

We are a MERN stack development company in India. We have all the expertise required for MERN development and assure you high quality delivery. We will love to help you. We have been into web development since 1999.

## What is MERN Stack

The MERN stack is a JavaScript stack that's designed to make the web development process smoother. MERN includes four open-source components: MongoDB, Express, React, and Node.js. These components provide an end-to-end framework for modern web development.

## MERN Stack advantages

1. The biggest advantage of MERN stack development is that **every line of code is written in JavaScript**. This is a programming language that's used everywhere, both for client-side code and server-side code.
2. The whole system, including the front-end, the back-end and the database, uses the REST API, which acts as a '**middleware**' and is **reusable** for any other application: mobile software etc., very easily.
3. Node.js is **very fast simply because it is an asynchronous** language. Its performance is impressive compared to other languages.
4. The MERN stack uses the famous **React.js**, which is unparalleled for front end development. React.js makes things easier for **single-page application (SPA)**. This is why Facebook, Dropbox, Airbnb, Altassian, Tesla, etc uses React.js.
5. The same react technology can be used to develop **native mobile apps**. Both Android and iOS native apps can be built with the same codebase using React Native library. You do need a separate team but the same team, even developer can do it.

## Platform for MERN Stack Development

1. **MongoDB** - for storing data
2. **Express** - for Database coding
3. **ReactJS** - for building web front end interfaces
4. **Node.js** - as backend platform
5. **React Native (optional)** - For mobile app development

## Steps involved to build a large web application

If you are a layman in software development, here are the steps for you to build a large application for your company. These are best when implemented on an **agile** basis. It still may contain some technical jargon, we will be happy to clarify it if requested ...

1. **Understand the basic concept and have a high level requirement** document that will describe the business objective, overall concept and capabilities. List out all the possible features under each capabilities.
2. **Identify the 20% main features** that basically constitute 80% product values. Put them in the MVP and pick the 1st feature for development.
3. **Break down the feature into user stories**. In the proposed software who will do what, when, where and why. You need a **Product Owner** (it is an agile software development term) to efficiently do above jobs .
4. **Plan to convert each user story into software components** along with requirements and specifications associated with every future component. Components are user Interfaces and code objects, database objects etc - bricks and mortars of the software application. This job is of a **System Analyst cum Designer**.
5. **Create graphical representation** of the user interface layouts and screen templates. You need a **Graphics Designer** who can do it efficiently.
6. **Convert all the functionalities, quality benchmarks, environment setup activities, miscellaneous works into doable tasks** in a manner such that every one in the team (including you people) transparently see the progress, spent hours, estimates, issues etc. This is best done by putting all requirements, defects, test cases, general tasks etc on an integrated project management software. The person who manages it is called **Scrum Master**.
7. **Convert the proposed components along with requirements into actual software components**. Actual codes, files and database tables that can run on a software platform to provide expected results. This is ideally done by **Developer**. It's often done by two developers. Front end developer ( **ReactJS, React Native Developer**) for creating user interfaces and **PHP/Node.js API** developer to fetch data from the server.
8. **Test (and fix) the React Native app / feature** formally using a test management tool to verify and validate the functional and nonfunctional TDD points are implemented. It requires further testing whether the idea itself requires changes or not. It may also require testing against load and security. Finally testing and fixing to make sure that everything is usable by the final user. This job is of a **Test Analyst, Tester and Product Owner**.
9. **Test the feature by the product owner and operation team** (customer team). Business facing testing to ensure all the business requirements meet or not. Exploratory testing to see if there are rooms for improvement. Usability testing by the actual system user and make sure they feel comfortable.
10. **Make the feature live** as per live process checkpoint. Everyone connected to the development team gets involved in the live process.

The entire cycle is done on an **agile process**. That means full development is transparent to the DEV team and Operation team. Right person does his job when required. An efficient feedback loop is created. If a defect /anomaly is identified at any step, it is sent back to the previous step and gets corrected. Using this **LEAN / DevOps** powered Agile development process we can build a system which will provide maximum value to your users without delivering clutter.

## How can we help you in building a MERN Stack application?

It may not be easy ( if not impossible) for you to hire so many experts. Just hiring a developer will not solve your problem either. We can help you ...

1. We have been into **web development since 1999**. We have a fair amount of organisational knowledge base and codebase from which you can benefit.
2. We will provide you with an experienced **developer cum analyst** who can play the roles of a product assistant, system analyst, system designer as well as of the developer with some help from inhouse experts.
3. We can provide you with a full stack developer with **competence in ReactJs and React Native** for building interactive web frontend with Drupal back end and native mobile apps for both android and iOS.
4. **A Scrum master** will be assigned along with the developer to monitor the project at no extra cost or at a marginal extra cost. He will be available to you for any expert suggestion.
5. When a situation demands expert help, **we will line up the experts on an SOS basis**. We have functional experts in system designing, business analysis, server administration, web designing etc. At just marginal additional cost.
6. A programmer can never bring the perfection of a designer to design point. We will give **you access to the designer** just paying the marginal cost.
7. We have our own **integrated project management cum product development platform** that takes care of the project life cycle as well as product development life cycle. You can use it at no extra cost. It has a built in requirement management system, test management system, bug reporting, front desk in addition to the agile project management system.
8. We can keep the **documentation** of the system (if you request) for you such that it never becomes an issue in maintenance in future when developer changes.
9. If your proposed system is performance or security sensitive you **must do formal load and security testing** to avoid unpleasant surprise in future.
10. We can manage your **DEV and Live server at AWS too**. Basic setup & day to day administration including backup.

## Hiring Models available for MERN Stack Development

1. **Full dedicated Hiring** - You can hire a developer on a dedicated basis. He will work only on your project. Additionally you can avail the shared resources (say designer) on an SOS basis.
2. **Part Dedicated Hiring** - You can hire a dedicated developer partly. Minimum booking for a month is 60 hours. We will guarantee the availability of the same developer however will be billed on an hourly basis. Good for low involvement support projects.
3. **Project Based Hiring** - You can hire us for your new project on project based. We will provide quotes conditionally on the basis of explored requirements.
4. **Virtual Dedicated Hiring** - Same as dedicated but we guarantee 160 hours of work. One main developer with shared resources. Good when you have a low budget but want help from all experts when required.

## Why Hire Us for MERN Stack Development?

- **We add Lean & DevOps values to your application**

Toyota became world leader in car manufacturing by practicing Lean. Leading businesses today do DevOps (the successor of Lean) automation to minimize the waste. We too can help you in this regard.

- **TDD checklists to ensure Built-in-Quality**

Quality not defined is quality denied. There are some core qualities those must be introduced in the design phase, can never be added after QC process. We add these built-in-quality through TDD checkpoints.

- **Agile platform covering both product and project life cycle**

Most of the project management software takes care of the project life cycle only. Our project cum product management system automates the CMMI processes in agile perspective throughout the product life cycle (PLC).

- **Integrated Requirement Management System**

Our system includes a built in agile requirement development and management system. It helps both you and the developer to extract the software requirements easily in the format that a developer actually needs.

- **Integrated Change Management System**

Change is a must to stay in business. A change can be a bug, an missed out requirement, an improvement or simply a new addition. To report, manage and document a change is important. Our system process takes care of it.

- **Integrated Test Management Platform**

Without a proper testing (verification and validation), there is a little chance that all the functional and non functional requirements will be there in the delivery. We have a built-in system and process to take care of it.

- **System Documentation in the background**

Project execution is one time job, but the delivered product requires future maintenance. It can

be too painful if the system logics, flow diagrams, use cases, changes are not documented. We do it in the background.

- **No unpleasant surprises - Estimate Change History**

The fact is, most software projects run in late. There can be many reasons but only one solution. Know the reasons at earliest and act accordingly. We provide anytime estimate change report to act before it surprises you.

- **Full team support lead by 15+ years exp experts**

We have several 15+ years experienced experts who guide the developers in defining the product, processes and design the architecture as required. You get the standards set by the experts but implemented by developers.

- **Defined quality delivery at low India price**

This has been possible because of the availability of high quality skills at India price together with agile practices, process automation, integrated test management with TDD checklists, 5S verification and finally ethical practices.

- **Web Development since 1999**

We are on web since 1999. In 2004, we developed our own MVC framework in PHP. We work with stable frameworks like Yii/Laravel/Phalcon (PHP), d-jango (Python), Express/Node.js and React.js / React Native (Javascript).

- **Future Support Ensured - by default**

We provide future support. Even if you come back with a small change. **Client stay with for years.** Most of our clients are with us for more than 5 years. The main reason we would like to grow with our clients.

## What next for MERN Stack Development Hiring?

Please contact us. We will discuss by email or schedule a meeting on skype whichever is convenient to you. After discussion we will suggest the best possible deal such that you get maximum value at minimum cost.