Project: Task Management App (Mini Jira)

Create a mini task management system where users can:

- Sign up / log in

- Create and manage projects

- Add tasks to a project

- Update task status (e.g., To Do, In Progress, Done)

- View projects and tasks on a dashboard

Tech Stack Requirements

- **Frontend**: React + TypeScript

- **Backend**: Node.js + Express + TypeScript

- **Database**: MongoDB

- **Authentication**: JWT (JSON Web Tokens)

Core Features & Scoring (Total: 100 points)

1. Authentication (20 points)

- [10 pts] User Registration and Login using JWT

- [10 pts] Protected routes (only logged-in users can access dashboard)

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2. Backend API with Express (25 points)

- [10 pts] RESTful routes for:

  - `/projects` (CRUD)

  - `/tasks` (CRUD)

- [5 pts] Tasks belong to a project (`projectId` reference)

- [5 pts] Tasks have status: `todo`, `in-progress`, `done`

- [5 pts] Type-safe request/response handling using TypeScript interfaces

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3. MongoDB Schema Design (10 points)

- [5 pts] Separate collections for Users, Projects, Tasks

- [5 pts] Correct use of references and validation (e.g., `ref`, `required`)

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4. Frontend React App (30 points)

- [10 pts] Dashboard page: list all projects and associated tasks

- [10 pts] Ability to create/edit/delete tasks within a project

- [5 pts] Drag-and-drop or dropdown to change task status (bonus if real-time updated)

- [5 pts] Use of React hooks and clean folder structure with TypeScript types/interfaces

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5. UI & UX (10 points)

- [5 pts] Basic but clean UI (e.g., Bootstrap, Tailwind, or Material UI)

- [5 pts] Loading indicators, error messages, and input validation

6. Bonus (5 points)

- [2 pts] Responsive design (mobile-friendly)

- [3 pts] Add project members (invite by email - mock only)

Submission Instructions

1. Push the code to a private GitHub repo and invite us.

2. Include a `README.md` with:

   - Setup instructions

   - Technologies used

   - API documentation (brief)

   - Time taken and which parts are complete/incomplete