

# School Management System

## Project Report

Generated on: 2025-05-18 21:42:17

### Project Overview

The School Management System is a comprehensive web application designed to streamline the management of student records, course information, and fee tracking in an educational institution. Built using Flask and SQLite, the system provides a user-friendly interface for administrators to manage student data efficiently.

### Key Features

- Admin Authentication and Security
- Student Registration and Management
- Course Management
- Fee Tracking and Management
- Student Search Functionality
- Discount Management System
- Course-wise Student Grouping

### Technical Stack

Backend Framework	Flask
Database	SQLite
Frontend	HTML, CSS, Bootstrap
Authentication	Flask-Login
ORM	SQLAlchemy
Template Engine	Jinja2

### Database Schema

The application uses three main database models: 1. Admin: Manages administrator authentication 2. Course: Stores course information including name, duration, and fees 3. Student: Contains comprehensive student information including personal details and fee records

## Available Courses

Course Name	Duration	Total Fees
Bachelor of Technology	4 years	■400,000
Bachelor of Science	3 years	■300,000
Master of Technology	2 years	■200,000
Master of Science	2 years	■180,000
Bachelor of Commerce	3 years	■250,000
Bachelor of Arts	3 years	■200,000
Master of Business Administration	2 years	■350,000
Bachelor of Computer Applications	3 years	■280,000

## Security Features

- Password hashing using Werkzeug's security functions
- Session management with Flask-Login
- Protected routes requiring authentication
- Secure form handling and data validation

## Future Enhancements

- Student attendance tracking system
- Online fee payment integration
- Parent portal access
- Student performance tracking
- Automated report generation
- Email notifications system