# **DATA236: Distributed Systems for Data Engineering**

#### **Objective:**

Create a Node.js application with Express that implements a simple user authentication system for the Department of Applied Data Science at SJSU. The application should include:

- User login and logout functionality.
- Session management to keep users logged in.
- Protected routes that only logged-in users can access.
- Styling using Bootstrap to make the application visually appealing.

## **Requirements:**

## 1. Routes- Handled Separately in a router 4 points

## Home Page (/):

Display a welcome message for ADS-SJSU

Show a link to the login page if the user is not logged in.

Show a link to the dashboard and logout if the user is logged in.

## Login Page (/login):

Display a login form with fields for username and password.

Validate the credentials and log the user in if they are correct.

Redirect to the dashboard on successful login.

#### Dashboard Page (/dashboard):

Display a welcome message with the user's name.

Show a logout link.

Protect this route so only logged-in users can access it.

## Logout (/logout):

Destroy the session and redirect the user to the home page.

#### 2. Session Management- 4 points

Use express-session to manage user sessions.

Store the logged-in user's information in the session.

Ensure that the session cookie is secure

#### 3. Styling with Bootstrap – 2 points

Use Bootstrap to style all pages.

Make the application responsive and visually appealing.

Use Bootstrap components like: Navbar for navigation, Cards for forms and content, Buttons and alerts for actions and messages.

## **Submission Guidelines:**

- Submit a single PDF named FirstName\_LastName\_HW3.pdf
- Include one screenshot per route page.
- Include only the app.js code at the bottom and one screenshot of your views directory