UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

FACULTY OF ENGINEERING, DESIGN AND TECHNOLOGY
DEPARTMENT OF COMPUTING AND TECHNOLOGY
EASTER 2025 SEMESTER ASSIGNMENT

PROGRAM: *BACHELOR OF SCIENCE IN COMPUTER SCIENCE*

YEAR: 2   SEMESTER: 2

COURSE NAME: *WEB PROGRAMMING*

TEST DATE: JANUARY 2025

TIME ALLOWED:

Simple User Authentication System (Console-Based) In-class Assignment

Assignment Instructions

Project Overview

In this project, you will build a simple user authentication system using **Node.js**. The system will allow users to:

1. **Create an account** (register a username and password).
2. **Log in** using their credentials.
3. **Access a menu** after successful login.

Project Requirements

- Store user credentials in a **JSON file**.
- Implement **password encryption**.
- Use **readline** to accept user input from the terminal.
- Validate login credentials (check if the username exists and if the password matches).
- Display a **menu** after login (e.g., View Profile, Logout, Exit).

Features to Implement

1. **User Registration**

- Prompt the user to enter their names, email and password.
- Save the credentials to a JSON file.

2. **User Login**

- Prompt the user to enter their email and password.

- Verify credentials against stored data.
- If correct, allow access; if incorrect, deny access.

3. **User Menu (After Login)**

- Display options (e.g., View Profile, Logout, Exit).
- Implement basic functionality for each option.

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