Task Management System

A Web App

Team Members

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Project Description

A Task Management System that allows users to efficiently create, manage, and track tasks.

Project Features

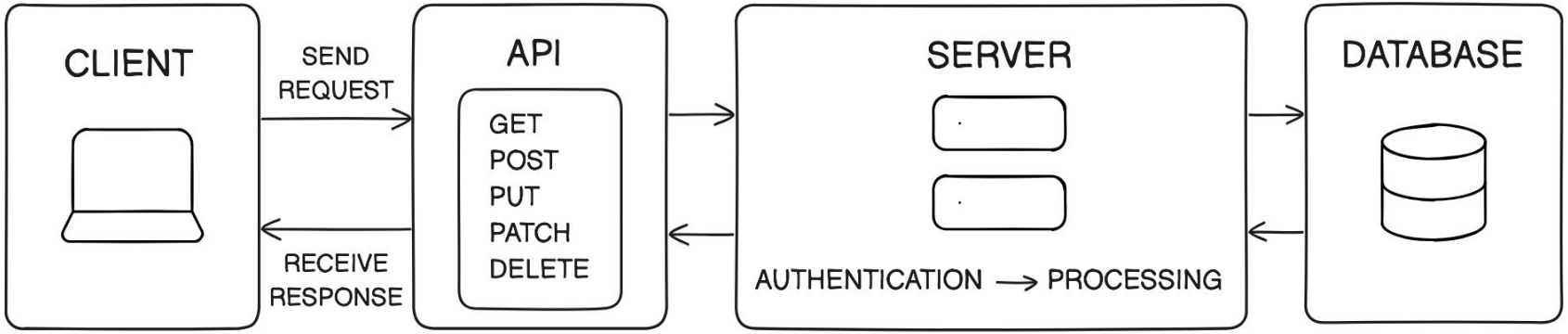
- **Task Creation & Management:** Easily create tasks with the fields Title, Status (To Do, In Progress, Done), Priority (Low, Medium, High), Category, Due Date.
- **Status Tracking:** Mark tasks with their status.
- **Search by Title:** Quickly find tasks by searching for their titles.
- **Sorting Options:** Sort tasks by any of the fields listed above.

Architecture

Client-Server Model

- Server: RESTful API endpoints for managing users and tasks. Requests are processed by the server, authenticated, interact with MongoDB via Mongoose, and return responses.
- Client: The client handles the user interface and sends HTTPS requests using Axios to the server for data.

Architecture

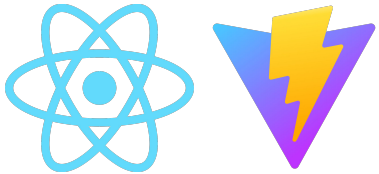


Tech Stack

Node.js

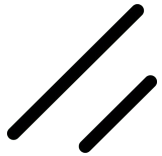
Express.js

Postman



React.js + Vite

MongoDB + Mongoose + MongoDB Atlas



Shadcn/ui

Tailwind

Axios

Timeline

Date Range	Phase	Details
20 September - 27 September	Choosing a project idea	-
28 September - 7 October	Planning the project	Approach and flow, dividing tasks
8 October - 11 October	Finalizing project plans	UI design, API endpoints, etc.
12 October - 19 October	Implementation phase	Each team member took on their respective roles: - UI components design and implementation - API deployment on Vercel - Implementing API requests from the frontend - Filter and sort functionalities - Login/register pages and logout implementation - Adjustments as needed
20 October	Deployment and final tasks	Frontend deployment, final tweaks, testing, project delivery/submission

Developments Report

Success:

Delivered a functioning app with:

- **CRUD operations for the task management**
- **Authentication**
- **Session management using JWT for login and logout on the client side.**

Developments Report

Challenges:

- **Busy Schedules:** Coordinating between team members' busy schedules impacted project progress.
- **Limited time**
- **Feature Limitations:** Some additional features had to be postponed due to time constraints.

Developments Report

Areas for Improvement

- **Endpoint Consistency:** Standardize endpoint design and data flow.
- **Performance Optimization:** Optimize **request handling** and **reduce response times**.
- **Token Management:** Integrate **JWT** for more efficient token management.

Developments Report

Lessons Learned:

- **Adapting to New Technologies**
- **Collaborative Learning:** Benefited from each other's expertise, leading to personal and team growth.

Developments Report

Areas for Improvement & Future Plans

- Code Refactoring
- JWT: Set expiry and handle it with refresh tokens.
- Implement user roles in frontend (for managers to assign tasks to employees) (already implemented in the backend).
- User account deletion in frontend (already implemented in the backend).
- Password reset functionality.

Live Demo

Q&A

Thank you

Deployment link:

https://depi-task-management.vercel.app/