Assignment: Node.js and MongoDB Intern - Login Flow Implementation

Overview:

As an intern, you will be responsible for creating a login flow using Node.js and MongoDB. This assignment aims to provide you with hands-on experience in developing a basic authentication system and integrating it with a database. The final deliverable will include a functional login flow and a comprehensive readme.md file explaining the implementation details.

Requirements:

1. Familiarize yourself with Node.js and MongoDB concepts, as well as basic JavaScript programming.

2. Implement a user registration page that captures necessary details such as username and password.

3. Store the registered user’s information in a MongoDB database.

4. Create a login page that verifies the user’s credentials against the database records.

5. Upon successful login, display a welcome message or redirect the user to a dashboard page.

6. Handle invalid credentials and display appropriate error messages.

7. Ensure proper validation of user inputs to prevent common security vulnerabilities (e.g., SQL injection, cross-site scripting).

Deliverables:

1. Functional login flow implemented using Node.js.

2. MongoDB integration for storing and retrieving user information.

3. A readme.md file explaining the implementation process, including setup instructions and any additional notes you deem necessary.

4. Clear and concise code documentation with inline comments where appropriate.

Guidelines:

1. Use the Express.js framework for handling HTTP requests and routing.

2. Utilize the Mongoose library to interact with MongoDB.

3. Implement secure password storage by using hashing and salting techniques.

4. Use sessions or JSON Web Tokens (JWT) for managing user sessions and authentication.

5. Keep the design simple and focus on functionality rather than visual aesthetics.

6. Feel free to use any additional libraries or frameworks that might assist you in achieving the objectives.

Note:

This assignment is designed for interns with little or no prior experience in Node.js and MongoDB. Don’t worry if you encounter challenges along the way—learning from them is an essential part of the internship. Feel free to seek guidance from your mentor or supervisor whenever needed.

Good luck, and enjoy the learning experience!