




# Task Title: “Team Pulse – Ask, Answer & Insight Mini App”

## Objective:

Build a mini full-stack app (Node.js + Express + MongoDB + React) where team members can:

- Ask questions 
- Answer others' questions 
- Managers can view team insights 

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## Core Requirements

### 1. Authentication (Backend + Frontend)

- **POST /auth/register** → Create new user (name, email, password, role)
- **POST /auth/login** → Return JWT token
- Roles: "member" and "manager"
- Use **bcrypt** for password hashing
- Protect private routes with JWT middleware

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### 2. Questions Module

- **POST /questions** → Authenticated users can post a question  
`{ title, description, tags[], createdBy, createdAt }`
- **GET /questions** → List all questions with search (by keyword or tag)
- **GET /questions/:id** → Fetch single question
- On frontend:
  - Show question list

- Add “Ask Question” modal/form
  - Search bar (filters by keyword or tag)
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### 3. Answers Module

- **POST /answers/:questionId** → Add answer  
`{ text, createdBy, createdAt }`
  - **GET /answers/:questionId** → Fetch all answers
  - On frontend:
    - Each question card → “View Answers” section
    - “Add Answer” input form (if logged in)
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### 4. Manager Dashboard

- **GET /insights** → Return:
    - Total questions asked
    - Top 3 most active users
    - Average answers per question
  - Simple analytics chart on frontend using **Recharts / Chart.js**
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### 5. UI Expectations (React Frontend)

- Modern, clean UI (Tailwind / MUI)
- Pages:
  - Login / Register
  - Home (List of questions + search)

- Question Details (answers view)
- Manager Dashboard (chart view)
- Use **React Query** or Axios for API calls
- Bonus: Toast notifications, loading states, protected routes

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## Tech Stack

- **Backend:** Node.js, Express.js, MongoDB (Mongoose)
- **Frontend:** React, Tailwind/MUI, React Router
- **Auth:** JWT, bcrypt
- **Deployment (Bonus):** Render / Vercel / Railway