WHY MEAN?

MEAN stack is a technology stack based on the JavaScript language that helps you build fast, robust, and maintainable web applications. Combining the powers of MongoDB, ExpressJS, AngularJS, and NodeJS (hence the acronym MEAN), it's become a popular option for creating dynamic websites. Following are some of the key features that makes it a dominant player in the tech horizon.

1. It's a **complete technology stack** comprising of a DB Tier technology (MongoDB), the middle Tier/Server Tier technologies (Node.js & Express.js) and a client/presentation Tier technology (AngularJS). Together these four technologies provide everything that is required to create a powerful enterprise solution.

2. It is an **end-to-end JavaScript** technology stack. From Database to the server side to the presentation tier side- you have one single language to write code. This means a programmer working on the client tier will be equally productive on the DB tier and the server tier. This is very different from other stacks where you work with one language on the server, like Ruby, Python, or Java, and then JavaScript language in the browser. Having only one language of JavaScript everywhere, it becomes easier for developers to switch between the server, the DB and the client tier code.

3. All technologies included in the MEAN stack are **open source and free**, no licensing cost is involved in running your enterprise on this platform.

4. MEAN stack servers are **highly scalable and support a large number of concurrent users on minimal hardware infrastructure**. The asynch Callback capability of NodeJS is the key behind platform's ability to support a large number of concurrent users on minimal hardware.

5. **MongoDB is** a NoSQL database that will hold all of your application's data. Featuring a **schema-less** nature, it allows developers to quickly change the structure of the data being persisted. Not being forced to write DDL scripts before you start saving data, is a huge bonus. Moreover, **horizontal sharding** capabilities of mongoDB makes DB tier highly scalable.

6. High responsiveness of Web based applications created using MEAN stack comes from the fact that the web-server is not burdened to create HTMLs for all clients. **AngularJS creates a Single Page Application (SPA)** that allows to change views entirely on the client side. Server is contacted only for data.

7. Objects on the database need not be converted to other format on the server tier or on the presentation tier. **JSON** is the JavaScript Object Notation that is used everywhere. Having a single object notation on the all the tiers avoids un-necessary translations required in technologies such as Java, PHP, C etc.

8. Web based applications created using MEAN stack can very easily be **converted to Native mobile apps for Android, iOS platforms** using tools like PhoneGap and CORDOVA.

9. MEAN stack allows to use **Web Sockets to provide server-push** capability into applications.

10. Node.js along with express.js is a great tool to create **RESTful APIs** with minimum efforts.

11. Google, Microsoft, Amazon, Yahoo, Paypal are some of the tech giants who have adopted the MEAN stack for their enterprise platforms. Small enterprises and companies too find it extremely attractive due to its low cost and high throughput.