



Assignment

Mock Auth API

Products API

Categories API

# Assignment: Product Management App

Deadline: Saturday, October 18, 2025, by 11:59 PM (Dhaka Time)

## Goal

Build a Next.js (App Router) application that allows a user to browse, create, edit, view details, and delete products. Focus on polished UI/UX, solid validation, and clean code. Please use [this color palette](#) for your design.

## Quick API notes

- Authentication:** send POST /auth with the same email you used on your job application, e.g., { "email": "you@example.com" } to get a JWT. Include the token as Authorization: Bearer on every request.

## Required tech stack

- Framework:** Next.js (App Router)
- Library:** React
- State management:** Redux Toolkit
- Styling:** Tailwind CSS (or any other of your choice)

## Functional requirements

### Auth & session

- Simple login screen that accepts an email, calls POST /auth, store the JWT in the redux store, and send it with product requests.
- Provide logout functionality.

### Products page

- Display all products with pagination.
- Real-time search by product name.
- Delete product with a confirmation pop-up.
- Cache data where necessary; ensure cache invalidation or updates after create/edit/delete.

### Create & Edit pages

- Single form for create and edit flows.
- Create product with category and update product category.
- Client-side validations on all fields: required fields, correct types (number/string), and custom validations (e.g., price > 0).
- Show inline validation messages and error handling.

### Details page

- Full product information with actions: Edit, Delete (confirmation).

### UX / UI expectations (very important)

- Modern, visually consistent design with attention to spacing, typography.
- Responsive layout (mobile, desktop).
- Clear loading and error states for network operations.
- Smooth user flows for primary actions (create, edit, delete).

## Deployment (Mandatory)

You must deploy the project to Vercel, Netlify, or a similar hosting platform and provide the following:

- Public GitHub repository URL
- Live deployed link

## What we will evaluate

- Feature completeness — All core CRUD flows (products, search, pagination, create, edit, details, delete)
- UX / UI design — Visual polish, layout consistency, and responsive behavior. (This is important)
- Code quality & best practices — Component structure, modularity, readability, and use of Redux Toolkit.
- Validation & error handling — Proper client-side validations and handling of server errors.
- Extras/innovations — Thoughtful bonus features (e.g., filter products by category), micro-interactions, improvements, or thoughtful trade-offs.

If you run into any issues, contact us at [connect@bitechx.com](mailto:connect@bitechx.com).