**What Is The MERN Stack, and How Does It Work -** [Kavindu Pathum Hewage](https://medium.com/@kavindupathumhewage?source=post_page-----ea12ef914cba--------------------------------) Mar 17, 2022

**Introduction**

The desire and demand among users for a more enriching and seamless World Wide Web experience is higher than ever. As a result, in order to provide that enriching and seamless experience, developers will need to change their methods. Developers are now using advanced technology stacks like MERN and MEAN instead of traditional JavaScript and HTML-based methodologies.

**What is MERN Stack**

In the word MERN, there are four letters that stand for Mongo DB, Express.js,Rect.js, and Node.js. MERN Stack is a powerful technology stack that is based on JavaScript. It is a very easy faster and more comfortable deployment of full-stack web applications. Let’s have an idea about the components of MERN Stack and how they interact with each other.

**1. Mongo DB**

This is a non-relational document-oriented based database. And It’s an open-source, cross-platform. JSON-based flexible documents are used to store data by MongoDB. It allows the fast exchange of data between client and server. And even this increases the efficiency of data integration within applications. MongoDB is very easy to scale and it is known as a flexible database.

**2.Express.js**

This is a framework of Node. js. It manages the server and its routes. This improves the development process with more security. Express js is run on top of Node js.

**3.React.js**

React js is a JavaScript library that is open source. It was once used to create single-page application user interfaces. React.js dynamically loads the required components based on the user’s request (Virtual DOM). It also only has one page rather than multiple pages. The development process is made much easier and faster with React js. It saves time to be able to reuse react components.

**4.Node.js**

Node js is an open-source, cross-platform JavaScript run time environment. It is mainly built for Google Chrome. It is open-sourced by Google in 2008 which is built on Chrome’s v8 JavaScript engine. Node Package manager (NPM) is designed to run the JavaScript code outside the browser on the server which is accessed by Node js.

**What is the Interaction of the MERN Stack Components?**

Diagram

Description automatically generated

The MERN stack is used to develop applications that are deployed on three logical servers. The requests and responses are only handled by the server where the Node.js and Express.js based API resides; the browser cannot directly access the database server. For this API, most developers use REST or GraphQL architecture. The data in those requests and responses is formatted in JSON. Only that server can use database queries to communicate with the database server.

**MERN Stack’s Bonuses**

As I previously highlighted, the MERN stack is one of the most powerful tech stacks obtainable for full-stack development today, thanks to MongoDB’s scalability and speed, React.js’ responsiveness, and high performance, and the speed improvement provided by Express.js for Node.js.

· Cost-effective

· SEO friendly**(**Search Engine Optimization**)**

· Enhanced performance

· Provides more security

· Provide the fastest delivery

· Provides faster Modifications