

Project Development Phase

Model Performance Test

Date	05/12/2023
Team ID	Team-592216
Project Name	Brain Tumor Detection
Maximum Marks	10Marks

Model Performance Testing:

S.No.	Parameter	Values
1	Model Summary	-
2	Accuracy	0.913043

Training and Validation Accuracy Screenshot

```
Epoch 1/10
18/18 [=====] - 113s 6s/step - loss: 6.5974 - acc: 0.5694 - val_loss: 2.7752 - val_acc: 0.6809
Epoch 2/10
18/18 [=====] - 112s 6s/step - loss: 0.6673 - acc: 0.8660 - val_loss: 0.7384 - val_acc: 0.8723
Epoch 3/10
18/18 [=====] - 112s 6s/step - loss: 0.4260 - acc: 0.9234 - val_loss: 1.4756 - val_acc: 0.8085
Epoch 4/10
18/18 [=====] - 111s 6s/step - loss: 0.3159 - acc: 0.9234 - val_loss: 1.3513 - val_acc: 0.7872
Epoch 5/10
18/18 [=====] - 111s 6s/step - loss: 0.1444 - acc: 0.9426 - val_loss: 1.4256 - val_acc: 0.7872
Epoch 6/10
18/18 [=====] - 112s 6s/step - loss: 0.1830 - acc: 0.9617 - val_loss: 0.2958 - val_acc: 0.9362
Epoch 7/10
18/18 [=====] - 111s 6s/step - loss: 0.3004 - acc: 0.9234 - val_loss: 0.3313 - val_acc: 0.9362
Epoch 8/10
18/18 [=====] - 111s 6s/step - loss: 0.0600 - acc: 0.9856 - val_loss: 0.3585 - val_acc: 0.8936
Epoch 9/10
18/18 [=====] - 111s 6s/step - loss: 0.1067 - acc: 0.9665 - val_loss: 0.3866 - val_acc: 0.8936
Epoch 10/10
18/18 [=====] - 111s 6s/step - loss: 0.0386 - acc: 0.9856 - val_loss: 0.4064 - val_acc: 0.9149
```

Model Summary Screenshot

```
Accuracy: 0.913043
Precision: 0.913043
Recall: 0.913043
F1 score: 0.913043
Cohens kappa: 0.826087
ROC AUC: 0.913043
[[21  2]
 [ 2 21]]
Specificity: 0.9130434782608695
precision    recall  f1-score   support

      0       0.91      0.91      0.91        23
      1       0.91      0.91      0.91        23

 accuracy          0.91          0.91          0.91          46
 macro avg       0.91      0.91      0.91          46
weighted avg       0.91      0.91      0.91          46
```