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1. Express App Setup
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const express = require('express');
const app = express();
app.use(express.json());
app.listen(3000, () => console.log('Server running'));
2. Routing Basics
app.get('/', (req, res) => res.send("Home"));
app.post('/user', (req, res) => res.json(req.body));
3. req Object
- req.params: URL params (e.g. /user/:id) req.params.id
- req.query: Query string (e.g. ?q=abc) req.query.q
- req.body: JSON body data req.body.name
- req.method: HTTP verb used
- req.url: Full request URL
4. res Object
- res.send(): Send plain response
- res.json(): Send JSON
- res.status(): Set HTTP code
- res.redirect(): Redirect user
- res.end(): End response
5. Common HTTP Status Codes
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200 - OK: Success (GET/PUT)
201 - Created: Success (POST)
204 - No Content: Success, no data to return
400 - Bad Request: Invalid input
401 - Unauthorized: Login required
403 - Forbidden: No permission
404 - Not Found: Item or route missing
500 - Server Error: App crashed
6. Middleware with app.use()
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// Logger middleware
app.use((req, res, next) => {
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console.log(req.method, req.url);
 next();
});
// Auth middleware for specific route
const auth = (req, res, next) => {
 if (req.query.admin === 'true') next();
 else res.status(403).send("Forbidden");
};
app.get('/admin', auth, (req, res) => {
 res.send("Welcome Admin");
});
7. Folder Structure
project/
controllers/
routes/
models/
db/
index.js
8. Route with params, query, and body
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app.patch('/product/:id', (req, res) => {
 const id = req.params.id;
 const search = req.query.search;
 const { name } = req.body;
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res.json({ id, search, name });

});