**Full Stack Developer Skills List –** [Dhanush K](https://medium.com/@dhanush9952?source=post_page-----a9b48c878fa6--------------------------------) Jun 19, 2022

**What Is A Full Stack Developer?**

It is a multifaceted role that will require the person to handle the front end, back end, software development, and even database management of a web application. They ensure the ease of jumping from coding languages and across technologies.

In short, a full-stack developer possesses skills and experience that make them valuable across technological platforms.

**Why Become A Full-Stack Developer?**

As the year progresses, so does the technology. Today most companies are more concerned with leaving a digital footprint than a carbon footprint.

The role of a full stack developer handles a myriad of developments that ensure the company stays on track. It comes with its share of advantages and disadvantages.

Advantages

* A Full Stack Developer Skills will add to your profile. These skills span across numerous domains and fields.
* The profile ensures you are versatile and will add value to your position in a company.
* This knowledge that spans across fields will help you grow a broader and more progressive mindset.
* This one-person job will help the company reduce costs.
* They make for excellent team leaders as you will have a vast knowledge of web development.
* You can choose to broaden your horizons using your Full Stack Web Developer Skills and become an entrepreneur in the future.

You can also check some other articles like [Best Frontend Framework](https://themeselection.com/best-frontend-framework-to-checkout/), [React hooks tutorials for beginners](https://themeselection.com/react-hooks-tutorial-for-beginners/), and [React typescript tutorials for beginners](https://themeselection.com/react-typescript-tutorial-for-beginners-in-2021/).

Now, let’s begin the list…!!

**Full Stack Developer Skills List**

**HTML/CSS**

While HTML stands for Hypertext Markup Language, CSS stands for Cascading Style Sheets. HTML is used for adding web content, and CSS is a personalization tool for designing and styling a website. Both HTML and CSS determine the look and feel of a website, which ultimately plays a major role in attracting prospective customers.

Full Stack Developers have to work with HTML to define the structure of web pages by using markup. They must also be proficient in CSS for effective presentation of the HTML elements. Full Stack Developers must have extensive knowledge in both of these programming languages for creating an interactive, intuitive, and engaging frontend for applications.

You can check the Sneat Bootstrap 5 HTML Admin Template for example. It is one of the best Bootstrap 5 Admin Templates for responsive web apps and projects.

Graphical user interface, application, Teams

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[Sneat Free Bootstrap 5 HTML Admin Template](https://themeselection.com/products/sneat-free-bootstrap-html-admin-template/) — is the latest open source bootstrap 5 HTML Admin Template. It is the most developer-friendly 🤘🏻 & highly customizable✨ free [Bootstrap 5](https://getbootstrap.com/) HTML Admin Dashboard. Besides, the highest industry standards are considered to bring you the best bootstrap admin template that is not just fast🚀and easy to use, but highly scalable.

In addition, incredibly versatile, the Sneat Bootstrap 5 Admin Template Free also allows you to build any type of web application. For instance, you can create:

* SaaS platforms
* Project management apps
* Ecommerce backends
* CRM systems
* Analytics apps
* Banking apps
* Education apps
* Fitness apps & many more….

Furthermore, you can use this one of the best innovative [Bootstrap admin templates](https://themeselection.com/products/category/bootstrap-admin-templates/) to create eye-catching, high-quality, and high-performing Web Applications. Besides, your apps will be completely responsive, ensuring they’ll look stunning and function flawlessly on desktops, tablets, and mobile devices.

Features:

* Based on Bootstrap 5
* Vertical layout
* Dashboard
* 1 Chart library
* SASS Powered
* Authentication Pages
* Fully Responsive Layout
* Organized Folder Structure
* Clean & Commented Code
* Well Documented

**JavaScript**

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When it comes to web and software development, JavaScript is one of the mandatory Full Stack Developer skills. The object-oriented scripting language is mostly used for adding behaviors using HTML. It is one of the most widely used languages for writing frontend and backend code for servers. Furthermore, JavaScript is the only programming language that can run natively in the browser and on the server-side (Node.js).

You can check [Materio VueJS Admin Template](https://themeselection.com/products/materio-vuetify-vuejs-admin-template/" \t "_blank), for instance, It is based on the popular JS Framework [VueJS](https://vuejs.org/" \t "_blank). It is the most developer-friendly & highly customizable Admin Template. You can use this template while working on the next project. It is one of the best [VueJS Admin Templates](https://themeselection.com/products/category/vuejs-admin-templates/" \t "_blank)

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Features:

* Pure VueJS, No jQuery Dependency
* Created with Vue CLI
* Utilizes Vuex, Vue Router, Webpack
* Code Splitting, Lazy loading
* Multi-lingual Support
* 2 chart libraries
* 3 Dashboard
* SASS Powered
* Material Icons

Full Stack Developers must have in-depth knowledge of JavaScript along with its concepts and features like React and Angular. One of the best things about JavaScript is that it includes numerous useful features, including functions, prototypes, higher-order event delegation, and closure, which help create responsive web pages.

It is also mandatory for Full Stack Developers to upgrade their JavaScript knowledge as and when new frameworks, libraries, and tools are launched.

If you are looking for [Figma UI Kits](https://themeselection.com/products/category/figma-ui-kits/), then do check the Figma Version:

A screenshot of a computer

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Also read: [Boilerplate In Programming](https://themeselection.com/boilerplate-in-programming/)

**Git And GitHub**

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Every developer, as well as aspiring developers, has heard of Git and [GitHub](https://github.com/). Git is an open-source “distributed version control system” that can handle all your development needs. Besides, it promises speed and efficiency for both small and large-scale projects. With Git, developers can seamlessly manage all the changes made to applications, codes, websites, documents, and other information associated with software/application development. Furthermore, professional developers usually have a GitHub profile, which is compulsory if working in a team.

As for Full Stack Developers, Git allows them to track every minor modification done to the application codebase. They must be aware of all the basic Git commands and examples. Using Git empowers Full Stack Developers to explore unique opportunities for security, productivity, and management. Knowledge of Git allows Full Stack Developers to better collaborate and cooperate with their fellow developers/programmers who are working on the same project. Thus, this is one of the most important full stack developer skills

**Backend Languages**

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While we’ve covered the two most critical frontend languages, HTML and CSS (along with JavaScript), the other pivotal part of an application or software is the backend. While backend development is a whole different game, there’s plenty of programming languages to choose from. Doing a full stack web development course will help you learn the required languages necessary to become a full stack developer.

A Full Stack Developer must know at least a few of these languages for backend development:

* [PHP](https://www.php.net/) — One of the most popular choices for backend development, PHP is an open-source, cross-platform compatible language that can work seamlessly on Unix, macOS, and Windows.
* [Python](https://www.python.org/) — Python’s English-like syntax, smooth learning curve, and vast assortment of libraries and frameworks are what makes it extremely popular among developers and coders around the world.
* [Ruby](https://www.ruby-lang.org/en/) — Ruby is a robust programming language. An active community of developers backs it, but it also boasts of excellent documentation and dependencies, making it the ideal choice for backend development.
* [Java](https://www.java.com/en/) — Java is a multipurpose programming language. It can be used for web, desktop, and mobile application development. Plus, Java has a wide range of frameworks that further simplify the process of backend development.

Web Architecture

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Full Stack Developers are the wizards of software development. They are equipped with multiple skills pertaining to both frontend and backend development.

Full Stack Developers need to know the nitty-gritty of web architecture. Since their primary responsibility is to develop complex software applications from scratch, they must know how to structure the code, categorize the files, structure the data in databases, and perform the necessary computational tasks. Read more on Web development project ideas.

HTTP And REST

Both HTTP and REST serve two unique purposes. HTTP is the protocol used for facilitating communication with the client, whereas REST is an interface between systems using the HTTP protocol to gather data or perform different operations (in various formats) on the data. So, REST acts like a translator between the frontend and the backend.

Since HTTP and REST are necessary for Full Stack development, Full Stack Developers must master both.

**Database Storage**

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All web applications need a database where all the data will be stored. This is to ensure that developers can access the data later. Database storage calls for an experienced and skilled Full Stack Developer who knows relational databases and database storage inside-out. Full-stack developers must be adept in database management — they should be able to design, understand, and manipulate database queries. They must also know how to work with XML and JSON. So, this one is one of the required full stack developer skills.

Things that a Full Stack Developer must know concerning database storage and management:

* Characteristics of relational/non-relational data.
* Knowledge of NoSQL databases.
* Knowledge of web storage.

Following are some of the best databases you must learn

Relational databases: Within the tables, data is stored in rows and columns. The relational database management system (RDBMS) is the program that allows you to create, update, and administer a relational database. Microsoft SQL Server, Oracle Database, MySQL, PostgreSQL, and IBM Db2 are examples of rational databases.

NoSQL: NoSQL databases (aka “not only SQL”) are non-tabular, and store data differently than relational tables. NoSQL databases come in a variety of types based on their data model. The main types are document, key-value, wide-column, and graph. Apache Cassandra, MongoDB, CouchDB, and Couchbase are examples of NoSQL.

Cloud database: It refers to any database that’s designed to run in the cloud. Like other cloud-based applications, cloud databases offer flexibility and scalability, along with high availability. Cloud databases are also often low-maintenance since many are offered via a SaaS model. Microsoft Azure SQL Database, Amazon Relational Database Service, Oracle Autonomous Database are examples of cloud database..

**Technology Stacks- MEAN, MERN, MeVn, Lamp**

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* MEAN Stack: MEAN stack development refers to the development process that falls within these particular sets of technologies [MongoDB](https://www.mongodb.com/), [ExpressJS](https://expressjs.com/), [Angular](https://angular.io/), [NodeJS](https://nodejs.org/en/).
* MERN Stack: It is is one of several variations of the MEAN stack (MongoDB, Express, Angular, Node), where the traditional Angular frontend framework is replaced with [React JS](https://reactjs.org/). The main benefit of using MERN is the integration of React and its powerful library and capability to use code simultaneously on servers and browsers.
* MEVN Stack: Other variants of MEAN Stack, the MEVN Stack (MongoDB, Express, [Vue](https://vuejs.org/), Node), and really any frontend JavaScript framework can work. It is the open-source JavaScript software stack that has emerged as a new and evolving way to build powerful and dynamic web applications
* LAMP: It is an old classic industry standard when it comes to time-tested web development stacks, which comprises [MySQL](https://www.mysql.com/) (Relational Database Management), [Linux](https://www.linux.org/) (Operating System), [PHP](https://www.php.net/) (Programming Language), and [Apache](https://httpd.apache.org/) (HTTP server).

**Basic Design Skills**

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As we’ve made it clear that a Full Stack Developer is concerned with frontend and backend, they must possess fundamental design skills. The knowledge of frontend design is crucial to make a website look attractive and appealing. A website with a neat and user-friendly design always wins the hearts of the users.

Thus, Full Stack Developers must know the basic design principles, including UI & UX design, prototypes, scalability, etc.

**Version Control**

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It is the system that records changes to a file or multiple files to help you recall the changes later. A developer must be aware of how to separate these files when in the middle of computing. It also helps you enable multiple people to work on the same project simultaneously.

**NPM**

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NPM is the package manager explicitly designed for Node.js. It aids in the installation of different packages. It also offers relevant solutions for various dependencies. NPM allows developers to place modules optimally to help the node to find them and manage the dependency conflicts accordingly. NPM is highly configurable, and thus, it is useful for many applications, including the development, publishing, discovery, and installation of node programs.

**Soft Skills**

When you aspire to become a Full Stack Developer, technical skills solely won’t suffice. You must possess the perfect balance of technical knowledge and soft skills. Every Full Stack Developer must have the following soft skills:

* An analytical bent of mind
* Good time management skills
* Curiosity for learning
* Attention to detail
* Creative vision
* Patience

**Conclusion:**

So, here was the Essential Full Stack Developer Skills list to keep in check in order to be a full-stack developer. The more you learn, the more you will be able to perform well.

Well, Full Stack Developers are experts who can handle everything related to web development. This Full Stack Developer skills list is what distinguishes them from Frontend and Backend Developers.