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

Date	27 June 2025
Team ID	LTVIP2025TMID59828
Project Name	Pattern Sense: Classifying Fabric Patterns Using Deep Learning
Maximum Marks	4 Marks

3.1.1 Functional Requirements:
Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Fabric Pattern Identification	Automatically classify and label fabric patterns from images
FR-2	Accuracy	Ensure high precision in pattern classification to avoid mislabeling
FR-3	User Satisfaction	Users should be satisfied with the accuracy and speed of the pattern classification results

3.1.2 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, user-friendly web interface for uploading fabric images and viewing classification results.
NFR-2	Reliability	The system shall consistently deliver accurate pattern predictions under normal operating conditions.
NFR-3	Performance	The system shall provide classification results within 2-3 seconds per image with high accuracy.
NFR-4	Availability	The system shall be operational and available at all times during demonstrations or real-time sessions.
NFR-5	Scalability	The system design shall allow for future scalability, including handling higher user traffic, batch classification of multiple fabric images, and expanding to new pattern categories.