MERN App

↳ client & API integration [http://localhost:3000/employees]

↳ server
↳ localhost:3000

run this first

API first Development

↳ API's based guide
↳ JSON Data

↳ frontend & Backend working simultaneously

Development

client
↳ frontend
(3)

Sample JSON

API server
↳ API
(2)

DB server
↳ DB
(1)

API's → Backend
client ← 3000
5173

↳ full stack
↳ frontend
↳ Backend

Backend
↳ SQL/NoSQL
↳ Types of DB, difference
SQL (Mysql)
↳ CRUD
↳ Tables, rows, columns
↳ Normalization
↳ Transaction
↳ ACID properties
↳ constraints

NoSQL (MongoDB)
↳ document
↳ collection
↳ fields
↳ CRUD
↳ aggregate.

↳ CSS
Types of CSS, Box model, Background, Borders, Positioning, Transitions, Flexbox, Grid, Transform, Transition, animation, Transform, Responsive, media queries, Bootstrap 5, Tailwind CSS

Node.JS
↳ modules
↳ servers

Express.JS
↳ server
↳ API development
↳ CRUD
↳ CORS
↳ Routes, DB connection
↳ middlewares
↳ .env

JS/ES6
↳ Programming fundamentals, variables, operators, conditional statements, loops, datatypes, functions, OOPS, Arrays, DOM manipulation, Asynchronous, ES6 features

jQuery

React.JS
↳ what, why, Babel, JSX, virtual DOM, components, state, props, class vs functions, hooks, API integration, React DOM, React Router, Redux, Redux Toolkit, CSS

Next.JS
↳ SSR
↳ Site static generation, API integration, Routing, styling, optimization

Pagination

Backend
10,000
Data Product

frontend
↳ allrecords (10,000)
data.slice(0,10)
on button click
data.splice( )
(conditional rendering)

Backend

1 req → 1st 10 record

2 req → next 10 records

miro