

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

Date	23 June 2025
Team ID	LTVIP2025TMID32832
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	Dataset Upload	Upload pollen images, Check upload status
FR-4	Model and Prediction	Model training, Prediction on uploaded images, View results
FR-5	Dashboard	View recent predictions, Model status, Dataset overview
FR-6	Admin Control (Optional)	Manage datasets, Manage models

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Easy-to-use web interface for users to upload images and view results.
NFR-2	Security	User data, images, and model files are secure. Only authorized users can access datasets.
NFR-3	Reliability	The system provides correct predictions with high accuracy. Works without crashes.
NFR-4	Performance	The model gives predictions quickly (within a few seconds).
NFR-5	Availability	The system is available online 24/7 or whenever hosted locally or on the cloud.
NFR-6	Scalability	Can handle more users, more pollen classes, and larger datasets as needed without performance loss.