

Project Development Phase

Model Performance Test

Date	19 Feb 2026
Team ID	LTVIP2026TMIDS66121
Project Name	Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	Model: MobileNetV2 (Transfer Learning) with an added Dense layer. Total parameters: 2,586,948. Trainable parameters: 328,964. Non-trainable parameters: 2,257,984.	<pre> History: 1000 epochs, accuracy: 0.893, validation accuracy: 0.81462 Total parameters: 2,586,948 Trainable parameters: 328,964 Non-trainable parameters: 2,257,984 </pre>
2.	Accuracy	<p>Training Accuracy – 0.89.3 (from Epoch 12/15)</p> <p>Validation Accuracy - 0.81462 (from Epoch 12/15)</p>	<pre> from sklearn.metrics import confusion_matrix, accuracy_score from sklearn.metrics import classification_report y_test = test_images.labels # set y_test to the expected output print(classification_report(y_test, pred2)) print('Accuracy of the Model: {}'.format(accuracy_score(y_test, pred2)*100)) precision recall f1 score support ----- retinohall 0.89 0.81 0.85 775 limbocyst 0.50 0.50 0.50 762 monocyte 0.80 0.80 0.80 770 neutrophil 0.87 0.80 0.83 742 accuracy 0.89 0.80 0.89 2968 macro avg 0.89 0.80 0.89 2968 weighted avg 0.89 0.80 0.89 2968 Accuracy of the Model: 89.3% </pre>
3.	Fine Tunning Result(if Done)	Validation Accuracy - Fine-tuning of the pre-trained MobileNetV2 base model was not performed. Only the newly added dense layer was trained.	<pre> from sklearn.metrics import confusion_matrix, accuracy_score from sklearn.metrics import classification_report y_test = test_images.labels # set y_test to the expected output print(classification_report(y_test, pred2)) print('Accuracy of the Model: {}'.format(accuracy_score(y_test, pred2)*100)) precision recall f1 score support ----- retinohall 0.89 0.81 0.85 775 limbocyst 0.50 0.50 0.50 762 monocyte 0.80 0.80 0.80 770 neutrophil 0.87 0.80 0.83 742 accuracy 0.89 0.80 0.89 2968 macro avg 0.89 0.80 0.89 2968 weighted avg 0.89 0.80 0.89 2968 Accuracy of the Model: 89.3% </pre>