

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

<b>Date</b>	31 January 2025
<b>Team ID</b>	LTVIP2025TMID41819
<b>Project Name</b>	Pattern Sense :Classifying Fabric Patterns Using Deep Learning
<b>Max Marks</b>	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 Upload & Classification	Upload image from gallery or camera Process image via deep learning model Display predicted fabric pattern
FR-4	User Dashboard	View uploaded images and prediction history Delete / re-upload images View classification accuracy/confidence

### 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 interface for mobile and web users
NFR-2	Security	User authentication, secure image storage, encrypted data
NFR-3	Reliability	Consistent output with high prediction accuracy
NFR-4	Performance	Fast image upload and classification

FR No.	Non-Functional Requirement	Description
NFR-5	Availability	System available with >99% uptime
NFR-6	Scalability	Able to handle more users and fabric patterns in future

Would you like to add the **testing plan**, **tools used**, or **tech stack** in the same document?