

Weekly Report

Week – 06

Submitted By

Muhammad Khurram Shehzad

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COMSATS University Islamabad, Abbottabad Campus

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1. Introduction:

This report outlines the activities completed during the sixth week of my internship at **CODELOUNGE Pvt. Ltd.** During this phase, development expanded to the Student Portal of the E-Learn application.

2. Duration:

Week Duration:

19 February 2026 – 28 February 2026

3. Overview:

The sixth week focused on building the Student Portal, which allows learners to explore and interact with educational content created by educators.

The Student Portal enables students to:

- Browse available courses
- View detailed course descriptions
- Enroll in courses
- Watch lectures
- Attempt quizzes
- Track progress within a course
- Monitor overall learning progress and completed courses

This phase emphasized implementing student workflows and connecting them to Firebase for real-time enrollment and progress tracking.

4. Task Performed:

The following activities were carried out during the Sixth week:

- Designed Student Portal UI structure
- Developed Course Listing screen

- Developed Course Detail screen
- Implemented Enrollment functionality
- Developed Lecture Viewing screen
- Developed Quiz Attempt interface
- Implemented student progress tracking logic
- Connected student activities with Firebase
- Tested educator-student data linkage

5. Learning Outcomes:

The sixth week provided valuable foundational learning, including:

- Designing user-centric workflows
- Managing cross-role data relationships (Educator–Student)
- Implementing enrollment logic and progress tracking
- Handling real-time updates for student interactions
- Improving overall system modularity

6. Challenges and Solutions:

Challenges:

- Synchronizing student enrollments with educator data
- Managing quiz submission and grading logic
- Structuring progress tracking efficiently.

Solutions:

- Implemented relational mapping in Firestore
- Designed structured progress documents per student
- Tested edge cases for enrollment and quiz completion

7. Conclusion:

The sixth week marked the expansion of the E-Learn project into a complete dual-portal educational system. With both Educator and Student workflows under development, the application evolved into a functional and structured learning platform. This phase significantly enhanced full-stack development skills and deepened understanding of scalable educational systems.