

# Top 10 Node.JS Frameworks – For CTOs to Choose Right Node Web Framework



Paridhi Wadhwani Technical Writer

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stay apart from the herd. This blog entails the list of best Node.js frameworks that dominate web development, depending on various factors, including popularity, performance, scalability, and community support.

Share your feedback in the comments if you find this blog useful on the **top 10 Node.js frameworks** to use in 2021.

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# **Preface**

The IT sector is under immense pressure to appease the needs of unusually varied businesses with emerging technologies. All types of enterprises now want to create their custom digital web presence to either stay ahead of the competition or promote their services.

With the introduction of Node.js in 2009, there was a companionship introduced that completed JavaScript client-side scripting. Node.js framework enabled developers in server-side scripting using JavaScript language. Since then, Node.js has become the most popular and viable runtime environment for developing custom web applications. Many are still confused and ask, is Node.js frontend or backend?

We will entangle all your queries and dilemmas in this blog post as we are covering the list of top ten Node.js frameworks for web apps in 2021. When it comes to choosing the best Node.js backend framework, there are many frameworks available, and selecting the one is not easy.

In this blog post of the top 10 Node.js frameworks of 2021, we will classify the top Node.js libraries, the most popular Node.js framework for Microservices, Node.js web Rest API frameworks, Node.js framework for AWS lambda, best unit testing framework for Node.js, best Node.js MVC framework. Most importantly, we will also discuss about each Node.js framework's core features, pros, and cons.

# Is Node.js a Framework?



code. This calls for a treat as we won the debate where developers are fighting over as Node.js web app framework.

On the other hand, a framework is a collection of functions to customize software or application. Node.js developers have written many web application frameworks that add-up to Node.js's potential for creating web applications. Node JS has taken the web development community by storm, and this is the reason top industries using Node.js to reduce the complexity and facilitate customization at any stage.

From our research and perspective, we have collected the top 10 Node.js frameworks for 2021. Before that, let us know about what are the different Node.js framework types.

# Which One Is the Best Node.js Framework?

If you are wondering what the best Node.js framework of 2021 amongst the most popular Node.js frameworks, let me get you through each Node.js framework in detail.

# Node.js MVC Framework

When your app uses the MVC framework, your app's application logic is split amongst the model-view-controller. The bifurcation of logic simplifies the maintenance and scalability of your application.

### Full-Stack MVC Frameworks

This is the ideal framework for real-time application development. Your app gets assistance in template engines, scaffolding, libraries, and additional developmental capabilities. In short, you can acquire comprehensive aid for frontend and backend development.



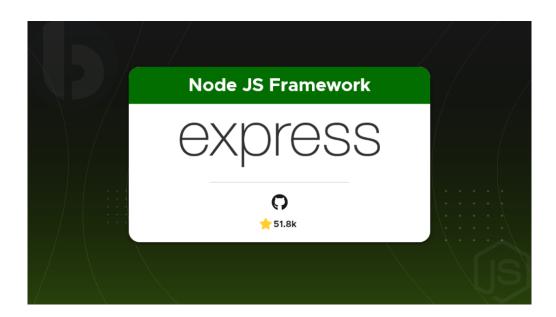
you can relax regarding the network apps' architecture. The REST API will take care of it.

# Top 10 Node.js Frameworks to Use in 2021

The developer community has openly welcomed the Node.js frameworks and has gained excellent benefits like increased developer productivity, enhanced app performance, reduced development cost, and more.

Entrepreneurs are looking for Node.js frameworks that minimize resource consumption and reduce marketing time. Let us check out the list of the top 10 Node.js frameworks in 2021 for CTOs.

# **Express.js Framework**



What is Express.JS?



unique framework that helps developers develop mobile applications and desktop applications at a considerably quicker and faster pace.

Additionally, it has huge features making scalable and speed its top priority. Being light in weight, it gets along well with free accessible modules from the public database of the NPM. Featuring an incredible API, it assures to render the best performance without splitting the difference of an ideal Node.js framework's functions.

Official Website: http://expressjs.com/

GitHub Stars: 51.8k



### What Are the Core Features of Express.js Framework?

- High-performance to enable multiple operations
- Server-side programming packages to speeds up the process with minor code lines
- High Test-coverage for building applications
- HTTP helpers that make programs reusable
- Content negotiation- for enhanced communication between client and server
- MVC architectural pattern

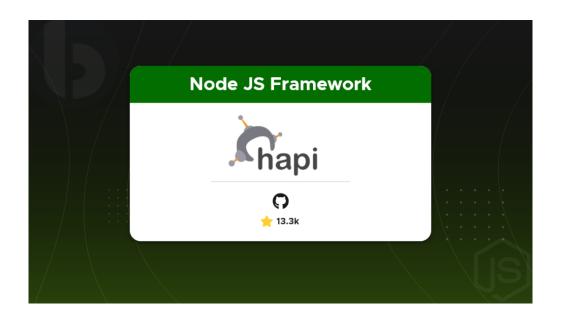


- ✓ Ideal for developing a short app cycle
- Customizations enabled
- ✓ Flexible & adjustable

# Cons of Express.JS

- Complexity
- Code-organization

# Hapi Framework



### What is Hapi.js?

Hapi is a stable and reliable Node.js framework; the Hapi framework is utilized for building REST APIs. Providing incredible ability to build servers with amazing features, there is no doubt that Hapi is considered the most favorable option for the Node.js framework.

Official Website: https://www.hapijs.com/

GitHub Stars: 13k



Scalability

Minimum Overhead

Secure defaults

Fast & simple bug-fixing

Rich community

Compatible with MySQL, MongoDB, & other

databases

Compatible with HTTPS proxy server & Rest APIs

Authentication, Caching, & Input validation

# Pros of Hapis.JS

- ✓ Plugin-based architecture
- ✓ Configuration-centric
- ✓ Supports Microservices
- ✓ Functionally-rich web server
- ✓ Robust libraries

# Cons of Hapi.JS

- Manual creation & testing of endpoints
- Manual Refactoring

# Koa Framework





# What is Koa.js?

Another major Node.js framework is the engineers of express formed Koa.js is a next-generation web framework for Node.js. Using ES2017 async abilities, the Koa framework is regarded as tiny but vital for developing Web applications and APIs. As it does not pack the middleware, the middleware is streamlined progressively. Furthermore, each of the code lines is rich.

Offering extensive features, there's an ongoing battle between Koa vs Express in NodeJS. Not only does it provide customized options, but it is highly customizable.

Official Website: https://koajs.com/

GitHub Stars: 30.7k

# What Are the Core Features of Koa.js Framework?

Customizable & futuristic framework

Exceptional error-handling

Middleware cascade to personalize user-experience

Normalises inconsistencies & helps code

maintenance

Cache cleaning, proxy support, content negotiation

Customization options



Support for sync/await keywords

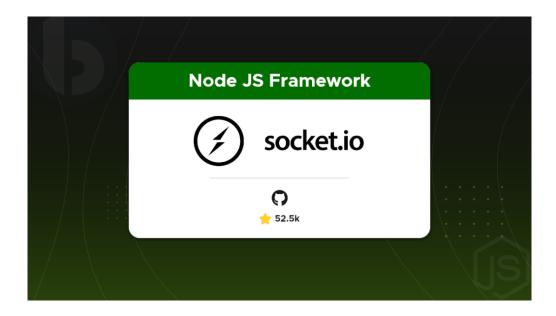
✓ Generator functions transcend

### Cons of Koa.JS

Small Community

Negligible compatibility with Express style middleware

# Socket Framework



# What is Socket.js?

Socket.js being one of the top Node.js frameworks is used to generate real-time computing applications. Additionally, it is quite popular among developers as it renders accuracy, thereby easing the entire process. It grants to build web socket applications kike dashboard APIs, chatbots, score tickets, etc. It is not one of those regular Node.js frameworks.

Official Website: https://socket.io/

GitHub Stars: 52.5k



Dillary Support

Support for multiplexing

Reliability

Support for auto-reconnect

Error-detection & auto-correct

Similar APIs for client & server-side development

# Pros of Socket.js

- Helps in multiplexing
- Extremely fast
- ✓ Supports real-time data analytics
- ✓ Smooth and seamless socket authentication
- Personalized URL routing
- ✓ Helps the JSON serializable objects

# Cons of Socket.js

- The connection on the server stays open
- Unable to create or build web applications that need updates periodically

# **Meteor Web Framework**





# What is Meteor.js?

Meteor framework is an easy and simple full-stack Node.js framework that is used to build mobile applications and web applications. Compatible with Android, iOS, and desktop, Meteor.js extends a lot of help to ease application development. It renders a platform or a secured space for the entire tier of the application for staying in the same language, JavaScript.

Official Website: https://www.meteor.com/

GitHub Stars: 42.3k

# What Are the Core Features of Meteor.js Framework?

Removes the need to update mobile applications regularly

It supports sync catchphrases

Light in weight

Very several lines of code are required

Seamless and smooth implementation with Vue,

React, Angular, Mongo, etc

Same codes for multiple devices



- ✓ Huge and vast libraries and packages
- Robust and strong community
- ✓ Lightweight architecture
- ✓ No need to renovate the mobile applications

### Cons of Meteor.JS

- lt lacks the widget library
- On the No flexibility in terms of network connection
- Unable to create progressive web applications

# Sails.js Framework



### What is Sails.js?

This Node.JS framework is a real-time MVC web development that is created and built on express. Sail.js creates the recent data-driven style of web applications and APIs. It offers essential blueprints. This is why you do not need to compose any code. It utilizes code generators that help the building of applications with less written code.

OfficialWebsite: https://sailsjs.com/



Highly compatible with sites that create frontend platforms

It helps socket.io

Easy and hassle-free management of HTTP requests

Offers ORM (Object rational mapping)

Smooth and seamless integration of middleware

Smooth transactions

Ensures superior quality

Creation of a simple project template

# Pros of Sails.js

- ✓ You can store and save data anywhere
- ✓ Distinct user interface from the business logic
- ✓ Simple and easy project templates
- Seamless integration of middleware
- ✓ Offers essential blueprints

# Cons of Sails.js

- Quite a slow framework
- Slow development of the project
- Weak management of assets

# Total.js Framework





### What is Total.JS?

This is an extremely fast and swift Node framework Web that requires assistance. It offers consistent scaling development and progress with an amazing and incredible performance in relevance to application development. Promising to provide stable services, it constructs IoT applications flexibly.

Official Website: https://www.totaljs.com/

GitHub Stars: 4.1k

### What Are the Core Features of Total.js?

Supports several databases like MySQL, MongoDB,

PostgreSQL, etc

Quick prototyping

Extremely efficient in terms of developing projects

Features a modular coding structure

High Compatibility

Allows and grants frontend development

Comprises of enormous pre-developed

components for quick and smooth development

Creates real-time responsive applications



- Possesses pre-developed components
- ✓ Fast and enhanced prototyping
- Community chat
- Capable of making real-time responsive applications

### Cons of Total.JS

- lt lacks a robust and strong community
- lt lacks adequate support

# Feather.js Framework

What is Feather.js?

Feather.js is considered as one of the Node.js REST API Frameworks. As the name suggests, this framework is extremely light as a feather. It can smoothly interact and connect with the backend technology and extend its assistance to a variety of databases.

Additionally, this framework can manage to work with frontend technologies such as React Native and Angular/React.js. Generally, it acts like one of the top Node.js libraries that helps create applications according to the REST principles.

Official Website: https://feathersjs.com/

GitHub Stars: 13.2k

What Are the Core Features of Feather.js?

Feather.js serves as a real-time framework



Consequently, it grants access to connect with 3rd party services

It connects with 3rd party applications
It helps to build minimalistic web frameworks

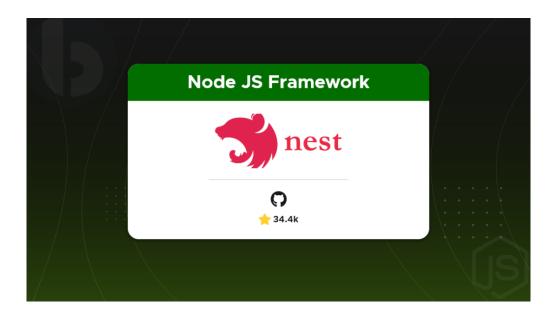
# Pros of Feather.js

- ✓ Feather.JS experiences a universal usage
- ✓ It provides REST APIs automatically
- ✓ It has the ability to support rational as well as the nonrational database
- ✓ Accelerates error handling

# Cons of Feather.js

- Unable to get along and work with websites that wish to render views on the server
- lt takes a comparatively longer time to learn

# **NestJS Framework**



# What is Nest.js?



progressive JavaScript. It is increasing at a high rate because of its flexibility. The server-side apps built with the help of Nest.js are scalable and reliable.

Utilizing Express.js, it offers an unusual application architecture allowing fast and smooth development of simplified maintainable, highly scalable, and vaguely paired testable applications.

Additionally, Nest.js is accompanied by an array of healthy and robust typing models like Functional Programming, Functional Reactive Programming, and Object-Oriented Programming.

Official Website: https://nestjs.com/

GitHub Stars: 34.4k

# What Are the Core Features of Nest.js?

Unlocks incredible features with Nest CLI

Possess features of Express.JS

Trustworthy

Uses TypeScript

Provides modular structure for managing codes
Builds healthy front end development on AngularJS
It helps to build Web applications that comprise of
such features that are usually distinct from their
contemporaries



- ✓ It is event-based & super-fast
- ✓ Has a strong and robust corporate support
- ✓ A vibrant ecosystem with several open-source libraries

### Cons of Nest.JS

- Users face issues in designs
- The tools are immature
- Performance is often congested and lousy

# **Loopback Framework**



# What is Loopback.js?

Loopback is a highly extensive and influential best Node.js server framework, and hence it makes it to the list of the popular Node.js frameworks. Offering extremely viable features, it owns a simple CLI and Zestful API website browser. It grants Node developers to build their models in a smooth way. Featuring dynamic API explorer, it has an easy-to-use CLI.



These services include MongoDB, Oracle, Postgres, MySQL, etc.

Furthermore, it grants the user to construct a server API that maps to some other server. Assisting and helping the native browser and mobile SDKs helps multiple clients such as Android/Java, Browser, and iOS JavaScript (Angular).

Official Website: https://loopback.io/

GitHub Stars: 13.3k

# What Are the Core Features of Loopback.js?

It helps the developer to generate SDKs swiftly

Helps to create API documents

Can be connected smoothly with any of the

databases

One outstanding feature is that it supports a

plethora of databases

It features model-relation- support

It has the ability to run on the cloud

Connects browsers and devices with data

Owns a structured code

Has enhanced documentation for quick

development

Excellent file management



✓ It helps in a swift development

Modular and structured code

✓ Built-in models and features

# Cons of Loopback.JS

Steep learning curve

Monolithic and biased architecture

# Conclusion

I hope your purpose of landing on this blogpost of top 10 Node.js frameworks has been perfectly served. And you might have understood the significance of Node.js framework and why choose Node.js for your next web app development.

With this, we come to the end of the guide of the most popular node.js frameworks for web applications in 2021. However, selecting the reliable and best Node.js framework entirely relies on the nature and sort of web application you wish to develop.

The above list of *top Node.js frameworks* will give you an idea and structure of what you want to use. Rendering high scalability, performance, building dynamic community extensibility, and extremely easy to learn, there are vast benefits of using Node.js.

Among a vast range of best Node.js frameworks, this blog post highlights the top 10 best Node.js frameworks that can take your business to another stake. At Bacancy Technology, we host full-stack Node developer team who are well-versed at offering end-to-end node.js development services.



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