Introduction To
MERN Stack
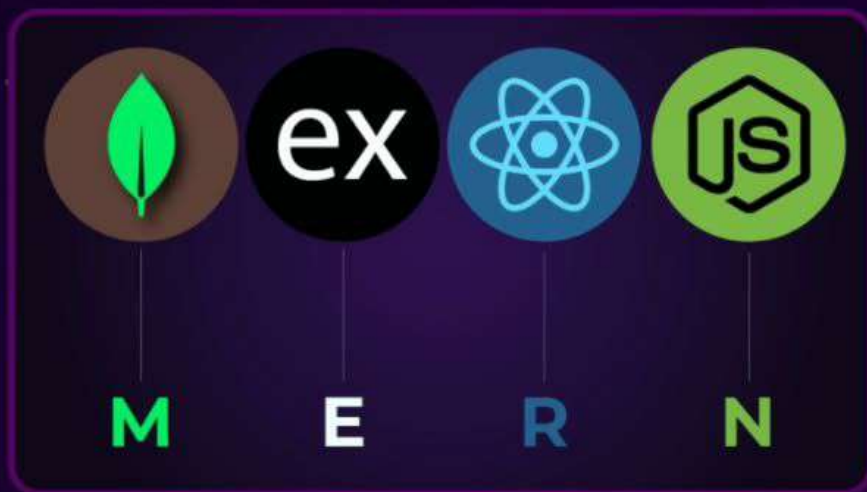
M   E   R   N

What is the MERN Stack?

- The MERN stack is a popular web development stack composed of

|		
M	⟶	**MongoDB**
E	⟶	**Express.js**
R	⟶	**React**
N	⟶	**Node.js**
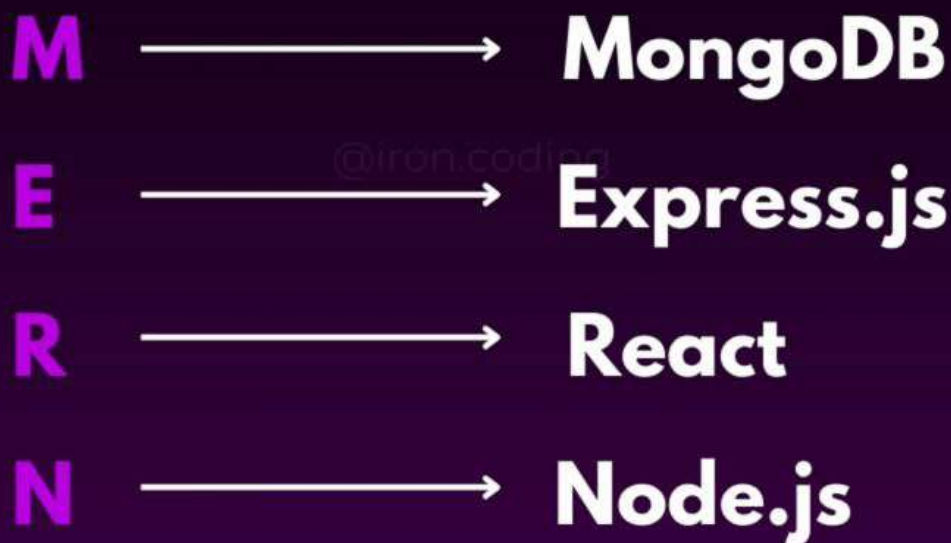
- **Each of these technologies plays a unique role in enabling seamless, modern web development, using a unified language: JavaScript.**

- **This makes it easier for developers to create dynamic, scalable applications from front to back with a single programming language.**

MongoDB – The Database

- **MongoDB** is a NoSQL database that stores data in JSON-like documents.

- It allows for fast and scalable storage solutions, making it ideal for handling large datasets in modern applications.
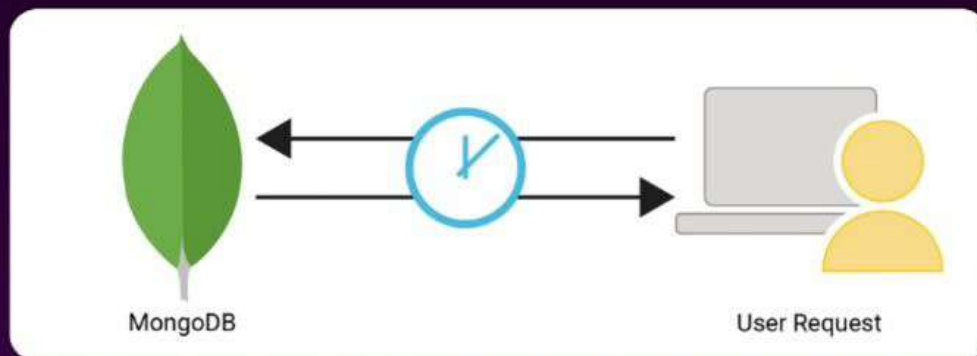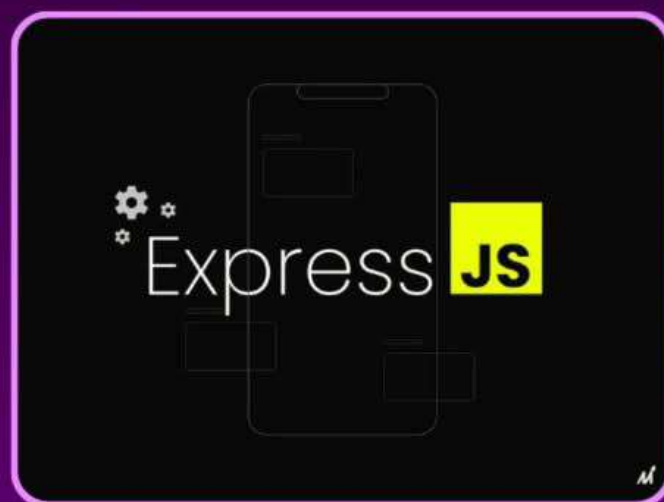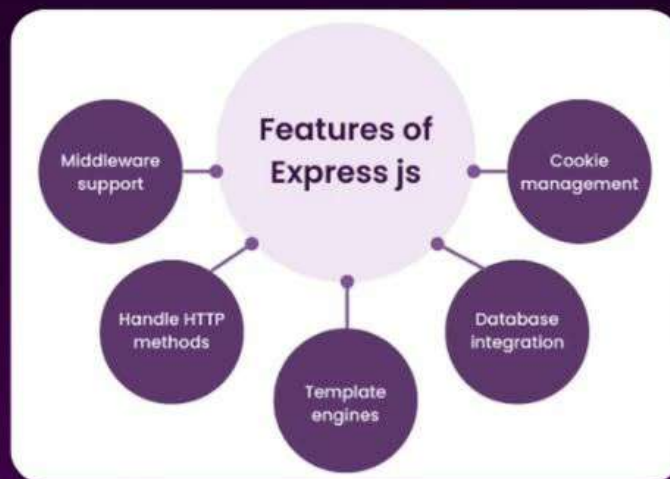
Express.js – The Backend Framework

- **Express.js** is a lightweight and fast web framework for Node.js, providing powerful tools for building APIs.

- It simplifies backend development by managing routing, middleware, and HTTP requests with ease.

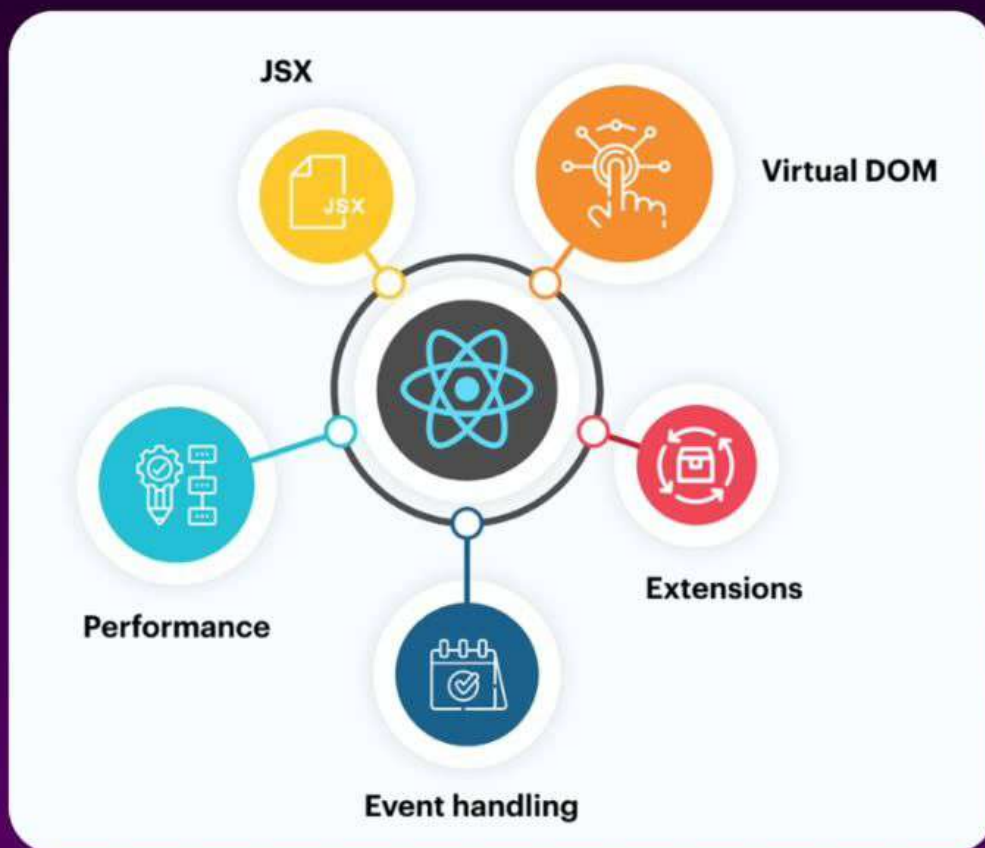Features of Express js
- Middleware support
- Cookie management
- Handle HTTP methods
- Template engines
- Database integration

Express JS

React.js – The Frontend Library

- **React** is a JavaScript library for building fast, interactive user interfaces.

- It breaks down the UI into reusable components, allowing for a highly modular and maintainable code structure.
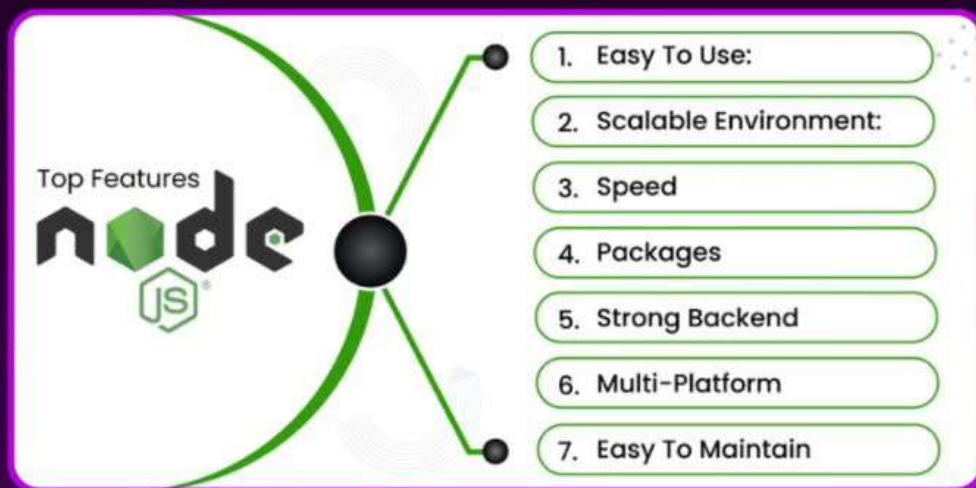
Node.js – The Runtime Environment

- **Node.js** is a JavaScript runtime that runs on the server, enabling JavaScript to be used for backend development.

- It's non-blocking and event-driven, making it perfect for building fast and scalable server-side applications.

Top Features

1. Easy To Use:
2. Scalable Environment:
3. Speed
4. Packages
5. Strong Backend
6. Multi-Platform
7. Easy To Maintain

How the Stack Works Together

- In the **MERN stack**, React handles the frontend, while Node.js and Express.js manage the server-side logic. MongoDB stores the application's data, allowing developers to handle both the client and server with one technology stack – JavaScript.