MERN

By Leonardo Giusseppinio Tozzetti & Georgi Goranov

Agenda

WHAT IS MERN
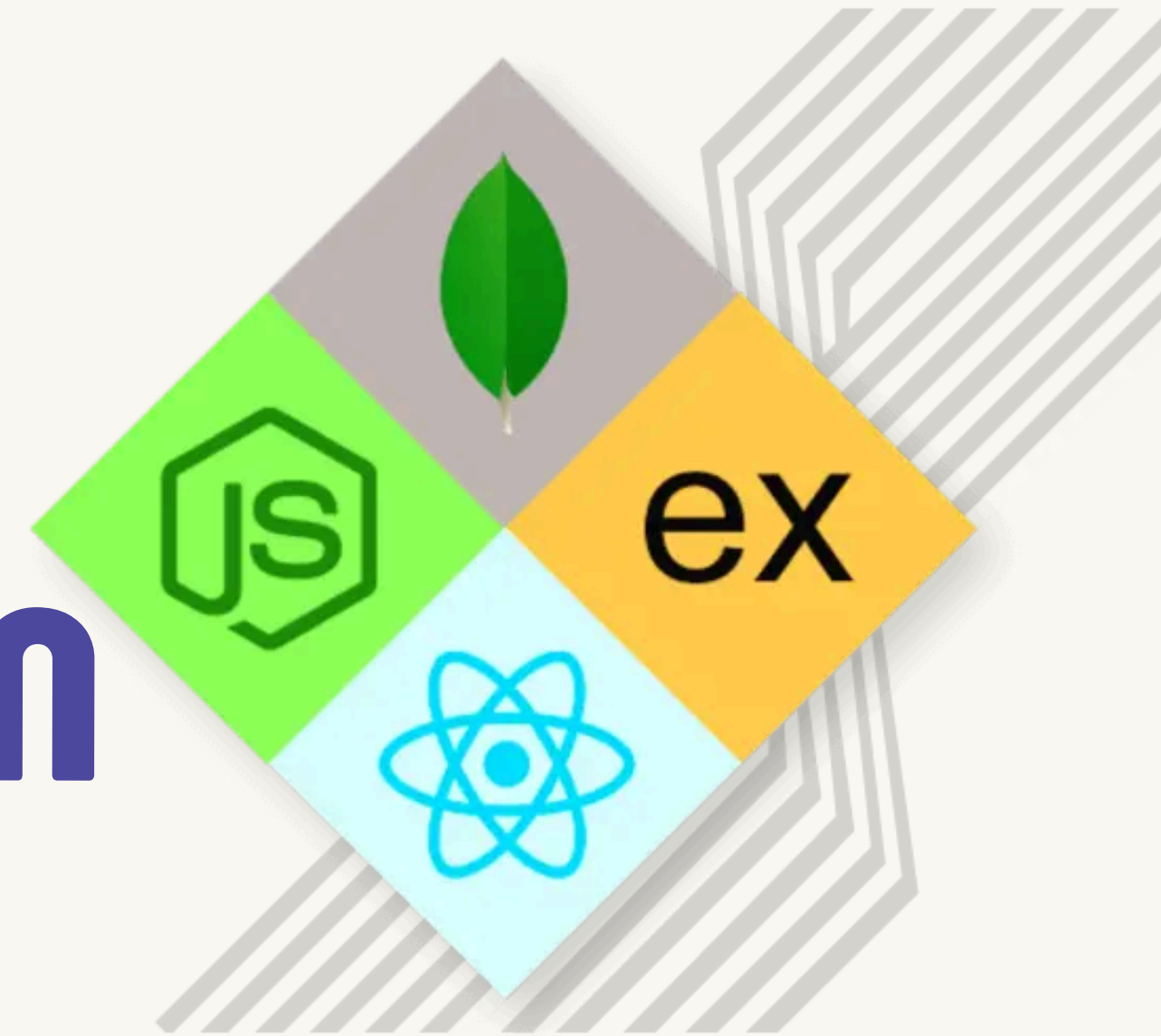
WHAT IS IT FOR

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

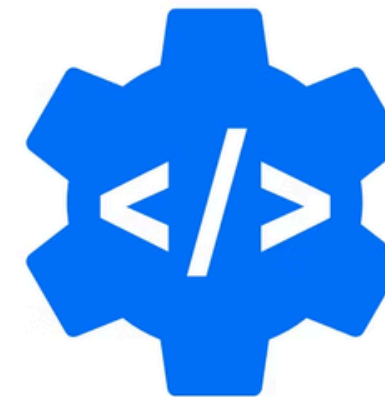A REST API or real-time backend (Express + Node)

A modern interactive frontend (React)

A flexible JSON-document database (MongoDB)

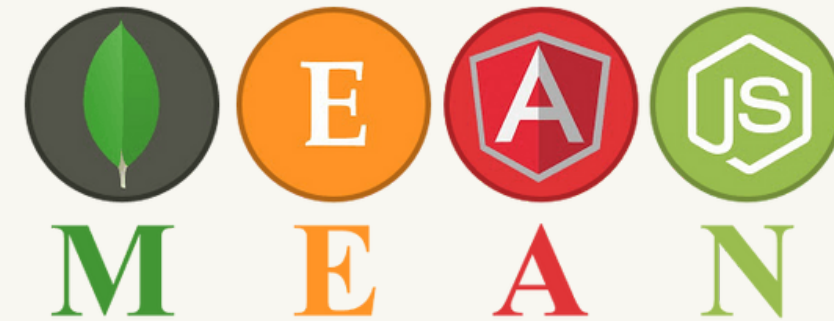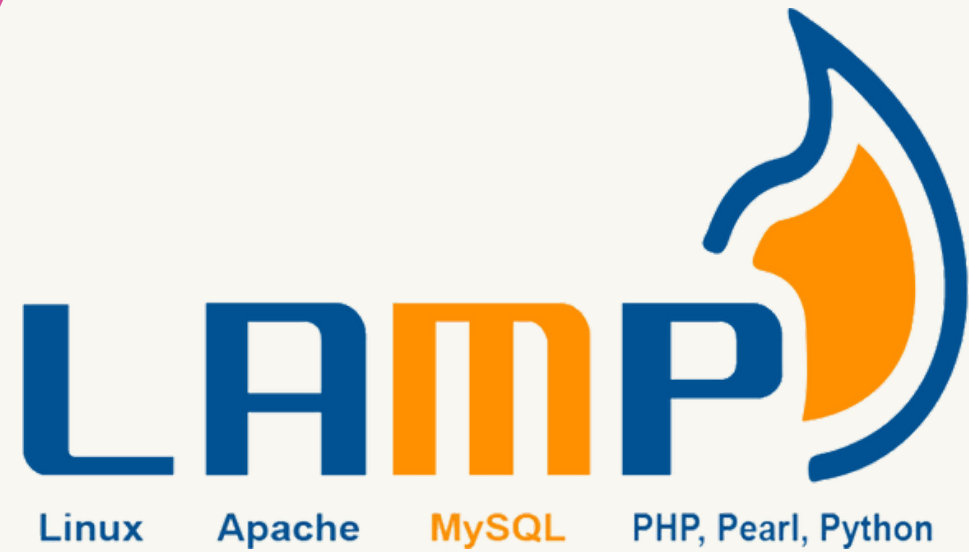Suitable for CRUD apps, dashboards, real-time apps, SaaS systems, and scalable web platforms.

Why is it used instead of other counterpart

Linux   Apache   MySQL   PHP, Pearl, Python

spring®

MEAN

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