CS457 Big Data Security

Assignment: User Authentication and Access Control

Assignment given on: 03-Mar-2025

Assignment to be shown on: 10-Mar-2025

Part 1. Handwritten Assignment

The hand written assignment will be of at least 4 pages [2 sheet back to back] (excluding figures) of handwritten text on what are User Authentication and Access Control methods.

Part 2: User Authentication and Access Control

Implement a role-based authentication system where users are assigned roles (admin, editor, viewer). Each role should have specific access rights to files or data. Ensure secure user authentication using password hashing and session management. Implement as a web based portal. Users will register on the portal and the admin assigns them (admin, editor, viewer) rights. Assume that there is a common database stud_info where in the fields are (roll, name, age, branch, hometown). Use My SQL DB. If user is trying to do an operation which he/she is not allowed to it should pop and error. Like a viewer should not be allowed to run sql queries.