Milestone Achievements

Online Tutoring Platform
Version 1.0
Date: 16.01.2025

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1. Introduction

This document highlights the significant milestones achieved during the development of the Online Tutoring Platform. These accomplishments reflect the progress made by the team in adhering to project timelines, completing critical tasks, and achieving functional objectives.

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2. Overview of Milestones

Milestone 1: Project Setup

- **Objective**: Establish the foundational project structure and development environment.
- **Key Achievements**:
  - Repository initialized on GitHub ([Repository Link](#)).
  - CI/CD pipeline configured using GitHub Actions.
  - Backend and frontend environments set up with Docker.

Milestone 2: Backend Development

- **Objective**: Implement core backend functionalities.
- **Key Achievements**:
  - User authentication and authorization API developed using Spring Security and JWT.
  - Database schema designed and implemented in PostgreSQL.
  - APIs for:
    - User registration and login.
    - Tutor and session management.
    - Content upload and retrieval.
  - Achieved 75% unit test coverage using JUnit.

Milestone 3: Frontend Development

- **Objective**: Build the user interface for core functionalities.
- **Key Achievements**:
  - Responsive UI implemented for:
    - User registration and login.
    - Dashboard for students and tutors.
  - Integrated API calls for authentication and session management using Axios.
  - Initial linting and quality checks added using ESLint.

Milestone 4: Integration Testing

- **Objective**: Ensure seamless integration between frontend, backend, and database.
- **Key Achievements**:
  - API integration validated using Postman.
  - Live testing conducted by 4 team members for core workflows:
    - User registration and login.
    - Scheduling tutoring sessions.
    - Content upload and download.
  - Identified and resolved API response delays and minor UI inconsistencies.

Milestone 5: Documentation

- **Objective**: Provide comprehensive project documentation.
- **Key Achievements**:
  - Vision document finalized and submitted.
  - Architecture handbook drafted and shared.
  - Initial test plan created and reviewed.

3. Lessons Learned

- Early integration testing helped identify and resolve API inconsistencies quickly.
- Automating testing in CI/CD pipelines improved efficiency and reduced manual errors.
- Collaboration between frontend and backend teams during live testing streamlined the debugging process.

4. Summary

The project has achieved critical milestones within the planned timeline, ensuring a solid foundation for upcoming phases.