Project Development Phase

Model Performance Test

Date	20 January 2026
Team ID	LTVIP2026TMIDS76912
Project Name	HematoVision: Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	

Model Performance Testing – HematoVision

S.No.	Parameter	Screenshot / Values
1	**Data Rendered**	Total Images: 12,000 Number of Classes: 4 (Eosinophils, Lymphocytes, Monocytes, Neutrophils) Train Data: 80% Test Data: 20%
2	**Data Preprocessing**	Image Resizing: 224x224 pixels Normalization: Pixel values scaled (0–1) Data Augmentation: Rotation, Zoom, Horizontal Flip One-Hot Encoding for class labels
3	**Utilization of Data Filters**	Stratified Train-Test Split Removal of corrupted/invalid images Class balancing through augmentation Validation split during training
4	**Evaluation Metrics Used** (Instead of DAX Queries – Not applicable for DL)	Accuracy, Precision, Recall, F1-Score Confusion Matrix Loss Function: Categorical Crossentropy Optimizer: Adam
5	**Model Performance Dashboard Design**	No. of Visualizations / Graphs – 6 (Training Accuracy vs Epoch, Validation Accuracy vs Epoch, Training Loss vs Epoch, Validation Loss vs Epoch, Confusion Matrix, Class Distribution Chart)
6	**Model Evaluation Report Design**	No. of Visualizations / Graphs – 5 (Per-Class Accuracy, Precision-Recall Curve, Prediction Confidence Distribution, Error Analysis Samples, Final Performance Summary)