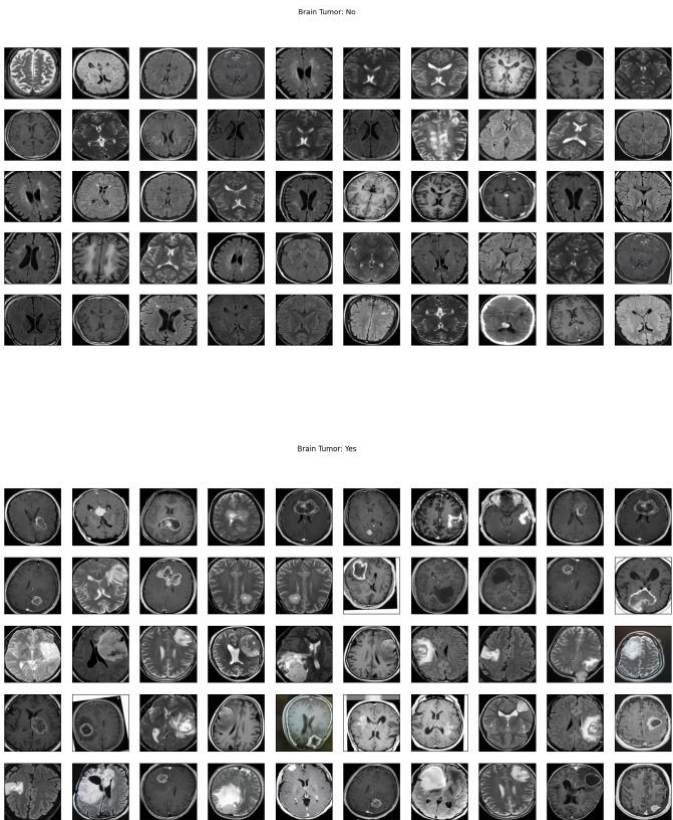


Performance Analysis of Brain Tumor Detection Using Different Neural Networks Models

Project output screenshots

Image Cropping & Focus:



Model Selection & Training:

Model: "BrainDetectionModel"		
Layer (type)	Output Shape	Param #
input_layer (InputLayer)	(None, 240, 240, 3)	0
zero_padding2d (ZeroPadding2D)	(None, 244, 244, 3)	0
conv0 (Conv2D)	(None, 238, 238, 32)	4,736
bn0 (BatchNormalization)	(None, 238, 238, 32)	128
activation (Activation)	(None, 238, 238, 32)	0
max_pool0 (MaxPooling2D)	(None, 59, 59, 32)	0
max_pool1 (MaxPooling2D)	(None, 14, 14, 32)	0
flatten (Flatten)	(None, 6272)	0
fc (Dense)	(None, 1)	6,273
Total params: 11,137 (43.50 KB)		
Trainable params: 11,073 (43.25 KB)		
Non-trainable params: 64 (256.00 B)		

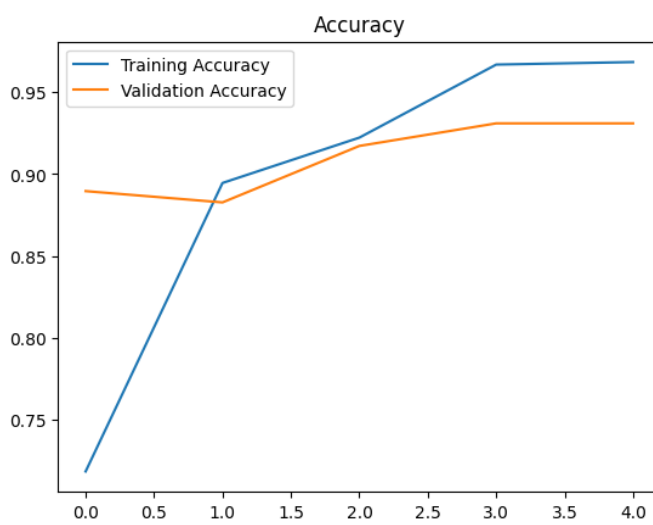
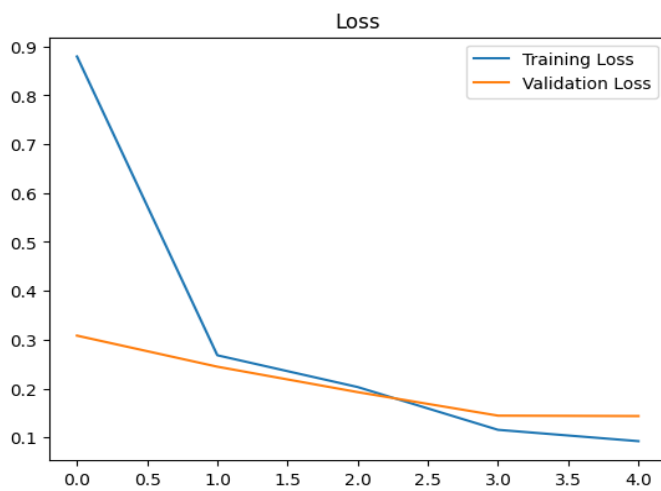
```
lenet_model.summary()
```

Model: "sequential"

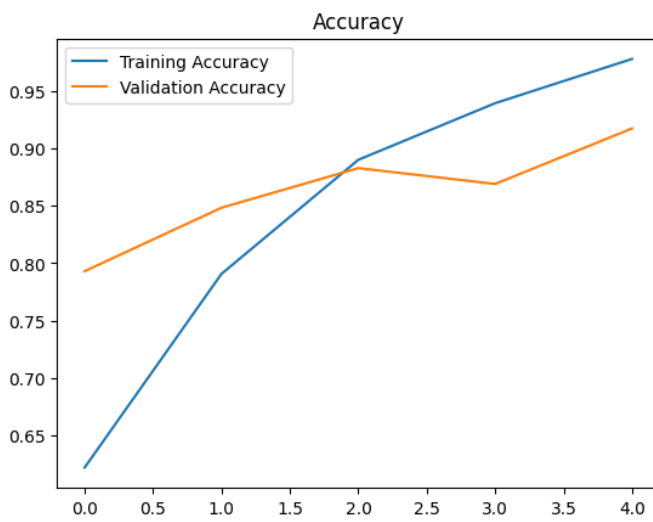
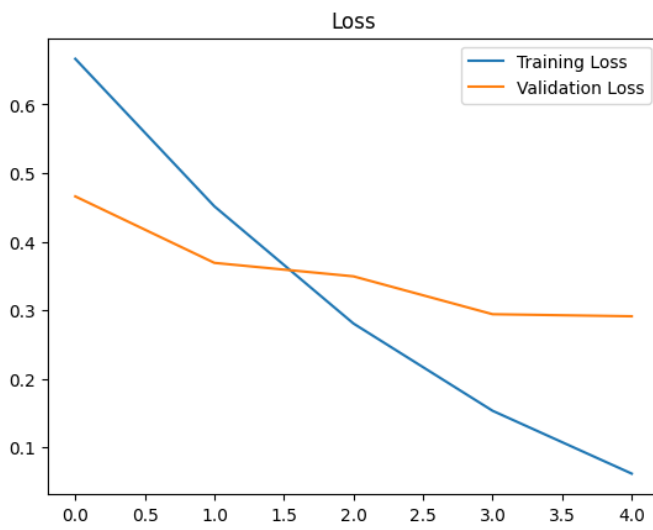
Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 28, 28, 6)	456
max_pooling2d (MaxPooling2D)	(None, 14, 14, 6)	0
conv2d_1 (Conv2D)	(None, 14, 14, 16)	2,416
max_pooling2d_1 (MaxPooling2D)	(None, 7, 7, 16)	0
flatten (Flatten)	(None, 51984)	0
dense (Dense)	(None, 128)	6,238,200
dense_1 (Dense)	(None, 64)	10,164
dense_2 (Dense)	(None, 1)	85

Total params: 6,251,321 (23.85 MB)
Trainable params: 6,251,321 (23.85 MB)
Non-trainable params: 0 (0.00 B)

VGG Model:



LeNet Model:



CNN Model:

