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

Date	27 June 2025
Team ID	LTVIP2025TMID38971
Project Name	pollen's profiling: automated classification of pollen grains
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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image Classification	Upload pollen grain image Process image using CNN-based model Display classification result and confidence
FR-4	User Dashboard	View classification history Download classification report
FR-5	Admin Panel	Manage users (view/block/delete) Monitor model accuracy and system analytics

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	System should be user-friendly and intuitive for both mobile and web users.
NFR-2	**Security**	All user data must be encrypted; support secure authentication methods.
NFR-3	**Reliability**	System should ensure consistent and correct classification results.
NFR-4	**Performance**	Image classification should complete within 5 seconds.
NFR-5	**Availability**	System should be available 99.9% of the time.
NFR-6	**Scalability**	System should support increasing number of users and image uploads without performance degradation.