Abstract

This project presents the design and implementation of a College Academic Materials Management System—a web-based application developed using Python (Flask) and SQLite. The system enables efficient organization, upload, and retrieval of academic materials, categorizing resources by Department, Semester, and Subject for streamlined student access.

Students can browse and download learning materials for any department or course directly, without registration or login, improving accessibility and convenience. An authenticated admin interface allows administrators to upload new materials, dynamically updating the repository and maintaining the academic content in a structured and secure way.

The platform features a modern, user-friendly interface with intuitive navigation from department to semester to subject. It incorporates dynamic dropdowns, file type validations, and an attractive visual design. The database schema enforces data consistency and supports scalability to accommodate additional departments and courses.

This project addresses common challenges in academic resource management, simplifying material sharing between faculty and students, supporting real-time updates, and enhancing the educational experience through digital transformation.