

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	27 June 2025
Team ID	LTVIP2025TMID59888
Project Name	HematoVision: Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Blood Cell Identification	Accurately classify Eosinophil, Lymphocyte, Monocyte, and Neutrophil cells.
FR-2	Accuracy	Achieve high prediction accuracy using MobileNetV2 with transfer learning.
FR-3	User Satisfaction	Provide fast and reliable predictions through an easy-to-use interface.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system shall provide a simple, intuitive web interface for users to upload and view results.
NFR-2	Reliability	The system shall provide consistent and accurate blood cell predictions under standard conditions.
NFR-3	Performance	The system shall deliver predictions within 2–3 seconds with high accuracy.
NFR-4	Availability	The system shall remain operational and responsive during all active usage or demonstrations.
NFR-5	Scalability	The system shall support future expansion to batch uploads and higher concurrent users.