Node.js

About me

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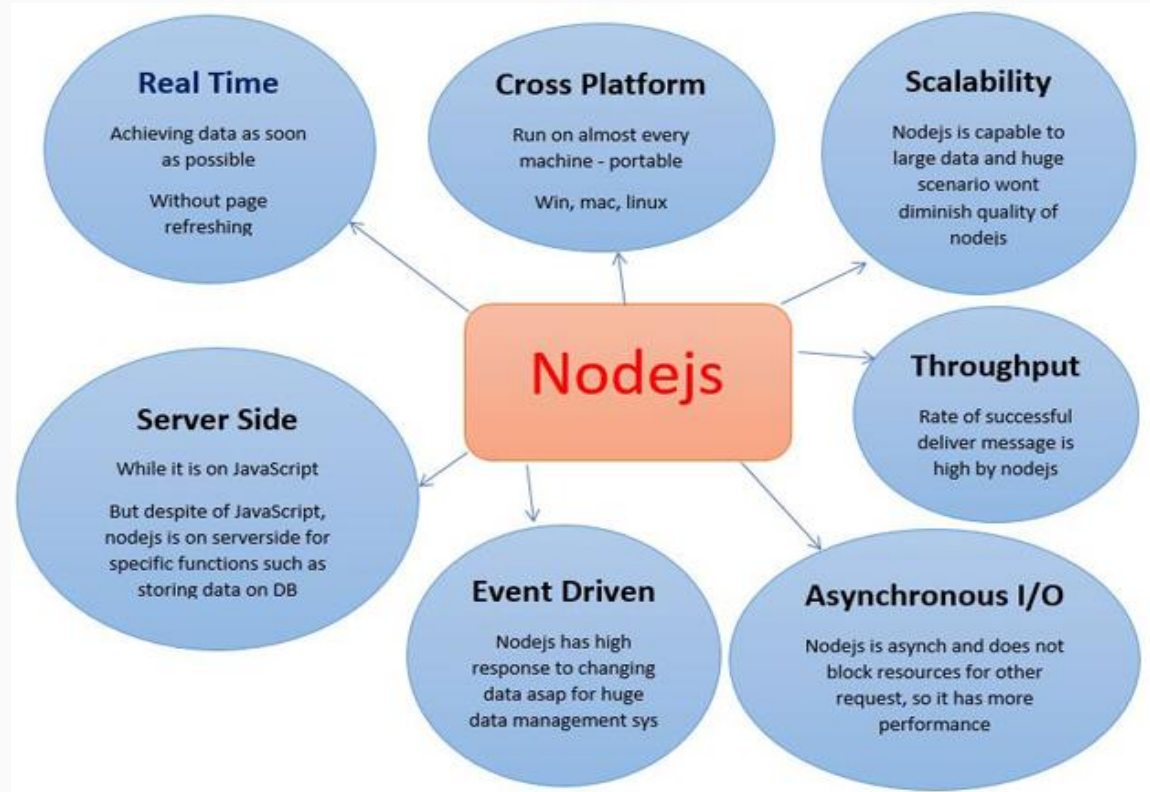
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Agenda

- ❏   What is Node.js?
- ❏   History
- ❏   Why Node.js
- ❏   Applications
- ❏   Pros & Cons.
- ❏   Companies using Node.js
- ❏   Setup
- ❏   References

What is Node.js?

- Open Source, Cross platform Development Platform

- Uses V8 Javascript engine (Google)

- "Javascript on the Server Side"

- It is command line tool
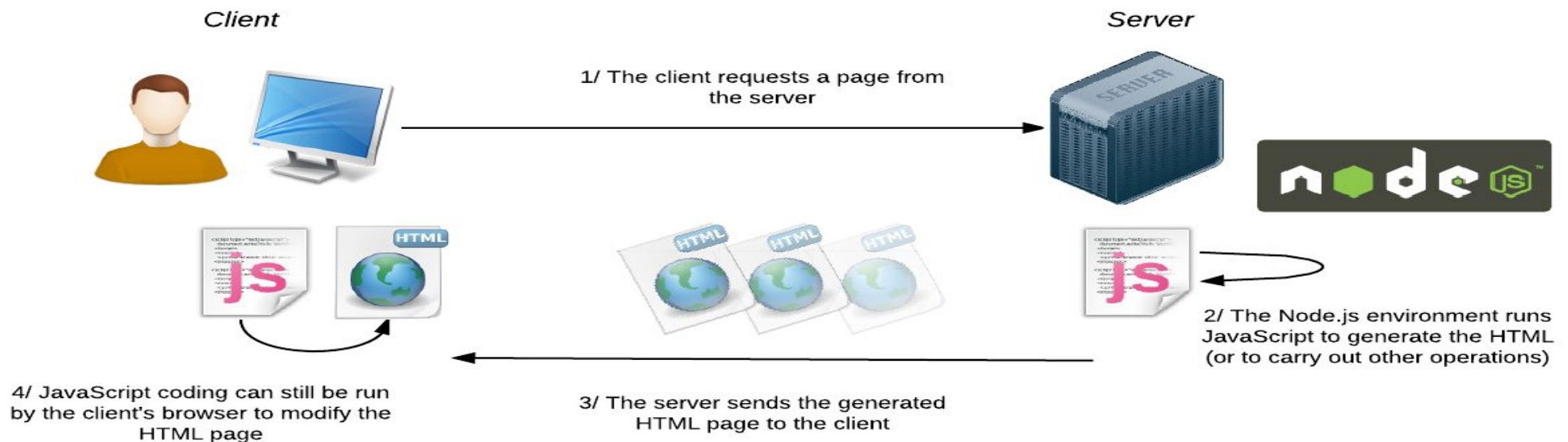
- Event driven with non-blocking I/O

Real Time
Achieving data as soon as possible
Without page refreshing

Cross Platform
Run on almost every machine - portable
Win, mac, linux

Scalability
Nodejs is capable to large data and huge scenario wont diminish quality of nodejs

Nodejs

Throughput
Rate of successful deliver message is high by nodejs

Server Side
While it is on JavaScript
But despite of JavaScript, nodejs is on serverside for specific functions such as storing data on DB

Event Driven
Nodejs has high response to changing data asap for huge data management sys

Asynchronous I/O
Nodejs is asynch and does not block resources for other request, so it has more performance

History

- Developed in 2009 by Ryan Dahl, Joyent

- From 2011, windows version available

- Official Site: https://nodejs.org/en/blog/

Applications

- HTTP Server

- Rest Server

- Web Sockets

- TCP Server

- Building Scalable Network Programs

Client ... Server

1/ The client requests a page from the server

2/ The Node.js environment runs JavaScript to generate the HTML (or to carry out other operations)

3/ The server sends the generated HTML page to the client

4/ JavaScript coding can still be run by the client's browser to modify the HTML page
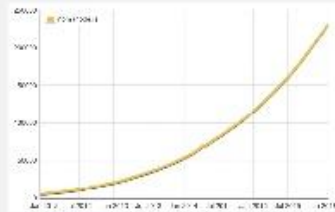
Why Node.js
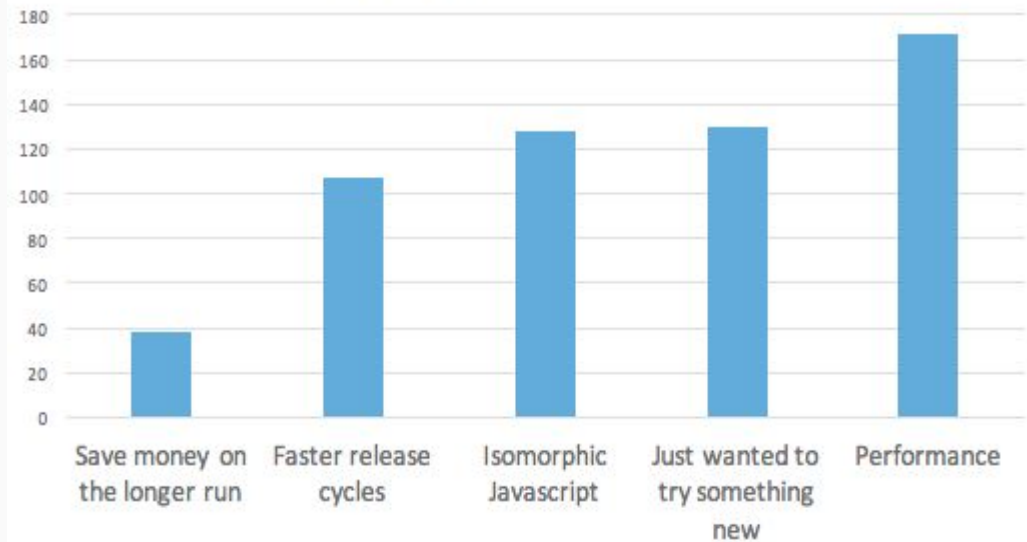
Pros & Cons

Pros

- Asynchronous event driven.
- Can share the same piece of code with both server and client side.
- Active and vibrant community.
- Stream big files.
- npm has already become hug and still growing.
- Best solution: Web Socket server, Fast file upload client, Data streaming, Ad Server, Real time social app, Stock exchange software etc.
- Build apps end-2-end JavaScript / Coffee-script.

Cons

- Tons of nested callbacks.
- Not suited for CPU-intensive tasks.
- Async programming are more complex.

Companies using Node.js

Node.js users span a variety of industries

Setup

- **Installation**

  $ curl -sL http://deb.nodesource.com/setup 6.x | sudo -E bash -
  $ sudo apt-get install -y nodejs

- **Checking Node version**

  $ node --version

- Ref: https://nodejs.org/en/download/

References

- https://nodejs.org/

- https://www.codecademy.com/learn/introduction-to-javascript

- https://openclassrooms.com/courses/ultra-fast-applications-using-node-js/node-js-what-is-it-for-exactly

Content:

https://docs.google.com/document/d/1K66jpxKhLgj-rbD31aUGF1-p4B1Z_HLCatsmwljeLco/edit#

Thanks for listening ...