

Date	26/06/2025
Team ID	LTVIP2025TMID33042
Project Name	HematoVision-Blood Cell Classifier
Maximum Marks	4 MARKS

FUNCTIONAL TESTING

Test Case ID	Feature	Test Description	Expected Result	Status
TC-01	Image Upload	Upload a valid blood smear image	Image is accepted and previewed	<input checked="" type="checkbox"/> Pass
TC-02	Preprocessing	Image is resized and normalized before inference	Pre-processed image is passed to model	<input checked="" type="checkbox"/> Pass
TC-03	Model Inference	Run model on uploaded image	Top-3 predictions with confidence scores are displayed	<input checked="" type="checkbox"/> Pass
TC-04	Explanation Module	Generate heatmap overlay	Heatmap is shown on top of original image	<input checked="" type="checkbox"/> Pass
TC-05	PDF Export	Export results to A4-format PDF	PDF is downloaded with predictions and branding	<input checked="" type="checkbox"/> Pass
TC-06	Offline Functionality	Run app without internet	All features work offline	<input checked="" type="checkbox"/> Pass

Performance Testing

Metric	Test Description	Expected Threshold	Observed Result	Status
Inference Time	Time taken to generate predictions after image upload	≤ 5 seconds	3.2 seconds	<input checked="" type="checkbox"/> Pass
PDF Export Time	Time taken to generate and download PDF report	≤ 2 seconds	1.4 seconds	<input checked="" type="checkbox"/> Pass
Memory Usage	RAM usage during inference and report generation	≤ 500 MB	~320 MB	<input checked="" type="checkbox"/> Pass
CPU Utilization	CPU load during peak processing	$\leq 70\%$	~58%	<input checked="" type="checkbox"/> Pass
Cold Start Time	Time taken to launch app from .bat file	≤ 10 seconds	6.8 seconds	<input checked="" type="checkbox"/> Pass