

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

Date	24 july 2025
Team ID	PNT2025TMID14671
Project Name	E-Commerce
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

Step No.	FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1	FR-1	User Interaction & Registration	User logs in / registers through Form, Gmail, or LinkedIn
2	FR-2	File Acquisition from External Source	Retrieve file from external source via application
3	FR-3	Data Visualization	Visualize results using D3.js charts and graphs
4	FR-4	Text Extraction & Processing	Send file/text to Watson NLU for natural language analysis
5	FR-5	Natural Language Understanding	Analyze text sentiment, keywords, entities via Watson NLU
6	FR-6	Content Extraction	Extract raw text from file using Apache Tika

Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface should be intuitive for all user levels.
NFR-2	Security	Encrypt files and data during upload, processing, and storage.
NFR-3	Reliability	Ensure fault-tolerant operation and quick recovery.
NFR-4	Performance	Maintain fast processing times for large files.
NFR-5	Availability	Ensure 99.9% uptime for application and cloud services.
NFR-6	Scalability	System should handle growth in users and file sizes efficiently.