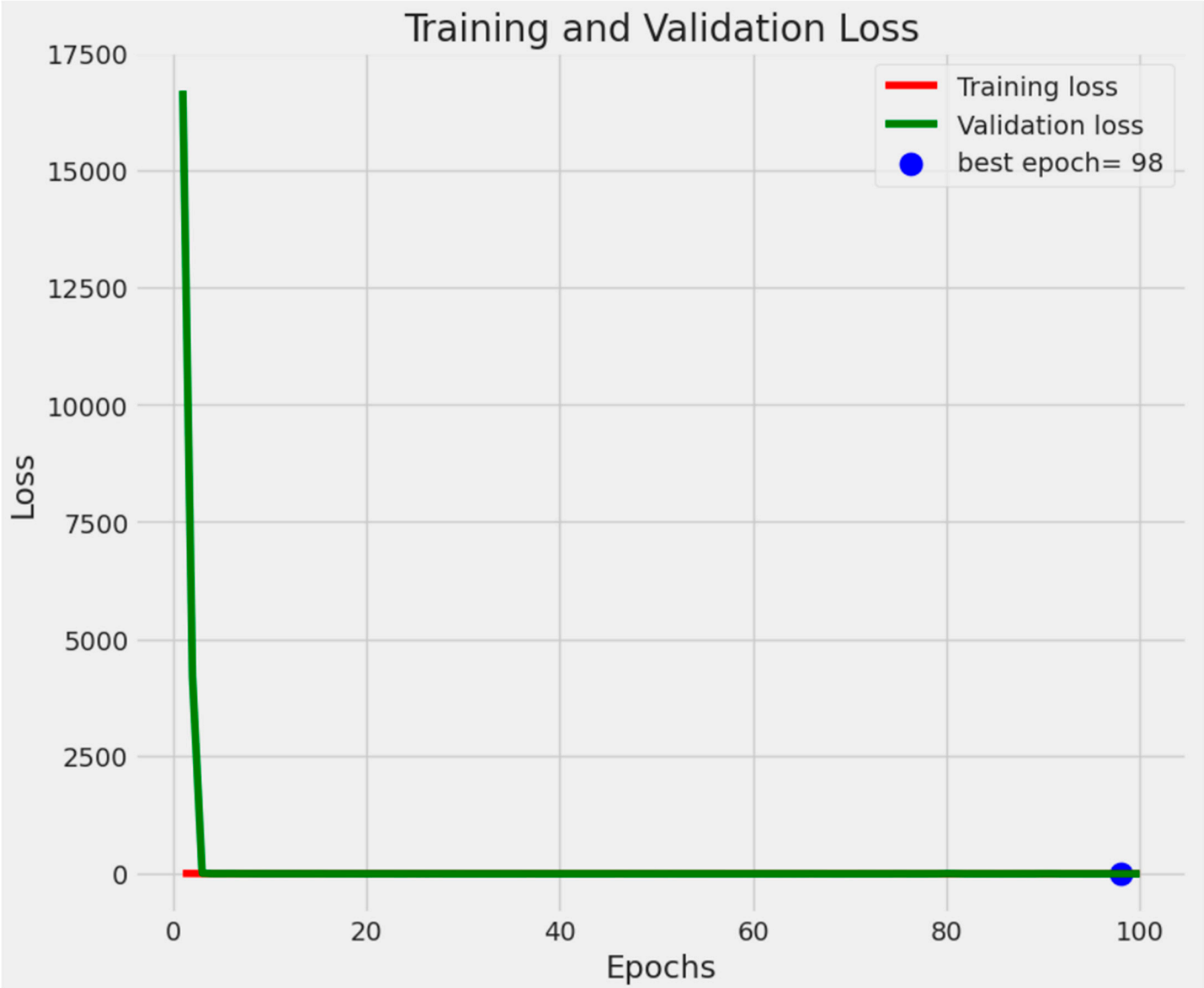
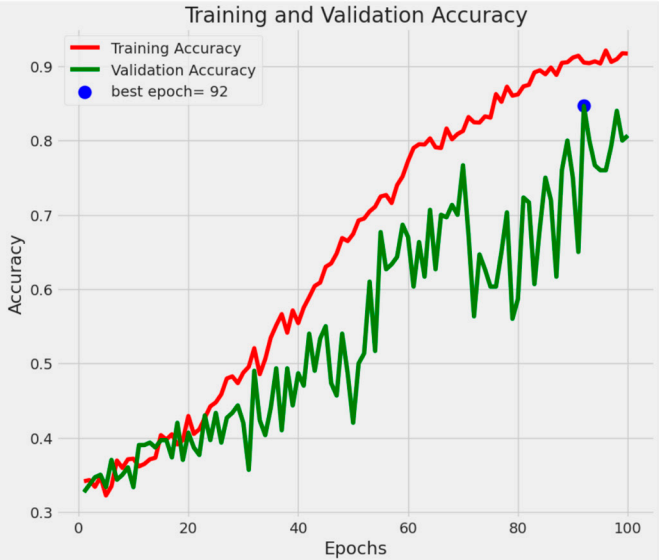
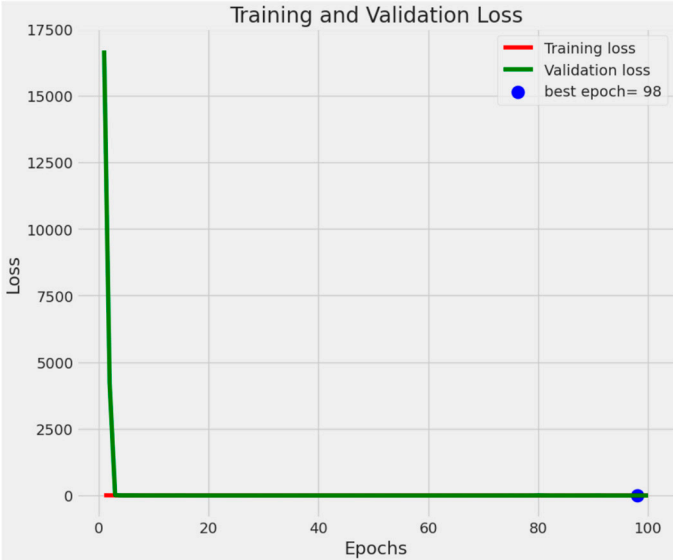


there were 69 errors in 300 tests for an accuracy of 77.00

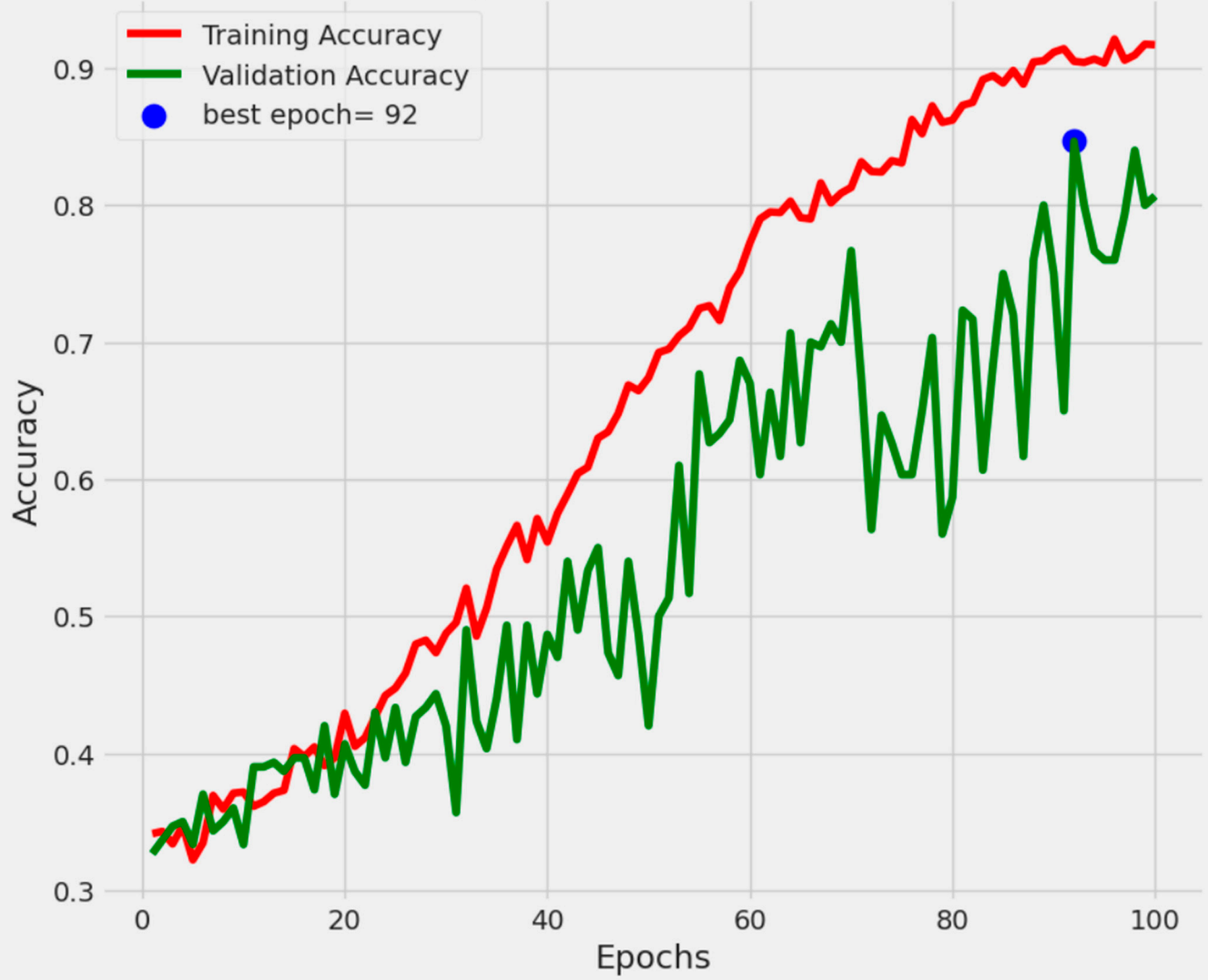
Classification Report:

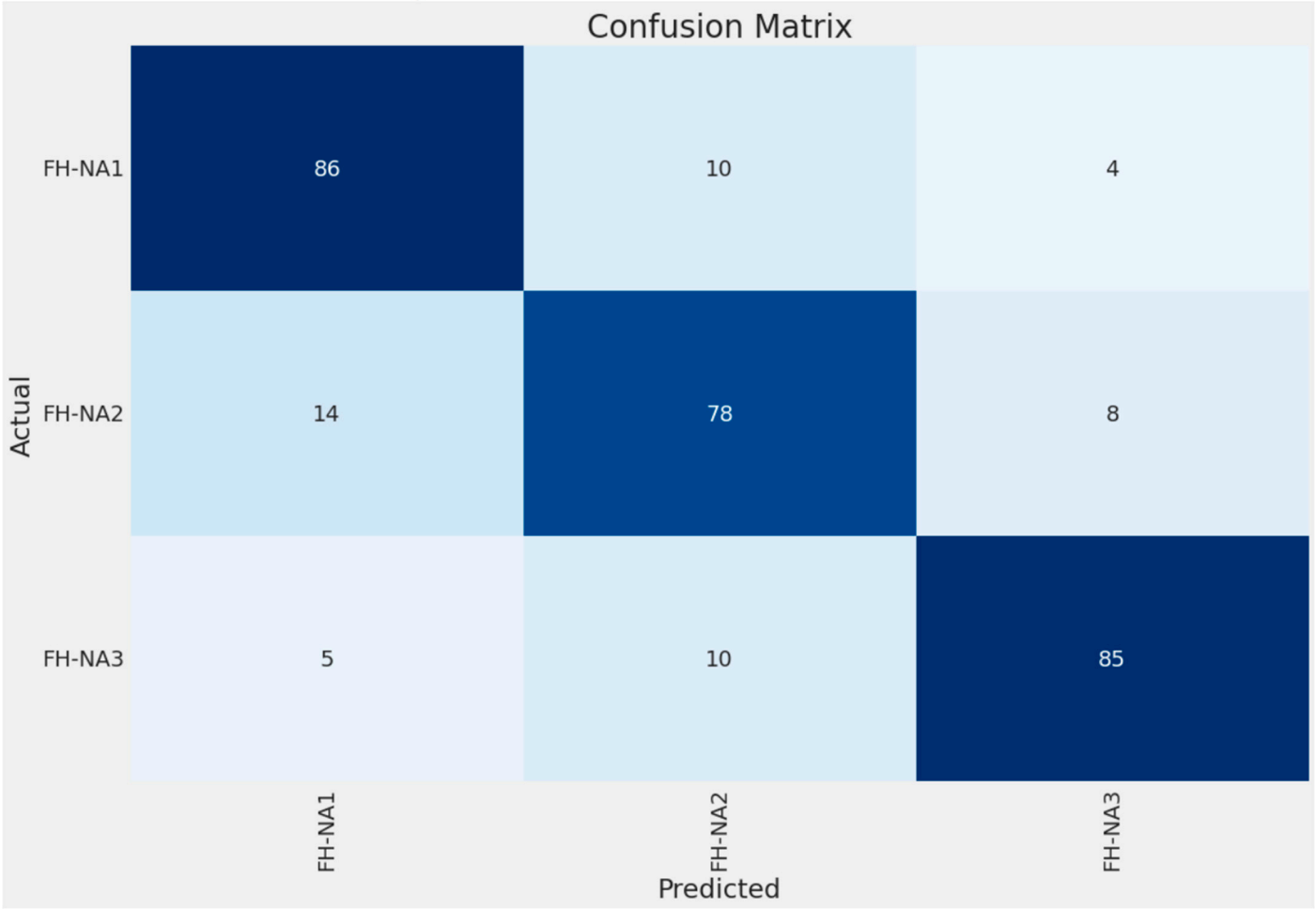
	precision	recall	f1-score	support
FH-NA1	0.7080	0.8000	0.7512	100
FH-NA2	0.7593	0.8200	0.7885	100
FH-NA3	0.8734	0.6900	0.7709	100
accuracy			0.7700	300
macro avg	0.7802	0.7700	0.7702	300
weighted avg	0.7802	0.7700	0.7702	300

RESNET101



Training and Validation Accuracy



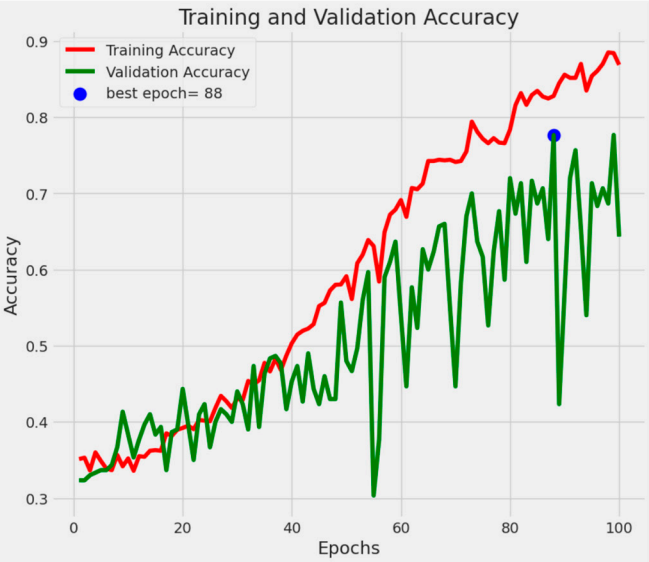
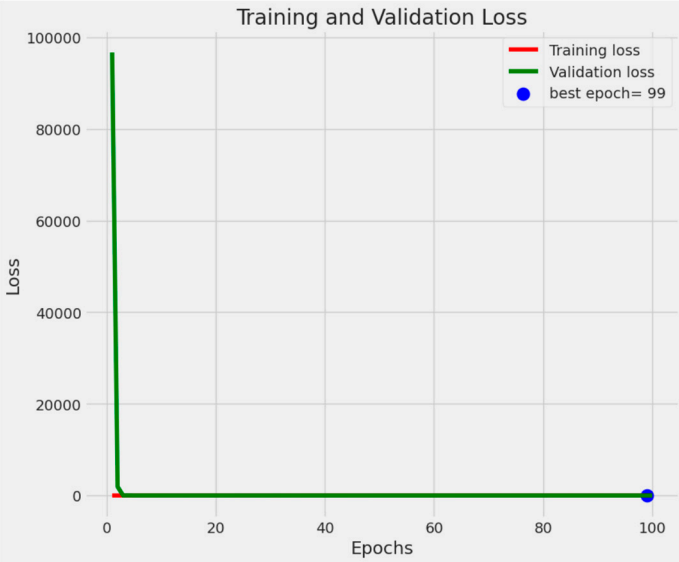


there were 51 errors in 300 tests for an accuracy of 83.00

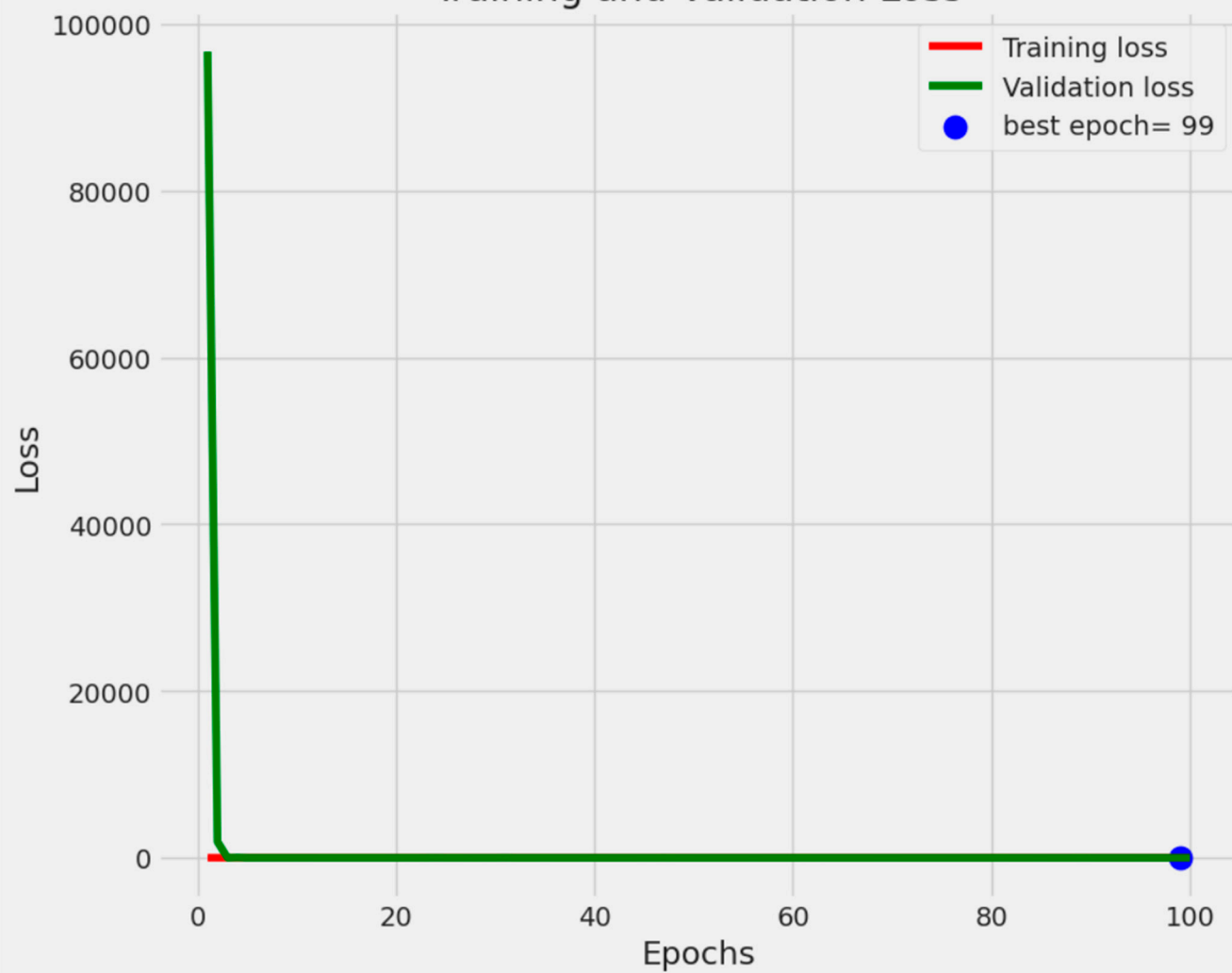
Classification Report:

	precision	recall	f1-score	support
FH-NA1	0.8190	0.8600	0.8390	100
FH-NA2	0.7959	0.7800	0.7879	100
FH-NA3	0.8763	0.8500	0.8629	100
accuracy			0.8300	300
macro avg	0.8304	0.8300	0.8299	300
weighted avg	0.8304	0.8300	0.8299	300

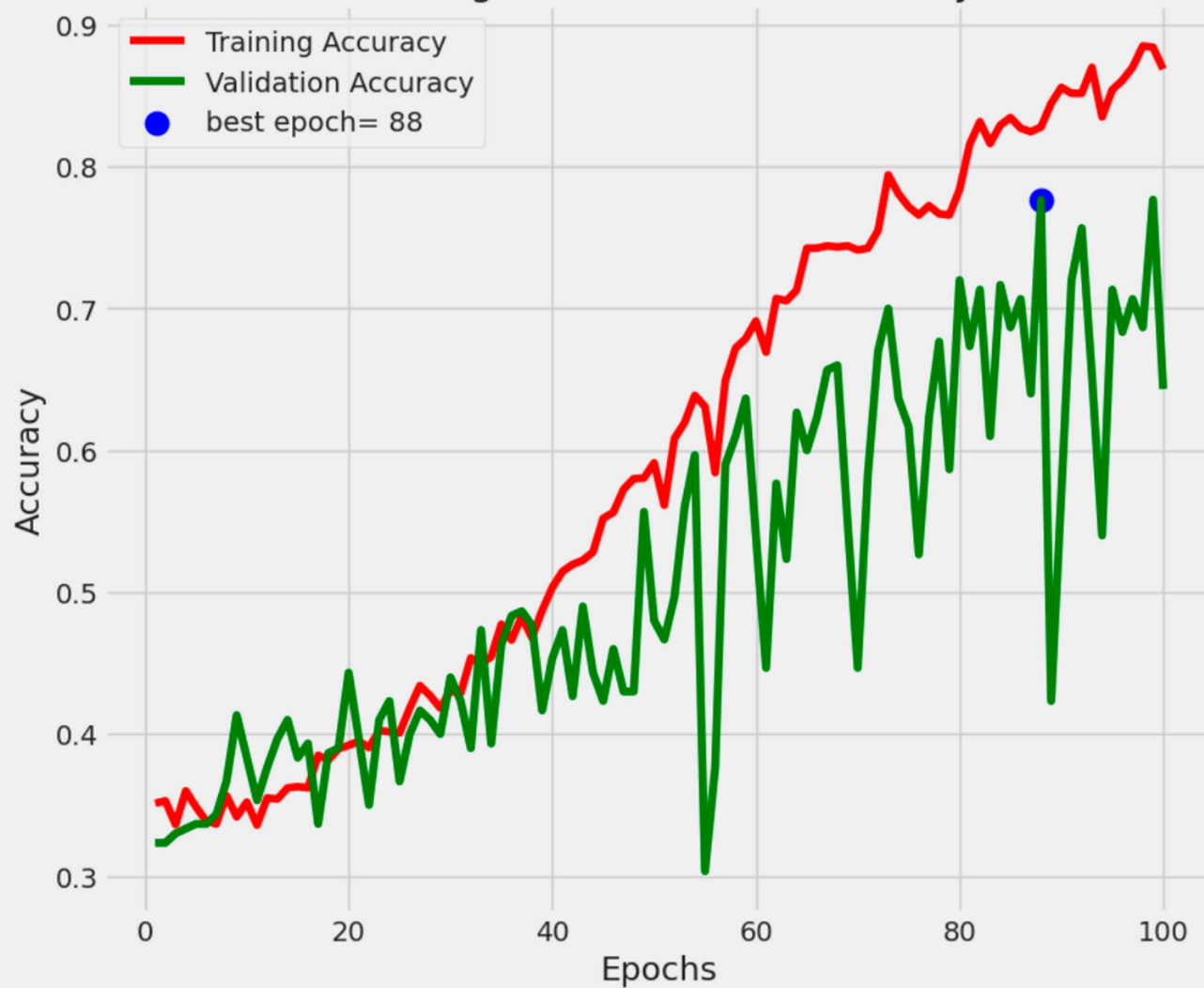
RESNET152

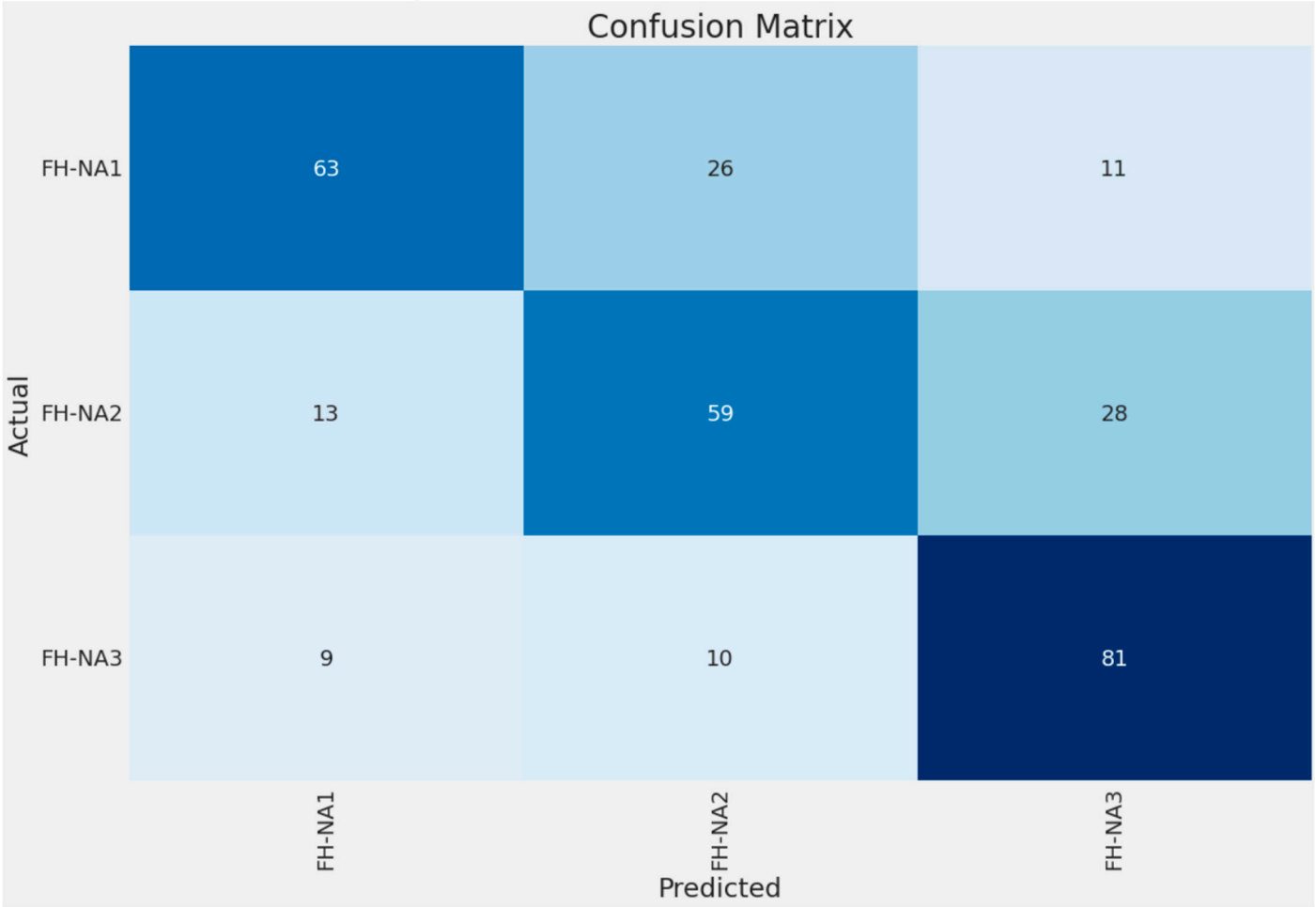


Training and Validation Loss



Training and Validation Accuracy



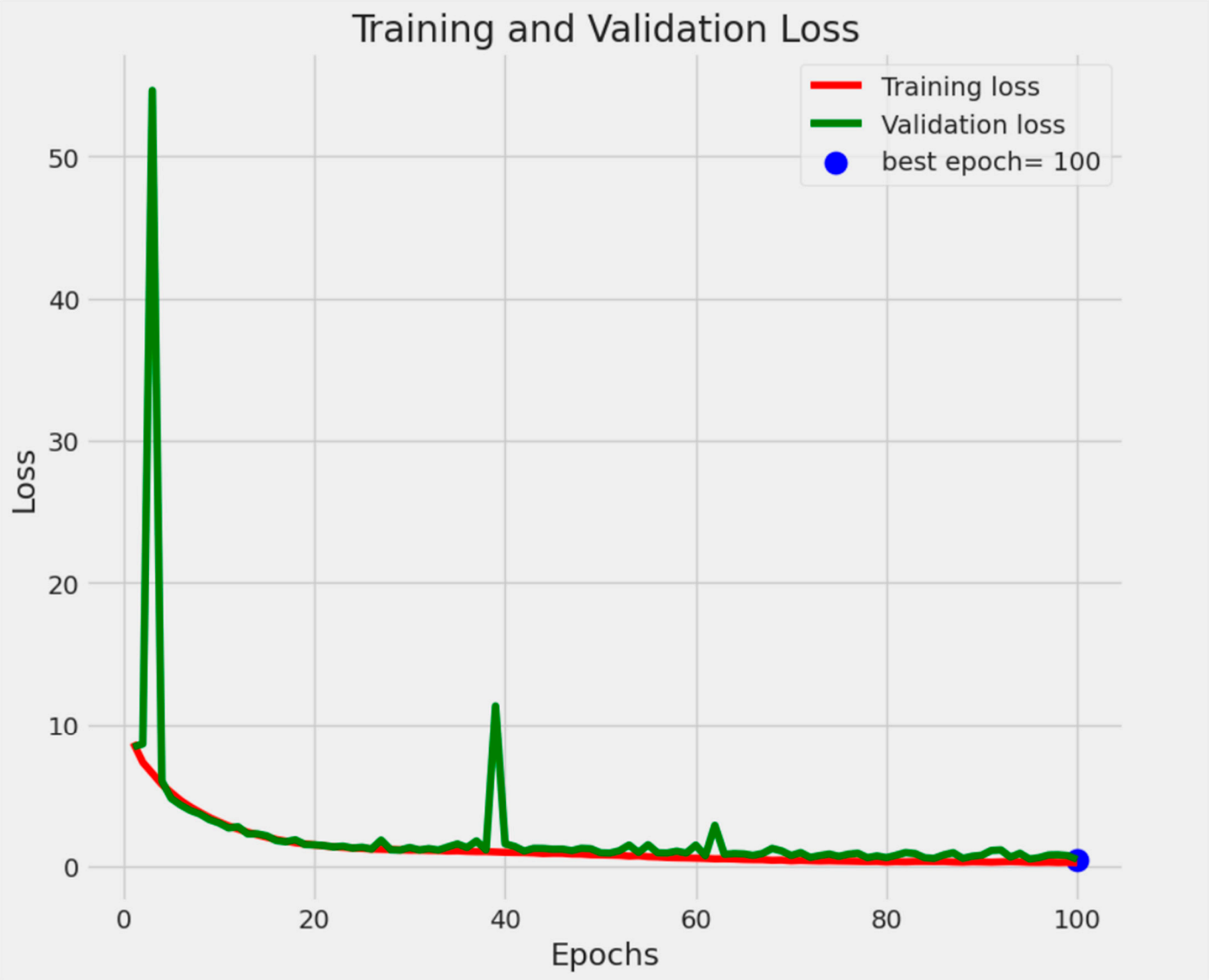
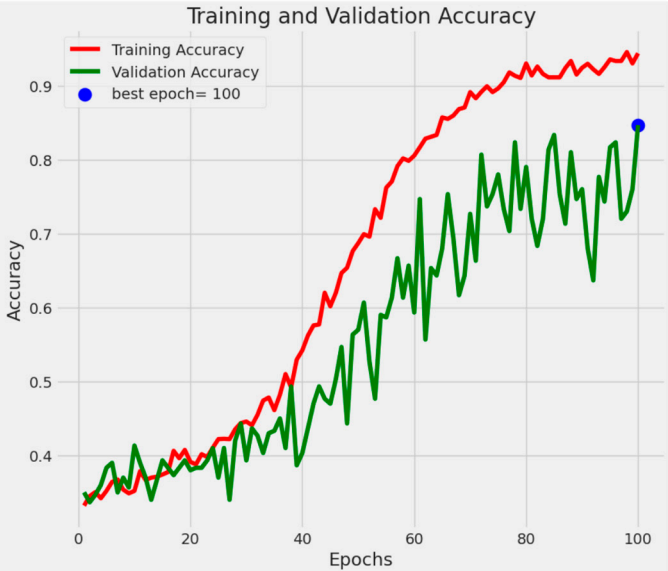
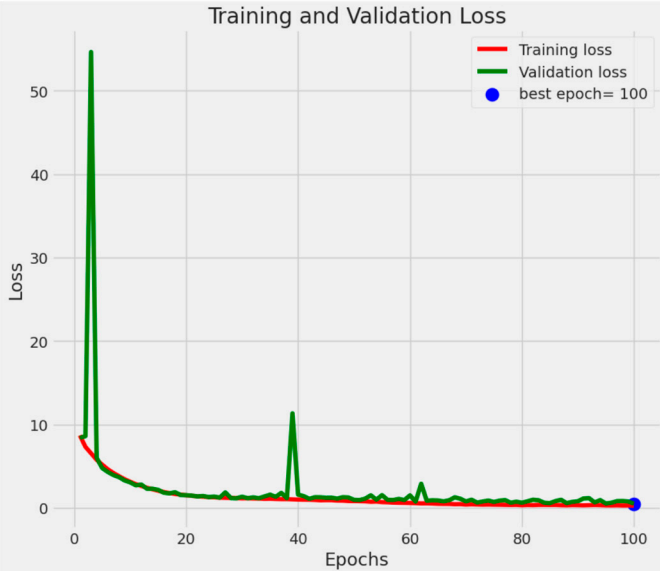


there were 97 errors in 300 tests for an accuracy of 67.67

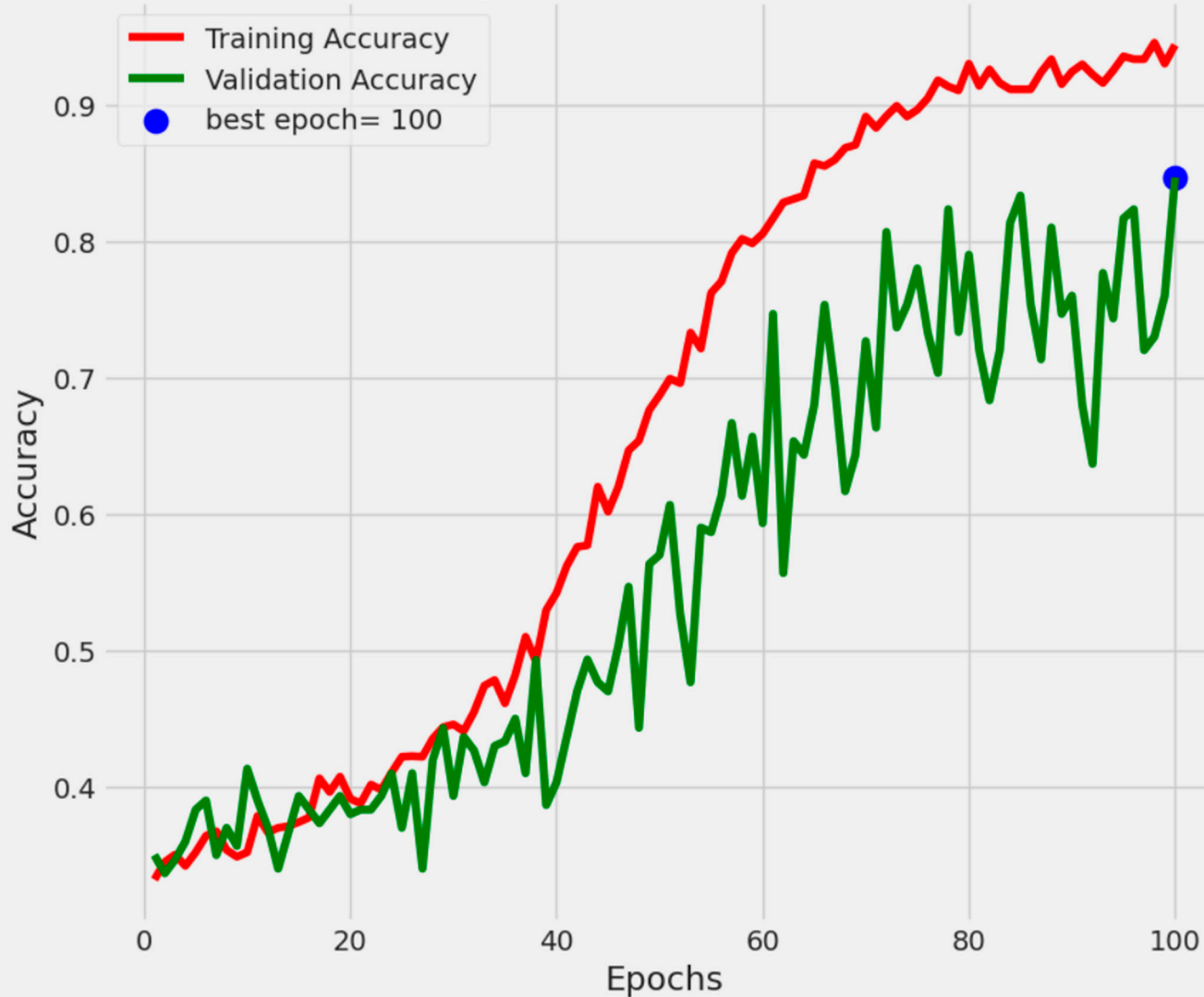
Classification Report:

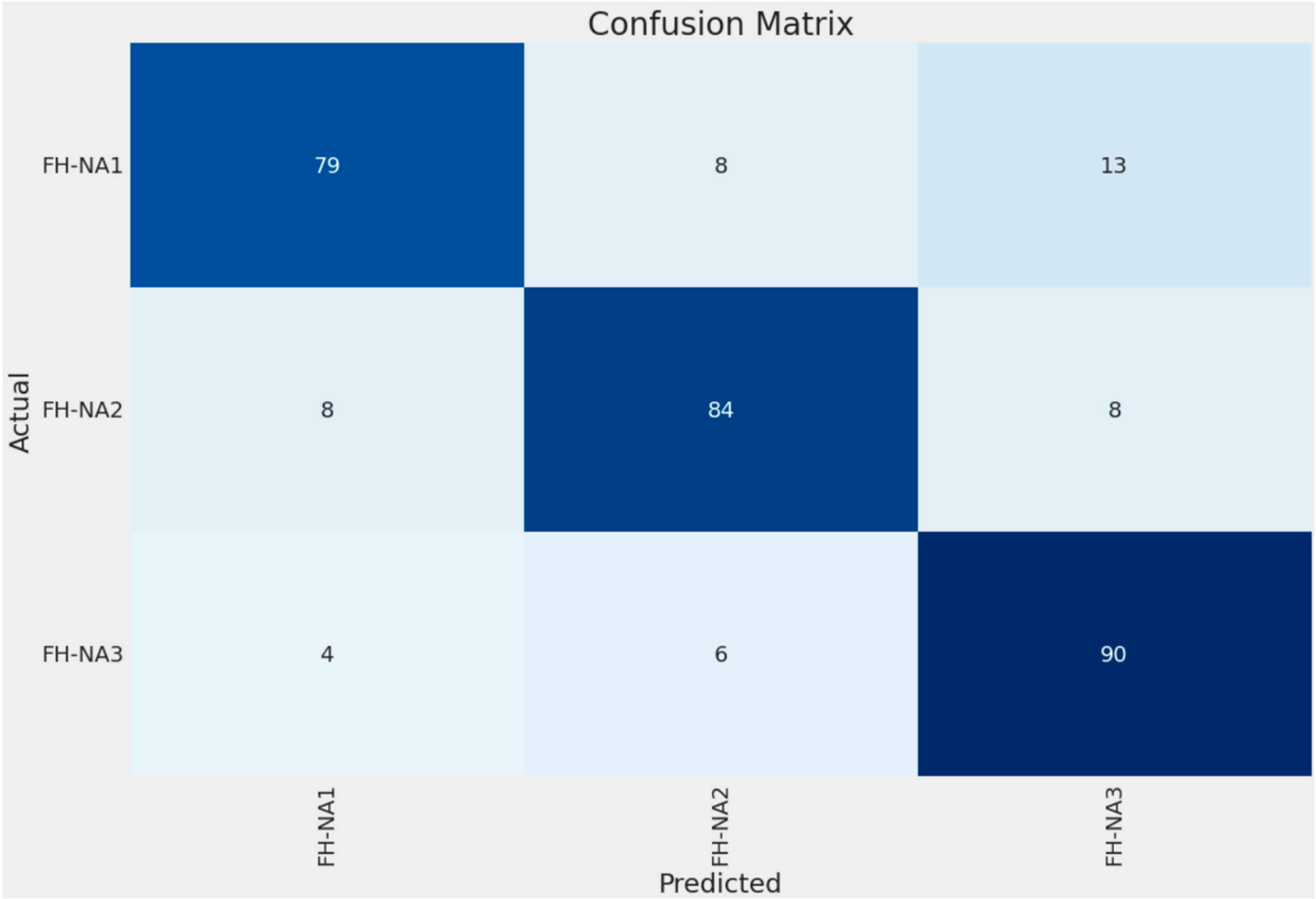
	precision	recall	f1-score	support
FH-NA1	0.7412	0.6300	0.6811	100
FH-NA2	0.6211	0.5900	0.6051	100
FH-NA3	0.6750	0.8100	0.7364	100
accuracy			0.6767	300
macro avg	0.6791	0.6767	0.6742	300
weighted avg	0.6791	0.6767	0.6742	300

RESNET50



Training and Validation Accuracy



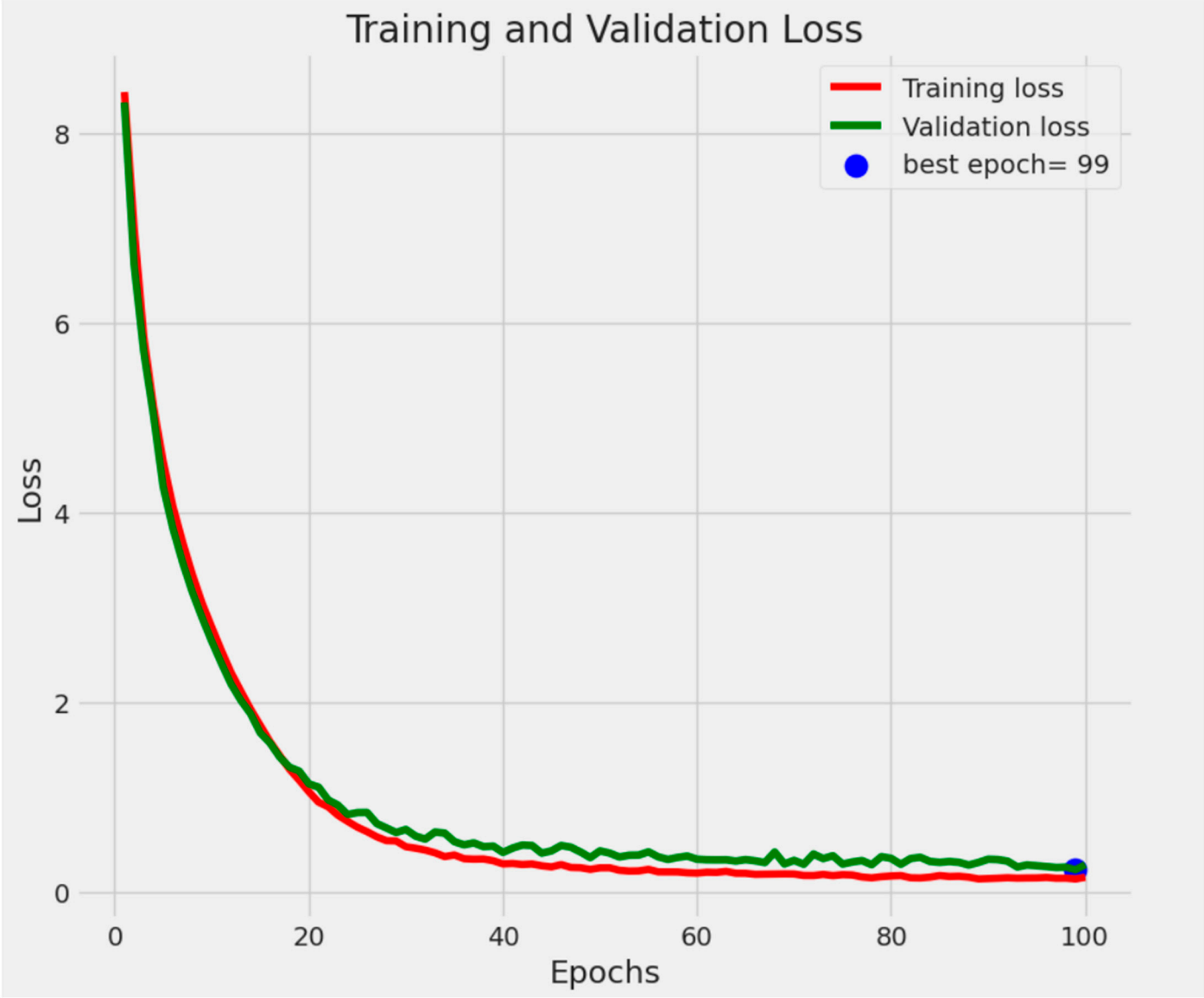
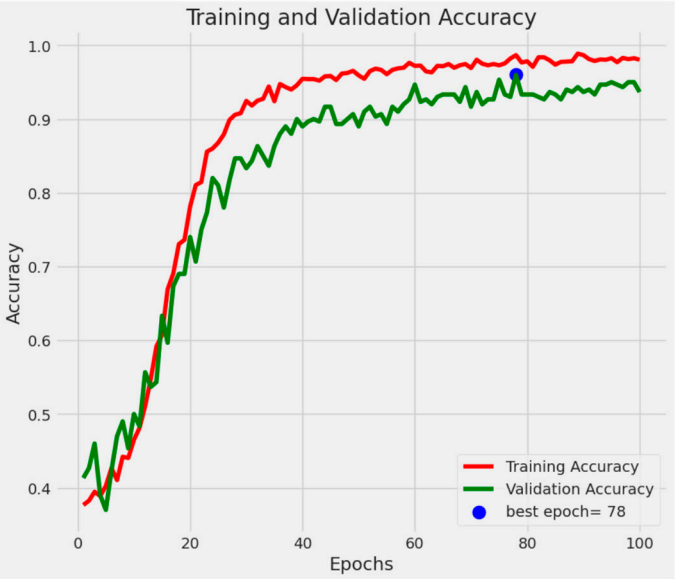
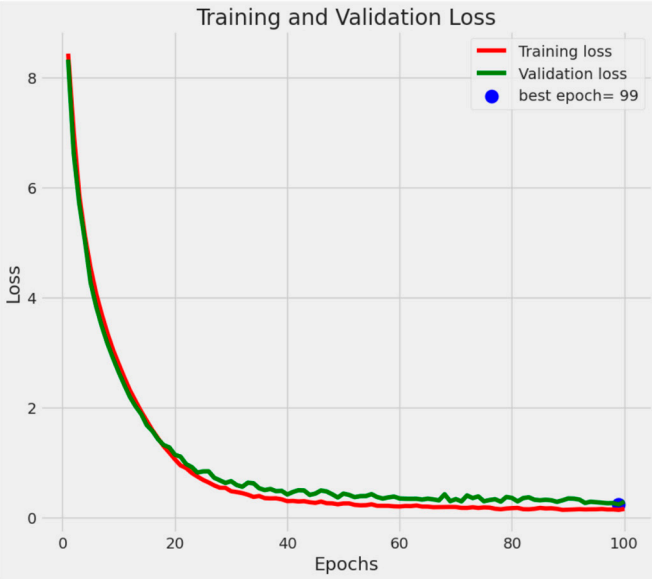


there were 47 errors in 300 tests for an accuracy of 84.33

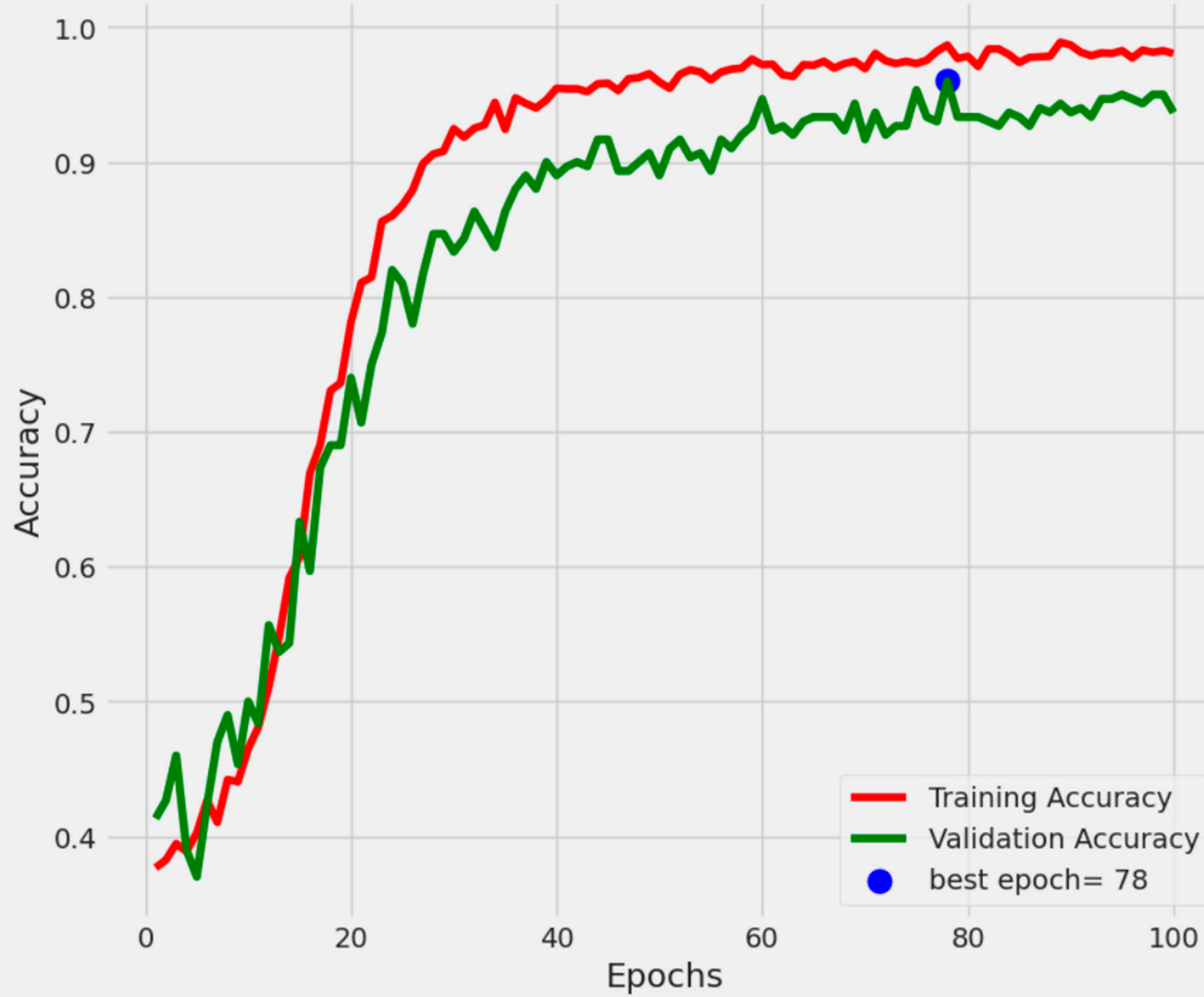
Classification Report:

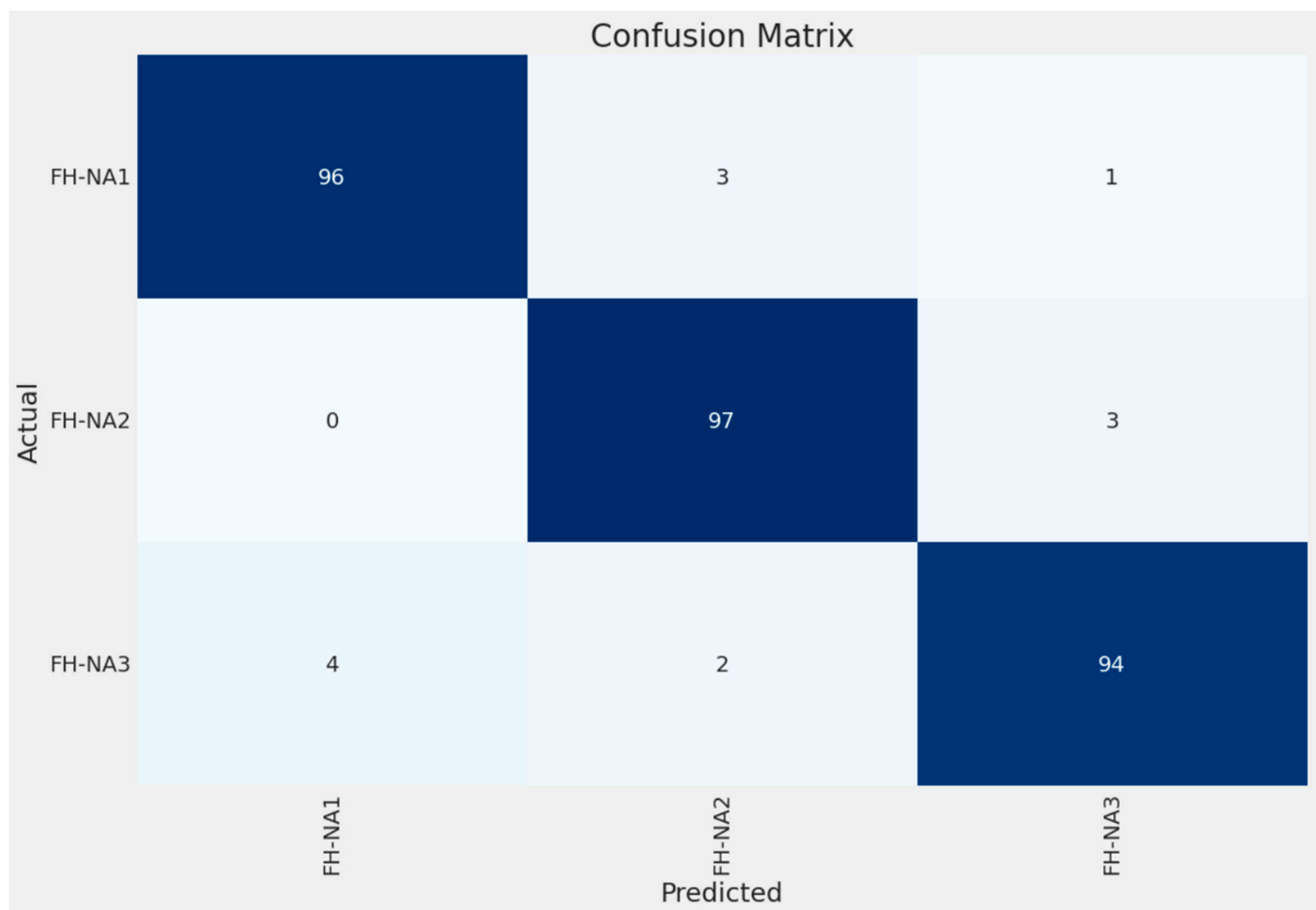
	precision	recall	f1-score	support
FH-NA1	0.8681	0.7900	0.8272	100
FH-NA2	0.8571	0.8400	0.8485	100
FH-NA3	0.8108	0.9000	0.8531	100
accuracy			0.8433	300
macro avg	0.8454	0.8433	0.8429	300
weighted avg	0.8454	0.8433	0.8429	300

EFFICIENTNETV2 B0



Training and Validation Accuracy





there were 13 errors in 300 tests for an accuracy of 95.67

Classification Report:

	precision	recall	f1-score	support
FH-NA1	0.9600	0.9600	0.9600	100
FH-NA2	0.9510	0.9700	0.9604	100
FH-NA3	0.9592	0.9400	0.9495	100
accuracy			0.9567	300
macro avg	0.9567	0.9567	0.9566	300
weighted avg	0.9567	0.9567	0.9566	300