

What is a technology stack?

The technology stack is a set of frameworks and tools used to develop a software product. This set of frameworks and tools are very specifically chosen to work together in creating a well-functioning software.

Here are some examples of widely used web development technology stacks in use today:

- **MERN** (MongoDB, ExpressJS, ReactJS, NodeJS)
- **LAMP** (Linux, Apache, MySQL, PHP)
- **MEAN** (MongoDB, ExpressJS, AngularJS, NodeJS)

MERN Stack

MERN stack is a web development framework. It consists of MongoDB, ExpressJS, ReactJS, and NodeJS as its working components. Here are the details of what each of these components is used for in developing a web application when using MERN stack:

- **MongoDB:** A document-oriented, No-SQL database used to store the application data.
- **NodeJS:** The JavaScript runtime environment. It is used to run JavaScript on a machine rather than in a browser.
- **ExpressJS:** A framework layered on top of NodeJS, used to build the backend of a site using NodeJS functions and structures. Since NodeJS was not developed to make websites but rather to run JavaScript on a machine, ExpressJS was developed.
- **ReactJS:** A library created by Facebook. It is used to build UI components that create the user interface of the single page web application.



As shown in the illustration above, the user interacts with the **ReactJS** UI components at the application front-end residing in the browser. This frontend is served by the application backend residing in a server, through **ExpressJS** running on top of NodeJS.

Any interaction that causes a data change request is sent to the **NodeJS** based Express server, which grabs data from the **MongoDB** database if required, and returns the data to the frontend of the application, which is then presented to the user.