Web-Based Student Note Sharing Platform

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I. Introduction

In modern universities, students often struggle to access comprehensive and well-organized lecture notes. Many rely on informal sharing methods, such as messaging groups or personal communication, which are inefficient and lack structure.
The aim of this project is to develop a web-based platform where students of Ankara Medipol University can upload, share, and access lecture notes and related study materials. The platform will improve accessibility, organization, and academic collaboration while promoting community engagement.

II. Background

Existing note-sharing systems are usually restricted to closed social media groups or messaging platforms that do not provide proper categorization or verification. These methods often result in scattered, unreliable, or incomplete academic content.
Our proposed system takes inspiration from both social platforms and academic repositories, integrating authentication, content moderation, and searchable organization. This ensures a structured and trustworthy academic environment for note exchange.

III. Problem Statement

Currently, there is no centralized system in our university that enables students to reliably share academic resources. Students face the following issues:

- Difficulty finding relevant and updated notes.
- Lack of verification or content quality control.
- Time wasted searching through different sources.

The proposed platform addresses these challenges by implementing a user-friendly, moderated environment where uploaded materials are categorized by course, instructor, and semester.

IV. Proposed Methodology

The platform will be developed using a full-stack web architecture with the following structure:

- **Backend:** Java, Spring Boot (REST API), Spring Security, JPA/Hibernate, MySQL/PostgreSQL
- **Frontend:** React.js, HTML, CSS, JavaScript, Bootstrap/Tailwind CSS
- **Architecture:** RESTful service-based design

Features include:

- User registration and authentication

- Uploading and downloading lecture notes
- Adding new courses dynamically
- Commenting and rating system
- Admin approval workflow

Workflow

Users upload lecture notes → Admin reviews and approves → Approved content becomes public → Users can interact via comments and ratings.

This iterative approach ensures content quality, secure access, and user accountability.

V. Limitations and Real Life Constraints

While the system is designed for efficiency, several practical limitations exist:

- Admin approval may delay publication of uploaded content.
- Quality of materials depends on user contributions.
- Performance may degrade with high concurrent usage.
- Legal and ethical issues may arise if copyrighted materials are uploaded.

These challenges will be mitigated through clear usage policies, storage optimization, and content validation mechanisms.

VI. Signed Statement of Eligibility

This is to confirm that I fulfill the requirements of this course and am eligible to take Senior Project I. I accept any consequences due to ineligibility.

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