# Node.js + MongoDB Project Requirements

Project Title: Personal Expense Tracker API

## Project Overview

Build a backend API using Node.js, Express, and MongoDB to track personal expenses. The system should allow users to register, log in, and record their daily expenses categorized by type (e.g., Food, Transport, Entertainment). Users can view summaries, filter expenses by date range, and see category-wise breakdowns.

## Key Features

- User authentication (JWT-based)  
- User registration and login  
- Add, edit, and delete expenses  
- Categorize expenses  
- Get all expenses for a logged-in user  
- Filter expenses by date range  
- Summary endpoint to get total expenses per category  
- Pagination for expense list  
- Basic input validation

## Technical Requirements

- Node.js with Express framework  
- MongoDB as the database  
- Mongoose for schema modeling  
- JWT for authentication  
- bcrypt for password hashing  
- Express middleware for authentication and error handling  
- Environment variables for sensitive config (dotenv)  
- Use proper folder structure (controllers, routes, models, middleware, config)  
- Use async/await with proper error handling

## Suggested Folder Structure

src/  
 ├── config/  
 │ └── db.js  
 ├── controllers/  
 ├── models/  
 ├── routes/  
 ├── middleware/  
 ├── utils/  
 ├── app.js  
 └── server.js

## Bonus Features (Optional)

- Monthly expense report  
- Export expenses to CSV  
- Multi-currency support  
- Role-based access (e.g., admin)

## Evaluation Criteria

- Code readability and structure  
- Proper use of async/await  
- Validation and error handling  
- Secure authentication  
- Efficient database queries  
- Modular and maintainable code