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

Date	27 June 2025	
Team ID	LTVIP2025TMID32976	
Project Name	EduTutor AI: Personalized Learning with Generative	
	AI and LMS Integration	
Maximum Marks	4 Marks	

Functional Requirements

The following are the core functional requirements for the EduTutor AI application, based strictly on the current feature set outlined in the README.

FR No.	Functional Requirement	Sub Requirement (Story /
	(Epic)	Sub-Task)
FR-1	User Input Handling	Accept topic input from user
		through a text field
FR-2	Explanation Generation	Send topic to IBM Watsonx
		model
		Display explanation using
		Streamlit
FR-3	MCQ Generation	Generate multiple-choice
		questions (MCQs) from the
		given topic
		Display MCQs with correct
		answers
FR-4	Credential Configuration	Allow user to enter IBM
		Watsonx API key and project
		ID in app.py

Non-Functional Requirements

The following are the non-functional requirements for the current version of EduTutor Al.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The Streamlit interface
		should be simple and
		intuitive for quick interaction.
NFR-2	Security	IBM Watsonx credentials
		should be kept secure and
		not hard-coded for public
		use.
NFR-3	Reliability	System should consistently
		produce valid explanations
		and MCQs for well-formed
		inputs.

NFR-4	Performance	Output should be generated within 2–4 seconds under normal load.
NFR-5	Deployment Simplicity	App should run with minimal setup using 'streamlit run app.py'.