**Project Design Phase-II**

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

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID32045 |
| Project Name | EduTutor AI: Personalized Learning with Generative AI and LMS Integration |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| **FR-1** | User Registration | - Registration through Form |
| **FR-2** | User Confirmation | - Confirmation via Email - Confirmation via OTP (future scope) |
| **FR-3** | Concept Understanding | - Input concept via textbox - Generate simplified explanation using IBM Granite model |
| **FR-4** | Language Learning | - Select language (English or Hindi) - Generate grammar and parts-of-speech lesson |
| **FR-5** | Quiz Generation | - Input a topic to generate MCQs - Upload PDF to extract questions |
| **FR-6** | Session Tracking & Storage | - Store user session info temporarily - Track activity during a session |
| **FR-7** | User Login | - Login with username and password - Redirect to Classroom UI |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| **NFR-1** | Usability | The application should provide an intuitive interface via Gradio for students and teachers with minimal learning curve. |
| **NFR-2** | Security | User login credentials should be securely managed (local session storage for now; extendable to token-based auth). |
| **NFR-3** | Reliability | The system should consistently respond to valid prompts and produce accurate educational output with minimal errors. |
| **NFR-4** | Performance | Responses should be generated within 2–4 seconds for standard prompts using IBM Granite through Hugging Face. |
| **NFR-5** | Availability | The system should be available at least 95% of the time during active hours for learners. |