

Introduction to Node.js

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NODE.JS

Created by Ryan Dahl, in 2009



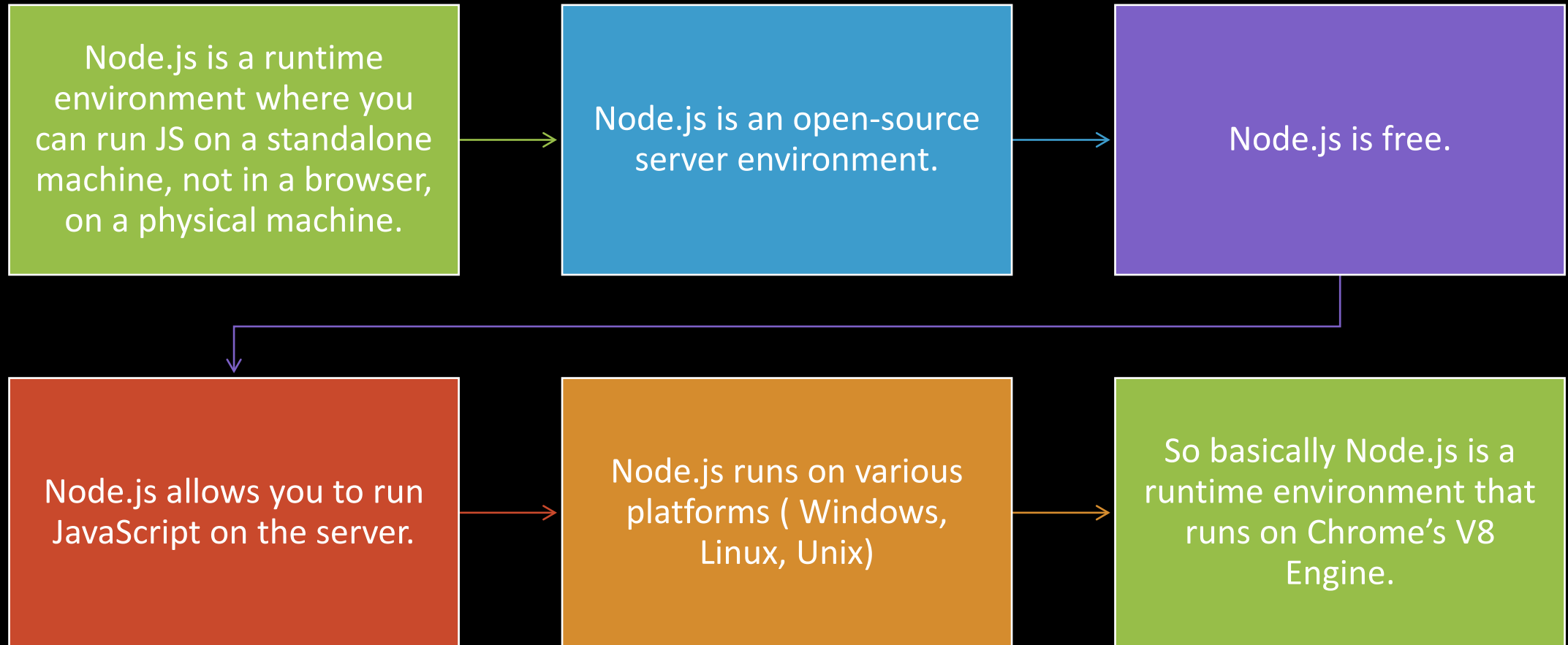
JavaScript :-

- In 1995, JavaScript was created.
- JavaScript is a client-side scripting language.
- JavaScript is browser dependent language.
- If you want to build a website,
you can use HTML for designing,
you can use CSS to make it more attractive &
you can use JavaScript to make it more interactive.
- That was the only use of JavaScript.

Then someone thought ...!



What is Node.js ?



Why Node.js ?

Node.js uses asynchronous programming.

Node.js eliminates the waiting, and simply continues with the next request.

Node.js runs single-threaded, non-blocking, asynchronous programming, which is very memory efficient.

A common task for web server can be to open a file on the server and return the content to the client:-

- **Here is how PHP or ASP handles a file request :-**

1. Sends the task to the computer's file system.
2. Waits while the file system opens and reads the file.
3. Returns the content to the client.
4. Ready to handle the next request.

- **Here is how Node.js handles a file request :-**

1. Sends the task to the computer's file system.
2. Ready to handle the next request.
3. When the file system has opened and read the file, the server returns the content to the client.

What can Node.js Do ?

Node.js can generate dynamic page content.



Node.js can create, open , read, write, delete, and close files on the server.



Node.js can collect form data.



Node.js can add, delete, modify data in your database.



Why Node.js is so popular ?



One language for all.



Node.js is a JavaScript engine, which runs your JavaScript on a physical machine.



Node community support
NPM.



Perfect for real time
application.

NPM

NPM stands for Node Package Manager.



```
graph TD; A[NPM stands for Node Package Manager.] --> B[NPM gives thousands of free packages to download and use.]; B --> C[NPM is already ready to run on your computer.]; C --> D[All NPM packages are defined in files, called as package.json.]; D --> E[NPM is the World's largest software registry & library for JavaScript Software packages.];
```

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NPM is the World's largest software registry & library for JavaScript Software packages.

What is a Node.js File ?



Node.js file contains tasks that will be executed on certain events.



A typical event is someone trying to access a port on the server.



Node.js file must be initiated on the server before having any effect.



Node.js files have extension “.js”.

Node.js {version 6.10.3} Built-in Modules :-

- events – To handle events.
- fs – To handle the file system.
- http – To make Node.js act as an http server.
- https – To make Node.js act as an https server.
- os – Provides information about the Operating System.
- path – To handle file paths.
- v8 – To access information about v8.
- vm – To compile JS code in a virtual machine.
- zlib – To compress or decompress files.

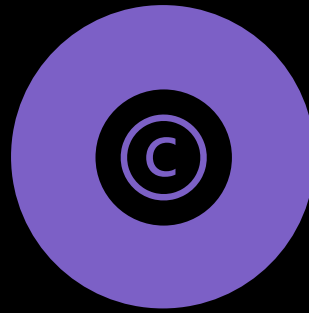
1. Node.js is written in which language?



C++



JAVASCRIPT



C



JAVA

JavaScript



2. Who created Node.js ?

Dyan Rahl

Brendan Eich

Ryan Dahl

John Resig

Ryan Dahl



3. NPM
stands for ?

Node Process Manager

Node Program Manager

Node Package Manager

Node Perform Manager

Node Package Manager

4. Which of the following extension is used to save the Node.js files ?

.js

.node

.java

.txt

.js



5. What does the fs module stand for ?



FILE SERVICE



FILE SYSTEM



FILE STORE



FILE SHARING

File System

Thank you

