## **30** Days Full Stack Node.js Challenge (Frontend + Backend + Database)

### **Goal:**

Learn and build full-stack applications using **Node.js, Express, MongoDB, and React (MERN stack)** — step by step.

# **Q** Week 1 − Frontend Foundations (HTML, CSS, JS)

Day	Topic	Task
1	HTML Basics	Learn all HTML tags, structure a page, add images & links
2	CSS Basics	Learn selectors, box model, flexbox, grid
3	Responsive Design	Media queries, mobile-first layouts
4	JavaScript Basics	Variables, loops, functions, events
5	DOM Manipulation	Selecting, editing elements dynamically
6	Mini Project	"To-Do List" using HTML, CSS, JS
7	Git & GitHub Setup	Push your first project online 🚀

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Day	Topic	Task
8	What is Node.js	Install Node, run JS files, learn npm
9	Express.js Intro	Create HTTP server, routes (GET, POST)
10	REST API	Build CRUD routes (Create, Read, Update, Delete)
11	Middleware & Routers	Organize your backend cleanly
12	MongoDB Intro	Connect Node app to MongoDB (Atlas or local)
13	Mongoose Models	Create schemas, insert & fetch data
14	Project: Simple Notes API	REST API + MongoDB CRUD operations

# **■** Week 3 – Full Stack Integration (React + Node + MongoDB)

Day	Торіс	Task
15	React Basics	Components, props, state
16	React Router	Multiple pages navigation
17	Fetch API / Axios	Connect React frontend to your Node API
18	Auth System	Login, Register using JWT & bcrypt
19	Context API	Manage user authentication state globally
20	UI Enhancements	TailwindCSS or Material UI for design
21	Mini Full Stack Project	"Auth + Task Manager" with React + Node + MongoDB

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Day Topic		Task
22	File Uploads	Use Multer (upload profile pictures, etc.)
23	Email Sending	Nodemailer for verification/reset password
24	Real-Time	Add Socket.io (chat or live notifications)
25	Environment Variables	Use .env for sensitive configs
26	API Testing	Postman & Jest basics
27	Deploy Backend	Deploy Node.js app on Render
28	Deploy Frontend	Host React app on Vercel or Netlify
29	Connect Domain	Optional: Use a custom domain
30	Final Project & Showcase	Build & share your own full-stack app 🞉

# Final Project Ideas (You Can Pick One)

Idea Description

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**Expense Tracker** Track income & expenses (CRUD + Auth)

**E-commerce App** Add to cart, login, product management

Chat App Real-time messaging with Socket.io

Blog App Users can post, edit, and comment

▼ Task Manager Manage daily tasks with authentication

## Example Tweet Format for X (Daily)

Ø Day 12/30 of my #30DaysOfFullStack

Connected Node.js backend with MongoDB

**Built REST APIs for CRUD operations!** 

Next up: React frontend 🔸

#NodeJS #MERN #100DaysOfCode

### Tech Stack You'll Use

• Frontend: HTML, CSS, JS, React

• Backend: Node.js, Express.js

• Database: MongoDB + Mongoose

• Extra: TailwindCSS, JWT, bcrypt, Nodemailer, Socket.io

• Deployment: Render + Vercel