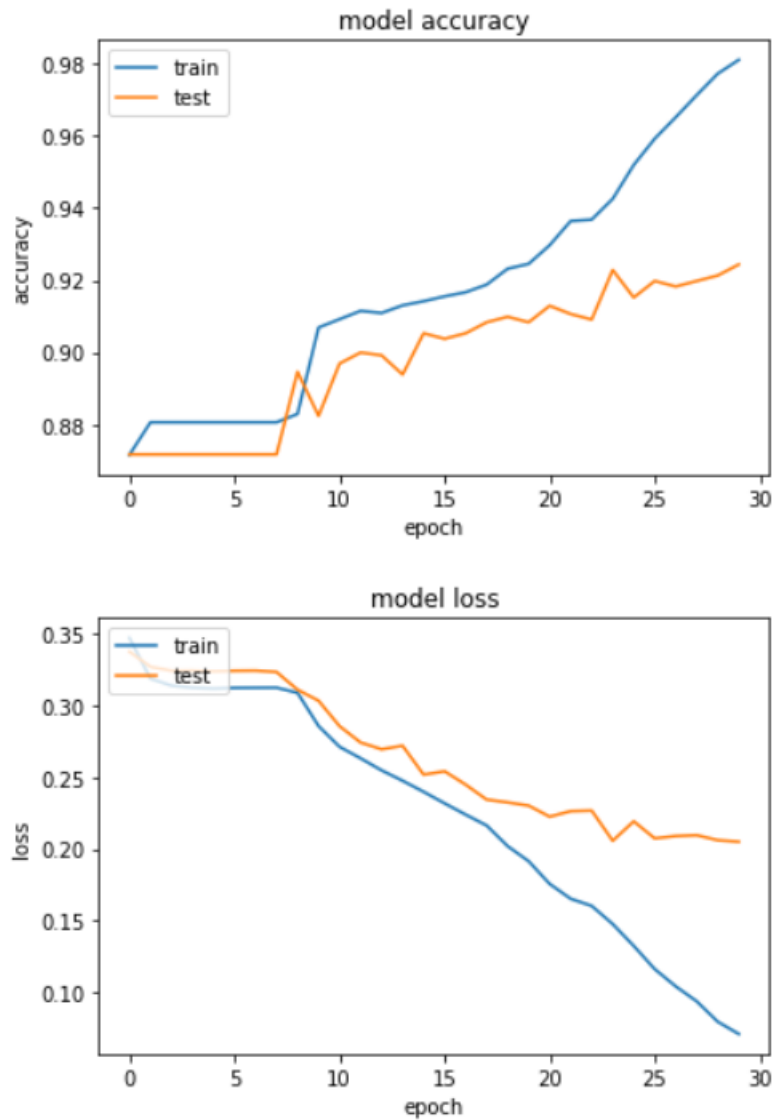


Model Used:

Layer (type)	Output Shape	Param #
conv2d_35 (Conv2D)	(None, 62, 62, 64)	640
conv2d_36 (Conv2D)	(None, 62, 62, 10)	5770
max_pooling2d_14 (MaxPooling)	(None, 31, 31, 10)	0
conv2d_37 (Conv2D)	(None, 31, 31, 3)	273
conv2d_38 (Conv2D)	(None, 31, 31, 5)	380
max_pooling2d_15 (MaxPooling)	(None, 15, 15, 5)	0
conv2d_39 (Conv2D)	(None, 7, 7, 10)	210
dense_16 (Dense)	(None, 7, 7, 70)	770
flatten_7 (Flatten)	(None, 3430)	0
dropout_7 (Dropout)	(None, 3430)	0
dense_17 (Dense)	(None, 100)	343100
dense_18 (Dense)	(None, 7)	707
Total params: 351,850		
Trainable params: 351,850		
Non-trainable params: 0		

Error Plots:

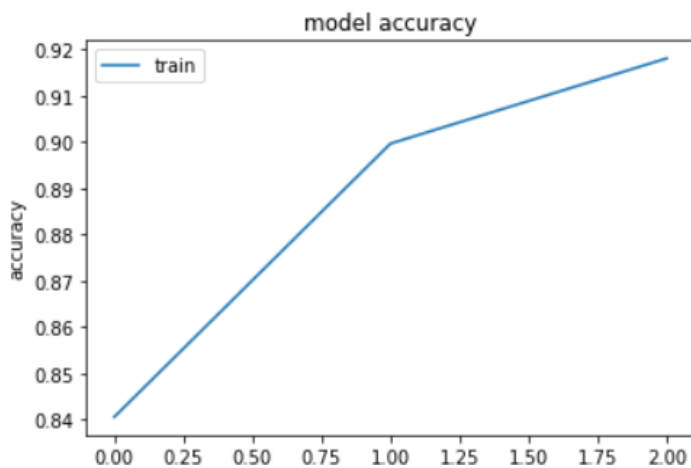


233/233 [=====] - 2s 10ms/step
Accuracy on the Test Images: 0.9227468128368067

Part2 Transfer Learning:

Train Data

```
Epoch 1/3  
73/73 [=====] - 1753s 24s/step - loss: 0.6039 - acc: 0.8400  
Epoch 2/3  
73/73 [=====] - 1718s 24s/step - loss: 0.3459 - acc: 0.8996  
Epoch 3/3  
73/73 [=====] - 1707s 23s/step - loss: 0.2495 - acc: 0.9181  
dict_keys(['loss', 'acc'])
```



```
Epoch 1/2  
73/73 [=====] - 1731s 24s/step - loss: 0.3103 - acc: 0.9188  
Epoch 2/2  
73/73 [=====] - 1742s 24s/step - loss: 0.2647 - acc: 0.9273  
dict_keys(['loss', 'acc'])
```

