Node.js

Node.js is an asynchronous event driven server-side Javascript runtime environment. It was developed by Ryan Dahl in 2009. Node was designed for building scalable network dependent applications. A rich library of JavaScript modules are also provided for this platform that simplifies the development of web applications.

Features:

Node.js is asynchronous such that when multiple requests come in it handles them concurrently. Moreover, when a request has been made, Node will move on to the next request even when the previous has not been finished yet. Node will send back data in chunks rather than buffering.

Node is event driven because as soon as its server starts running, it initiates all variables, declares functions and waits for an event to occur. Node.js’ Event Loop listens for events and triggers a callback function.

Where to Use Node.js

* I/O bound applications
* Data Intensive Real-Time Applications
* JSON APIs based applications
* Data Streaming applications
* Single Page Applications

Components of a Node.js application

Modules – modules are imported for use in your source code for easier and faster coding. Modules are loaded by using the require directive.

Server – the server will be the one listening to the requests that clients will make.

Request and Response mechanism – when the server listens to a client’s request it generates a response as defined by the programmer in reply to the request.