Objective

To evaluate your skills in developing a full-stack application using MongoDB, Express.js, React, and Node.js (MERN).

Assignment

Create a simple task management application that allows users to:

1. **Register and Login:**
   ○ Users should be able to register with their email and password.
   ○ Implement login functionality.
2. **Task Management:**
   ○ After logging in, users should be able to create, view, update, and delete tasks.
   ○ Each task should have a title, description, and status (e.g., To Do, In Progress, Done).
3. **Backend:**
   ○ Use Node.js and Express to create RESTful APIs for user authentication and task management.
   ○ Use MongoDB as the database to store user and task information.
4. **Frontend:**
   ○ Use React to create a user interface for the task management application.
   ○ Ensure the UI is user-friendly and responsive.

Requirements

- Use JWT for user authentication.
- Implement form validation on the frontend.
- Use Redux or Context API for state management.
- Include proper error handling and notifications for user actions.
- Write clean, maintainable, and well-documented code.

Bonus Points

- Implement search and filter functionality for tasks.
- Add due dates and priority levels to tasks.
- Deploy the application on a cloud platform (e.g., Heroku, Vercel).
- Use TypeScript for both frontend and backend.

Submission

- Provide a link to the GitHub repository with your code.
- Include a README file with instructions on how to run the application.
- If deployed, include the live demo link.

Deadline

Please submit your assignment within 7 days of receiving this task.

Evaluation Criteria

- Code quality and organization
- Functionality and completeness
- User interface and user experience
- Use of best practices and modern development techniques