

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

Date	29 june 2025
Team ID	LTVIP2025TMID46471
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	Functional Requirement (Epic)	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	Image Upload Interface	User uploads microscopic image through web interface
FR-3	Prediction Trigger	App sends image to deep learning model for classification
FR-4	Result Display	Predicted class displayed on result page
FR-5	Model Management	Load pretrained Blood_Cell.h5 model into backend
FR-6	Session Reset	Option to upload another image for fresh prediction

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Simple and intuitive UI with clear instructions
NFR-2	<b>Security</b>	No external storage of uploaded images
NFR-3	<b>Reliability</b>	Model should give consistent results on repeat inputs
NFR-4	<b>Performance</b>	Prediction response in under 3 seconds
NFR-5	<b>Availability</b>	Web app always available on localhost
NFR-6	<b>Scalability</b>	Model can be upgraded with new data or architectures