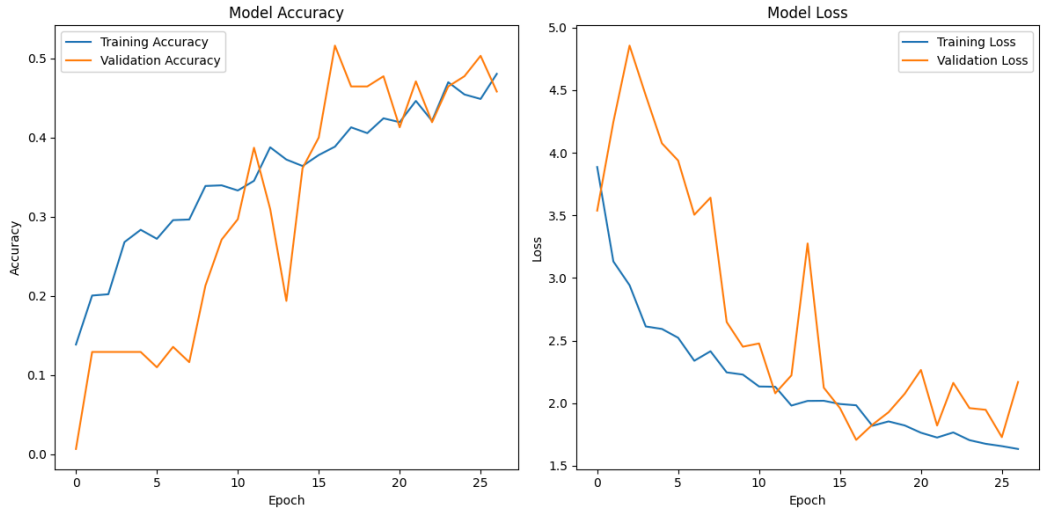
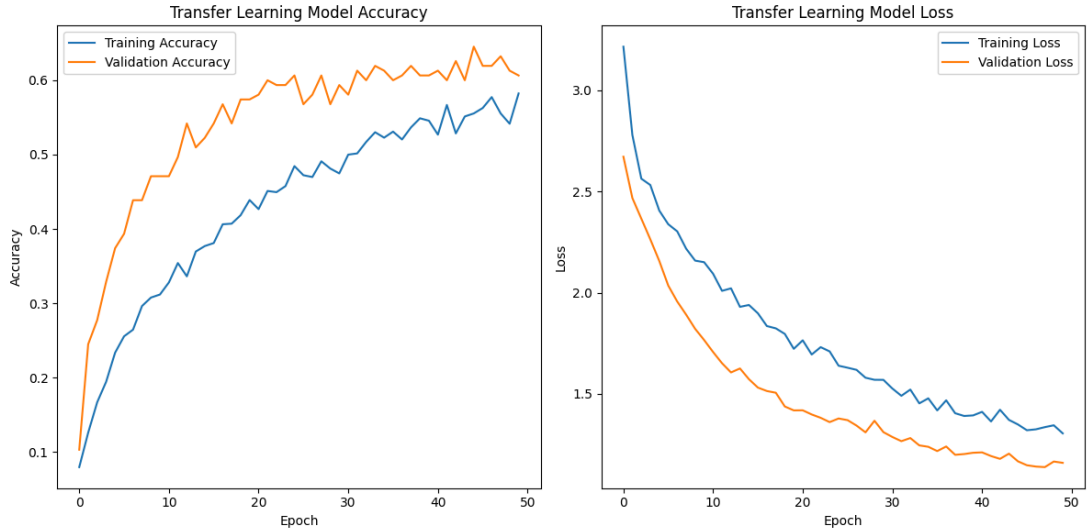
Our first modeling approach, which involved creating our own CNN, yielded very low accuracy. Therefore, we decided to import a pre-trained model, with the hope of achieving faster results and higher accuracy. Here are our results from the original self-made CNN, then our new CNN model, which utilized transfer learning with MobileNetV2:

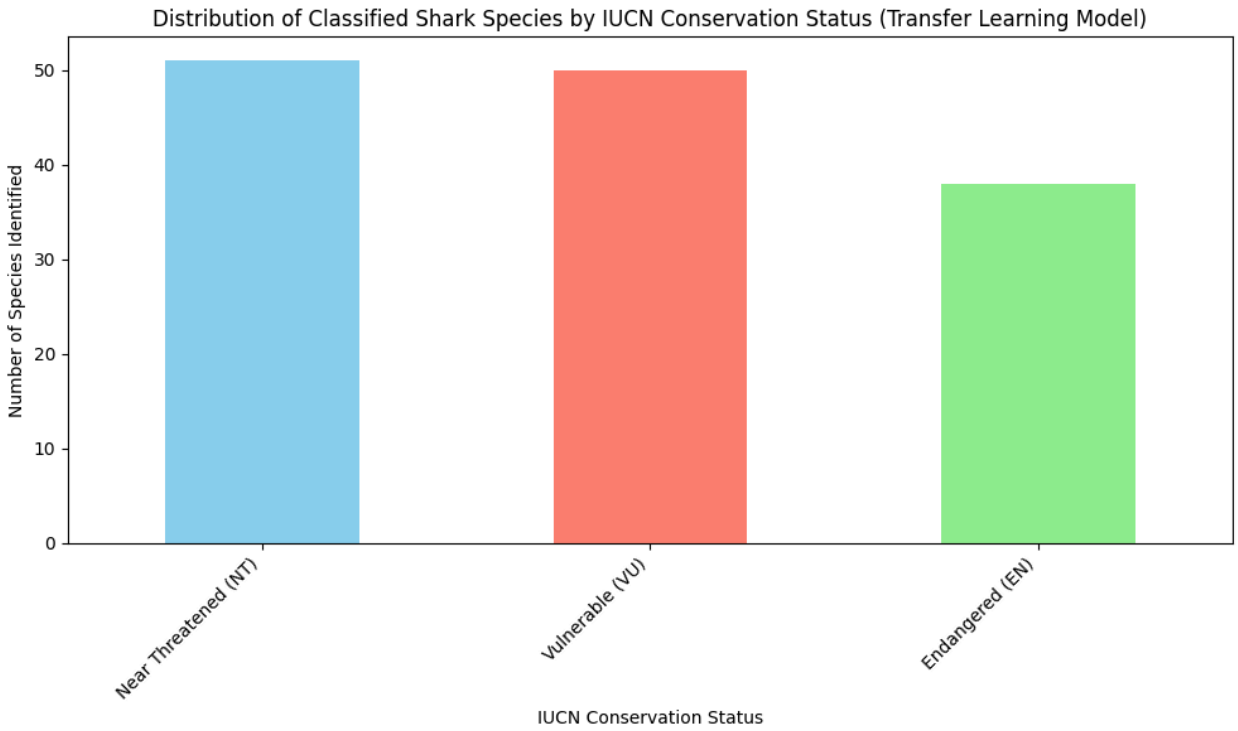
First Attempt with CNN model trained from scratch.
Accuracy: 5.16%



Second attempt using a pre-trained MobileNetV2 CNN model.
Accuracy:55.48%
Loss: 1.3629



A bar chart for the distribution of IUCN conservation statuses.


Distribution of Classified Shark Species by IUCN Conservation Status (Transfer Learning Model)
Number of Species Identified
0
10
20
30
40
50
Near Threatened (NT)
Vulnerable (VU)
Endangered (EN)
IUCN Conservation Status