

Node.js Frameworks

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Abstract-In today's era apps need to be fast and scalable network applications and lightweight and perfect for data-intensive real-time applications that run across distributed devices. So, Node.js is the best solution for it. It is based upon java script. It is a platform built on Chrome's JavaScript runtime for easily building fast and scalable network applications. This paper will explain various node.js frameworks and various features of frameworks.

Keywords-Node.js, Hapi.js, Express.js, Meteor.js, MEAN.js

I. INTRODUCTION

Node.js is a server-side platform built on Google Chrome's JavaScript Engine (V8 Engine). It was developed by Ryan Dahl in 2009. It is an open source, cross-platform runtime environment for developing server-side and networking applications. It also provides a rich library of various JavaScript modules.

Features of Node.js

- Asynchronous and Event Driven
- Very Fast
- Single Threaded but Highly Scalable
- No Buffering

II. FRAMEWORKS

2.1) Hapi.js

It is based on nodejs. It enables developers to focus on writing reusable application logic instead of spending time building infrastructure. It is a web framework for building web applications, APIs and services. It's extremely simple to get started with, and extremely powerful at the same time. While writing performant, maintainable code there are various problems arising due to this. It is a simple to use configuration-centric framework with built-in support for input validation, caching, authentication, and other essential facilities for building web and services applications.

Features of hapi.js

- Input and response validation (through Joi)
- Server-side caching with multiple storage options (mongo, S3, redis, riak), that can be enabled with a few lines of configuration
- Cookie-parsing

- Sessions
- File uploading/multipart parsing
- CORS support
- Logging

2.2) Express.js

Express.js, or simply Express, is a web application framework for Node.js. T.J Holowaychuk, using described Sinatra inspired server, meaning that is relatively minimal features that are available as plugins. It is widely used as middleware in node apps as it helps to organize your app into a MVC architecture.

Features of Express.js

- Routing
- Sessions
- HTTP requests
- Error handling

2.3) Meteor.js

MeteorJS, is a free and open-source isomorphic JavaScript web framework which is based on nodejs. It allows to produce cross-platform (Android, iOS, Web) code. It supports MongoDB and Distributed Data Protocol and publish-subscribe methods for automatically propagate data changes and sync code. It uses default Blaze template engine but it also supports Angular or React.

Features of Meteor.js

- Database Integration
- Full stack solution
- Front-end reactivity
- Live Reload

2.4) MEAN.js

The MEAN stack is MongoDB, Express.js, AngularJS (or Angular), and Node.js. MEAN made up of commonly used technology for an all JavaScript web stack. You don't have to use this combination and there are many alternatives choices, especially on the client-side such as Backbone, Ember etc. one language for both server side and client side. Full stack java script solution helps in building fast, robust and maintainable production web applications using angular JS, Node JS, MongoDB.

Features of MEAN.js

- The most important benefits of all are that it lets developer write the entire code in JavaScript, from client to server. This is like a blessing for the JavaScript developers who have invested their time and money in learning JavaScript for the client side tasks.
- It supports the MVC (Model View Controller) architecture.
- The MEAN components are open source; which means the stack gets updated regularly. In addition to it, it is easy and flexible to understand and use which helps the developers to customize as per your needs.
- Other advantages are the huge module library of node.js and the use of JSON to transfer the data.

III. CONCLUSION

This paper describes various framework of node.js with features. So, it is helpful to understand that where to use these frameworks.

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