Hematovision Blood Cell Classification - Functional & Performance Testing Template

Model Performance Test

Field Details

- **Date:** 29 January 2025
- **Team ID:** LTVIP2025TMID46346
- **Project Name:** Hematovision - Blood Cell Classification Using Transfer Learning
- **Maximum Marks:** _____

Test Scenarios & Results

Functional Testing

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Image Input Validation	Upload blood cell images in different formats (JPEG, PNG, TIFF) with various sizes	Valid image formats accepted (JPEG, PNG), proper error handling for unsupported formats		
FT-02	Image Quality Check	Upload low quality, blurry, or corrupted blood cell images	System should detect and reject poor quality images with appropriate error messages		
FT-03	Blood Cell Classification	Upload clear blood cell images of known types (Eosinophil, Lymphocyte, Monocyte, Neutrophil)	Correct classification with confidence scores above threshold (>85%)		
FT-04	Batch Processing	Upload multiple blood cell images (5-10) for batch classification	All images processed correctly with individual results displayed		
FT-05	Model Load Test	Start the application and load the pre-trained transfer learning model	Model loads successfully within acceptable time (< 10 seconds)		
FT-06	Confidence Score Display	Classify blood cell images and check confidence score output	Confidence percentages displayed for each class with proper formatting		
FT-07	Result Export	Generate classification results and export to CSV/PDF format	Results exported successfully with all required fields (image name, predicted class, confidence)		
FT-08	Edge Case Handling	Upload non-medical images (e.g., landscapes, objects)	System should detect non-blood cell images and sh		