Project Design Phase-II

## 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 Registration through Gmail Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Quiz Management | Create diagnostic quizzes Assign quizzes to users Track quiz completion |
| FR-4 | Adaptive Testing Engine | Analyze user responses in real-time Adjust difficulty level dynamically Provide immediate feedback |
| FR-5 | Performance Tracking | Store quiz scores Generate performance analytics Visualize progress charts |
| FR-6 | User Dashboard | Display upcoming tasks/quizzes Show personalized progress insights Suggest learning paths based on performance |
| FR-7 | Admin Panel | Manage users Upload questions Monitor user activity and reports |
| FR-8 | Integration with Classroom Tools | Connect to Google Classroom Import student list Export scores to LMS |
| FR-9 | Notification System | Send quiz reminders Notify feedback and results via email or in-app |

## 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 | User-friendly and intuitive interface for students and educators with minimal training required. |
| NFR-2 | Security | Secure login with encryption, protection against unauthorized access and data leakage. |
| NFR-3 | Reliability | The system should consistently perform without crashes or errors during testing and reporting. |
| NFR-4 | Performance | Fast response time during quiz loading, adaptive engine processing, and result display. |
| NFR-5 | Availability | 99.9% uptime during peak school/college hours. System should be accessible at all times. |
| NFR-6 | Scalability | Able to handle increased load (thousands of concurrent users, quizzes, and results) without performance drop. |