

Objective:

The objective of this assignment was to create a simple **Task Manager API** using **Node.js** and **Express.js**, with basic functionality to **add**, **view**, and **delete** tasks. The tasks were stored in an in-memory array, without using a database.

What I Learned:

- How to set up a backend server using **Express.js**.
- How to create RESTful API routes (GET, POST, DELETE).
- How to use **Postman** to test backend APIs.
- How to handle JSON data and route parameters in Express.
- Basic frontend interaction with an API using **HTML and JavaScript**.

Steps Followed:

1. Project Setup:

- a. Initialized a Node.js project using npm init.
- b. Installed express package.

2. Created Backend (index.js):

- a. Created an array tasks to store task objects.
- b. Implemented three routes:
 - i. POST /addTask: To add a new task.
 - ii. GET /tasks: To retrieve all tasks.
 - iii. DELETE /task/:id: To delete a task by its ID.

3. Tested API Using Postman:

- a. Sent GET, POST, and DELETE requests to verify functionality.
- b. Handled error cases like missing taskName or invalid ID.

4. Frontend Implementation:

- a. Designed a basic HTML page to display tasks.
- b. Used JavaScript fetch() API to communicate with backend.
- c. Added buttons to add and delete tasks dynamically.

Outcome:

By the end of the assignment:

- I successfully built a functional REST API using Node.js and Express.
- I tested the API endpoints using Postman.
- I connected the backend with a simple frontend UI.
- This assignment improved my understanding of full-stack development basics and API testing.