

## Project: Personal Notes & Bookmark Manager

- Tech Stack
  - Backend: Node.js + Express + MongoDB/PostgreSQL
  - Frontend: Next.js / JavaScript (React) + Tailwind CSS
- Objective
  - Build a Personal Notes and Bookmark Manager app where users can:
    - Save and search notes with tags
    - Save bookmarks with URLs, titles, and descriptions
    - Filter and search items

(Bonus): Auto-fetch metadata (title) from bookmark URLs.
- Requirements
  - Backend (Node.js + Express)
    - Build a REST API with these routes:
    - Notes API
      - POST /api/notes
      - GET /api/notes (optional query: ?q=searchTerm&tags=tag1,tag2)
      - GET /api/notes/:id
      - PUT /api/notes/:id
      - DELETE /api/notes/:id
    - Bookmarks API
      - POST /api/bookmarks
      - GET /api/bookmarks (optional query: ?q=searchTerm&tags=tag1,tag2)
      - GET /api/bookmarks/:id
      - PUT /api/bookmarks/:id
      - DELETE /api/bookmarks/:id
    - General
      - Required field validation
      - URL validation for bookmarks
      - Proper HTTP status codes and error messages

(Bonus): Auto-fetch title if user leaves the bookmark title empty
  - Frontend (Next.js + Tailwind CSS)
    - Build a responsive and clean UI.
    - Pages
      - /notes – list/search notes
      - /bookmarks – list/search bookmarks
- Features
  - Create, update, delete notes and bookmarks
  - Filter by tags or search text
  - Mark favorites (optional)

- Responsive UI using Tailwind
- Bonus Features
  - User authentication (JWT)
  - Show data only for the logged-in user
  - Mark notes/bookmarks as favorites
- Deliverables
  - Backend
    - Node.js project with /api-prefixed routes
    - Clear folder structure
    - Setup instructions in README.md
  - Frontend
    - Next.js + Tailwind project
    - Pages /notes and /bookmarks
    - Responsive design
    - Setup instructions in README.md
- README
  - Project setup steps (backend + frontend)
  - Brief API documentation
  - (Optional) Postman collection or sample cURL requests
  - Skills This Tests
  - REST API design
  - Data validation and error handling
  - React (Next.js) routing and state
  - Tailwind CSS for UI
  - Clean code and structure
  - Real-world data modeling
- Evaluation Criteria
  - Working CRUD functionality
  - Code structure and modularity
  - Error handling and validation
  - UI/UX quality (responsive and clean)
  - Clarity in README and setup instructions
- Submit Your Assignment
  - Deadline: Within 24 hours of receiving this challenge
  - Submit via this form: [Link](#)