International Islamic University Chittagong

Department of Computer Science & Engineering

Project Report

ON

CSE-3532

TOOLS AND TECHNOLOGIES FOR INTERNET PROGRAMMING

TOPIC — Document Management System

SUBMITTED TO —

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SUBMITTED BY—

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1. Introduction:

The project is a web-based mini DBMS that allows users to manage personal notes and files securely. It includes features like user authentication, real-time search, file upload/preview, and a visual dashboard for data summary.

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2. Why we choose this project:

The main goal of this project is to design and implement a user-friendly, secure web application that allows users to manage personal notes and uploaded files efficiently. This application simulates the functionalities of a lightweight Database Management System (DBMS) with an interactive interface.

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3. Technology Stack:

- **Frontend:**
    - HTML5 ,Bootstrap 5 (for responsive design and UI components)
    - JavaScript (with Chart.js for data visualization)
- **Backend:**
    - Python 3
    - Flask (micro web framework)
- **Database:**
    - SQLite (via SQLAlchemy ORM)

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4. Key Features:

- **User Authentication:**
    - Secure login, logout, signup,password change with hash-based verification
- **Notes Management:**
    - Add, view, edit, delete text-based notes and Real-time note search
- **File Management:**
    - Upload multiple file types: PDF, DOCX, JPG, PNG, etc.
    - Preview images and PDF files within browser
    - File download and delete functionality
    - Search uploaded files in real-time
- **Dashboard Summary:**
    - Display total count of notes and uploads
    - Visual comparison via interactive pie chart using Chart.js

- **Dark Mode Support:**
    - Toggle switch for light/dark theme
- **Profile Management:**
    - View user info (ID, name, email),Password update feature

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5.Team Contribution:

- **[Nuzhat]**: Frontend development, UI design, dashboard (Chart.js) and note integration.
- **[Ema]**: Backend development, authentication, database setup and secure file handling.