

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

Date	31 January 2025
Team ID	LTVIP2025TMID32512
Project Name	Classifying fabric patterns using deep 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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Pattern Defect Detection	Identify and highlight defects or irregularities in the fabric
FR-4	Pattern Defect Detection	Suggest similar patterns based on uploaded image

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Intuitive UI for uploading and viewing results for all types of users
NFR-2	Security	Secure user authentication and data protection
NFR-3	Reliability	High classification accuracy across various fabric types
NFR-4	Performance	Fast processing and real-time classification feedback
NFR-5	Availability	System available 24/7 for global textile and design industries
NFR-6	Scalability	Ability to handle large datasets and increasing user base over time