

MERn

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Agenda

WHAT IS MERN

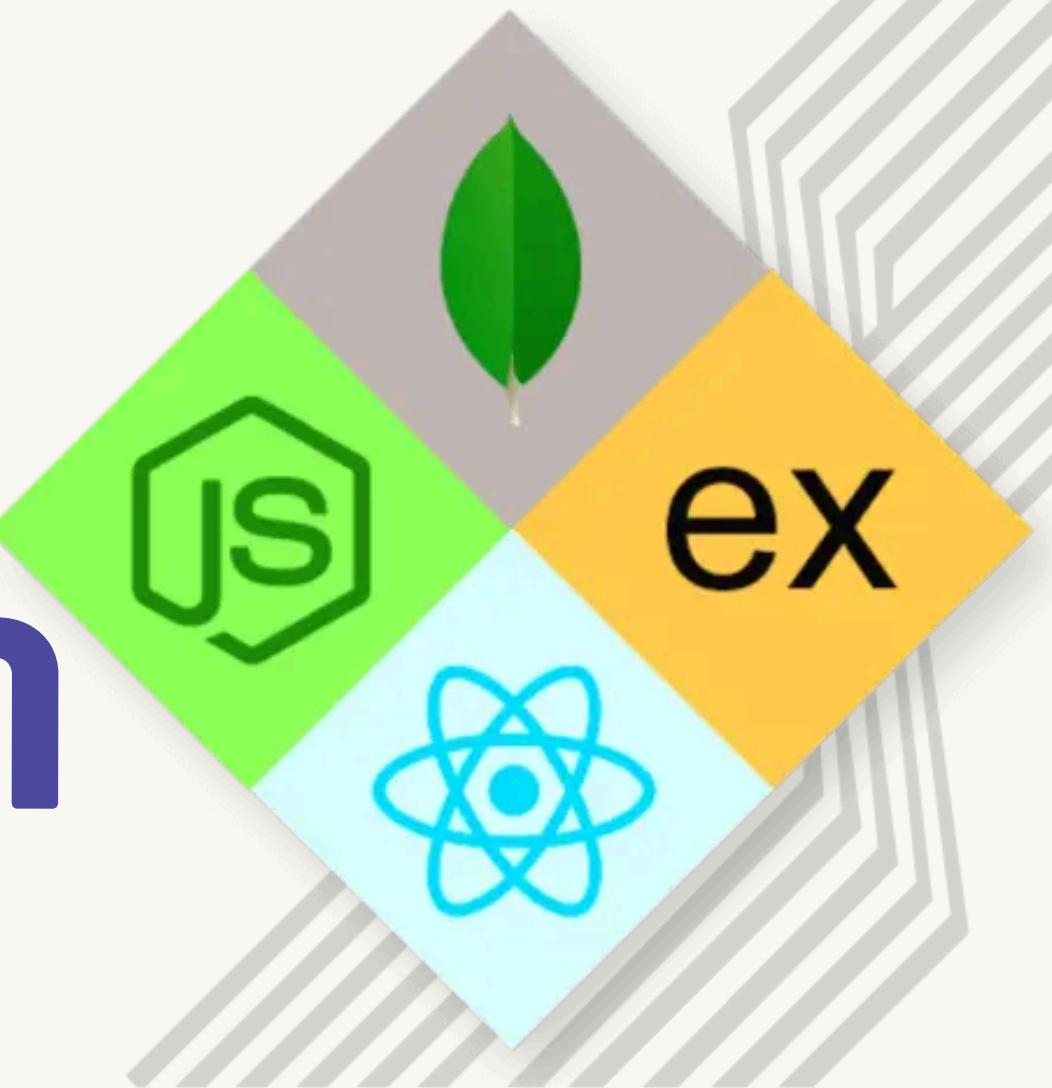
WHAT IS IT
FOR

WHY IS IT USED
INSTEAD OF OTHER
COUNTERPARTS

REAL WORD
EXAMPLES

PRACTICAL

What is mern



MongoDB – NoSQL database

Express.js – Backend web framework for Node.js

React – Frontend library for
building UI

Node.js – Runtime environment for executing
JavaScript on the server

What is it for

A REST API or real-time
backend (Express + Node)

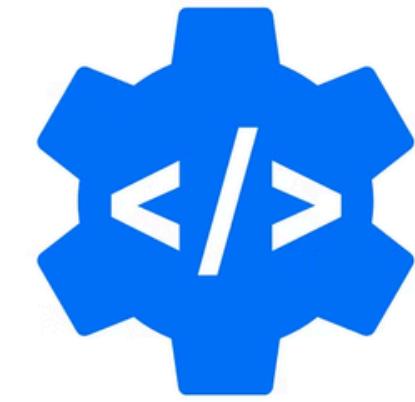
A modern interactive
frontend (React)

A flexible JSON-document
database (MongoDB)

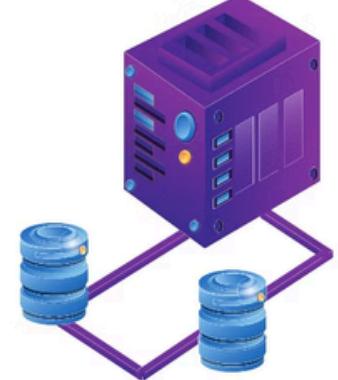
Suitable for CRUD apps,
dashboards, real-time apps,
SaaS systems, and scalable
web platforms.



Frontend



Backend Logic



Server

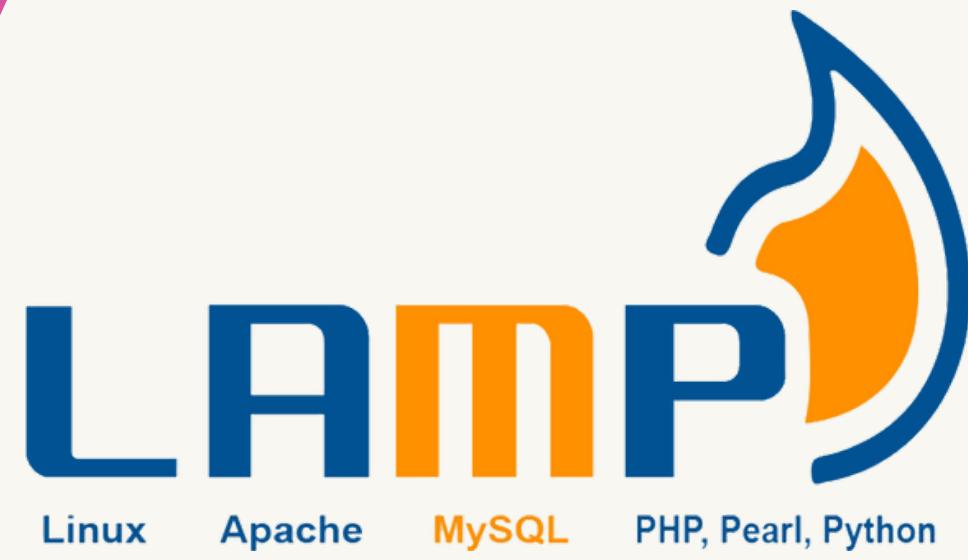


Express



Database

Why is it used instead of other counterpart



Real world example #1 and it's architecture

4. Real-World Examples

Serious / Enterprise Example

Simplify Next – Workforce operations platform

- Real production system
- Fully documented MERN usage
- Shows MERN's ability to power business-critical apps

Other professionally documented MERN use cases

Crypto exchange platforms

myFlix Movie App (Production-ready case study)

Real world example #2 (TREX game) and it's architecture

5. "Stupid" Fun Example

The T-Rex Runner Game

- Fun
- Interactive
- Lightweight
- Perfect to teach the MERN architecture without overwhelming students

Real world example #2 (TREX game) and it's architecture

6. How a T-Rex Game Would Be Structured with MERN

MongoDB → store high scores

Express → REST API for leaderboard & authentication

React → canvas game frontend

Node → game events & WebSocket server

→ This secretly introduces them to the real project folder structure

Practical Begins!

Thank you

Startup Pitch