**Day 2: Node.js & Express – Building Your API**

**Goal:**

Create a simple REST API for your todos (no database yet—just in-memory).

**1. Set Up Your Backend**

1. **Create a new folder** (outside your React app), e.g., mern-backend.
2. **Initialize a Node.js project:**

mkdir mern-backend

cd mern-backend

npm init -y

npm install express cors  
  
**2. Create Your Express Server**

Create a file called index.js:

const express=require(‘express’); //bring express bknd framework

const cors=require(‘cors’); //bring cors so react can talk to server

const app=express(); //create ur actual server app

app.use(cors()); //middleware to allow cross-origin requests

apps.use(express.json()); //middleware to automatically read json body sent in POST

let todos=[]; //temporary store todos in an array,it will reset everytime the server starts

app.get(‘/’,(\_req,res)=>{

res.send(‘welcome to Todo API’); //when u open server it shows this

});

app.get(‘/todos’ , (req,res)=>{

res.json(todos); //send ur todos array as json when client hits GET http://local:5000

});

app.post(‘/todos’ ,(req,res)=>{

const todo=req.body;

if(!=todo || typeof todo.text!== ‘string’ || typeof todo.done !== ‘boolean’){

return res.status(400).json({error: ‘invalid todo format’});

} //if block checks for 1.is there a todo 2.is text a string 3.is done a boolean

todos.push(todo); //if yes,push to array and return 201 created

res.status(201).json(todo); //if no ,send error,400 BAD request

});

app.delete(‘/todos/:index’ , (req,res)=>{

const index=parseInt(req.params.index); //requet shud hv index as paramter

todos.splice(index,1); //remove todo at that index

res.status(204).end(); //204=no content

app.put(‘/todos/:index’ , (req,res)=>{

const index=parseInt(req.params.index); //req shud hv index as paramter

todos[index].done = !todos[index].done; //flip boolean

res.json(todos[index]); //send back updated todo

});

app.listen(5000,()=>{

console.log(‘server running at <https://localhost:5000>’); //test server on this address

});

**3. Test Your API**

* Run your server:

node index.js

Use [Postman](https://www.postman.com/) or [Hoppscotch](https://hoppscotch.io/" \t "_blank) to test the endpoints:

* + GET http://localhost:5000/todos
  + POST http://localhost:5000/todos with JSON body: { "text": "Read book", "done": false }
  + DELETE http://localhost:5000/todos/0
  + PUT http://localhost:5000/todos/0