

# Event-Driven

## Event-Driven Architecture Concepts in Web Technologies - Part 1

Research and Design by: Hamidreza Soleimani <[www.MeloBit.com](http://www.MeloBit.com)>

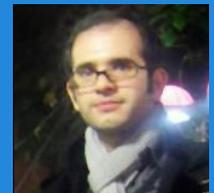
# What will you learn?

- What is **Process & Thread**?
- I know them, but what is **Event**?
- What is **Asynchronous** Programming?
- And what exactly **Node.JS** can do?

# Who am I?

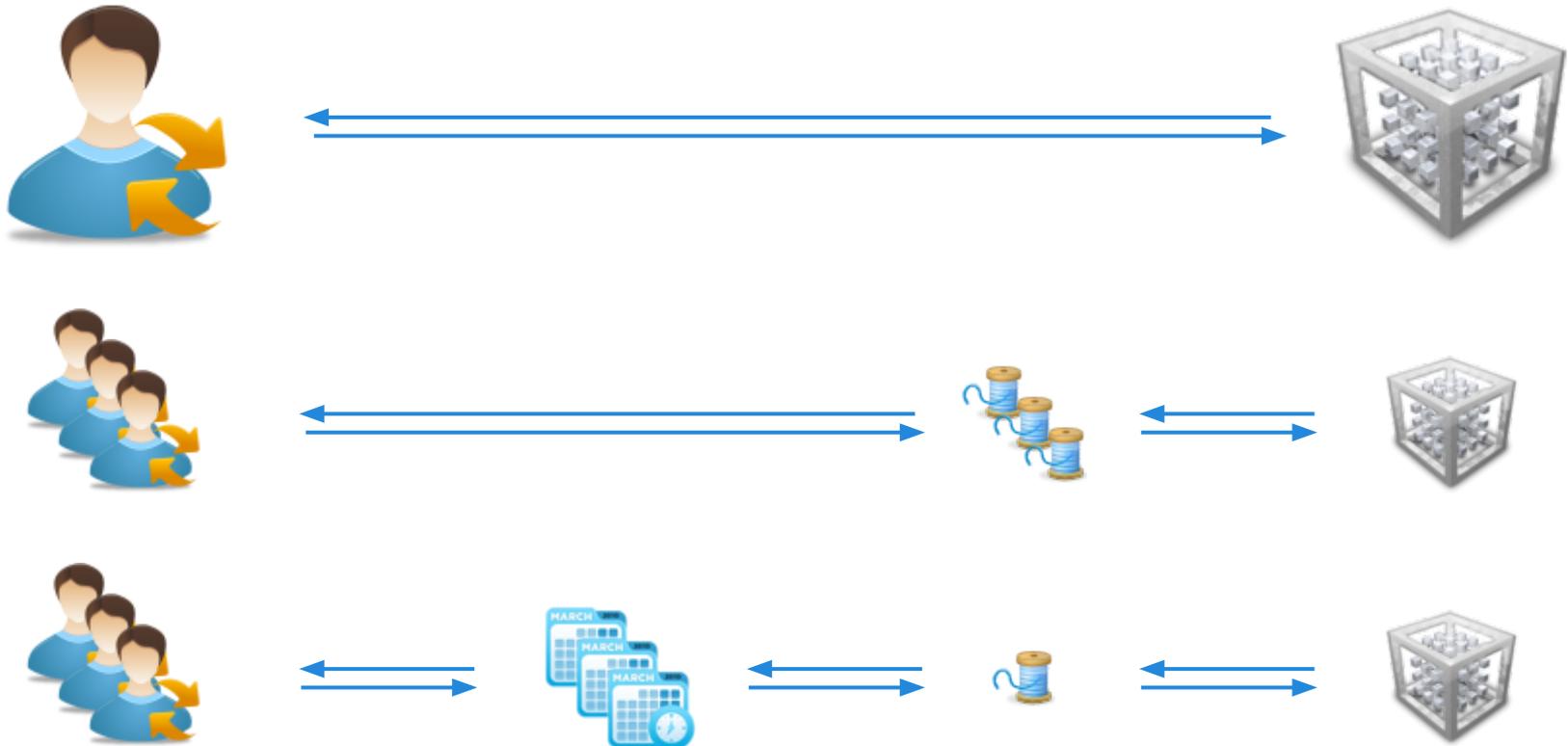
- PHP / JavaScript / BashScript / Nginx / NodeJS / Zend / Doctrin Developer
- Founder & Developer of [www.MeloBit.com](http://www.MeloBit.com) Open Source CMS
- Developer of [www.SpeedUp.ir](http://www.SpeedUp.ir) Online Game
- IT Project Manager & Developer in Armaghan Co.

[www.github.com/hamidreza-s](http://www.github.com/hamidreza-s)



# History

Processes > Threads > Events



User(s)

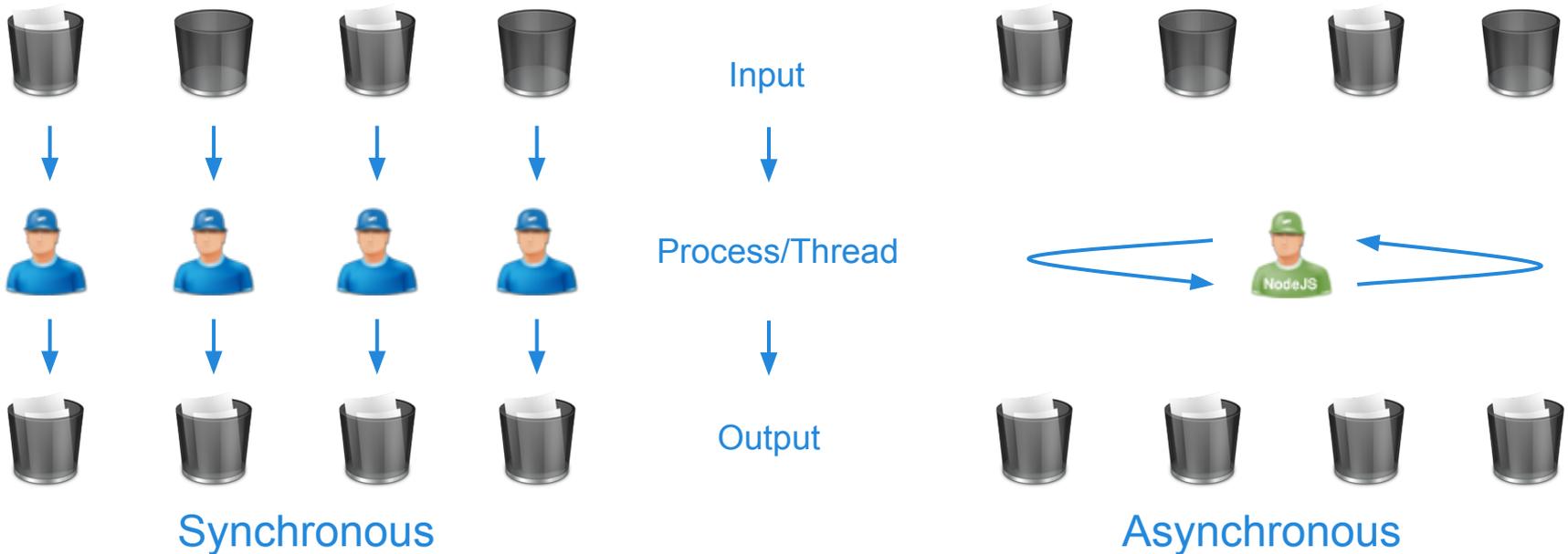
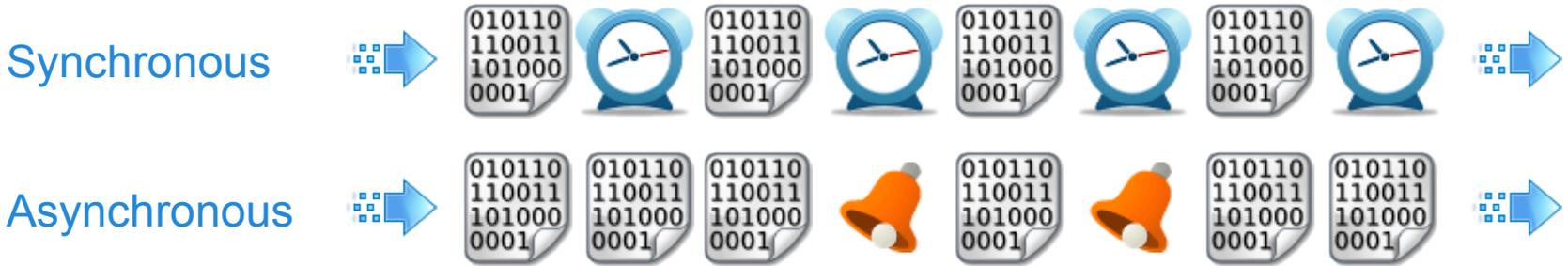
Event(s)

Thread(s)

Process(s)

# Production-Line Example

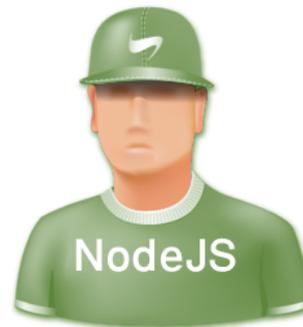
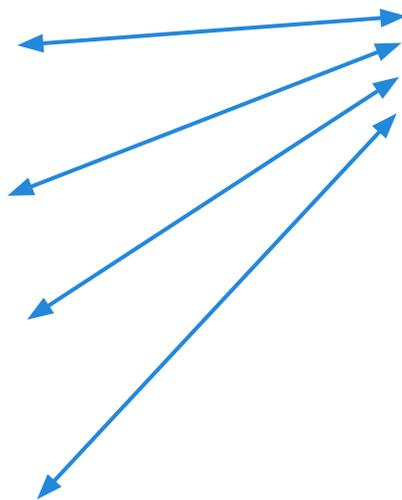
## Synchronous vs. Asynchronous



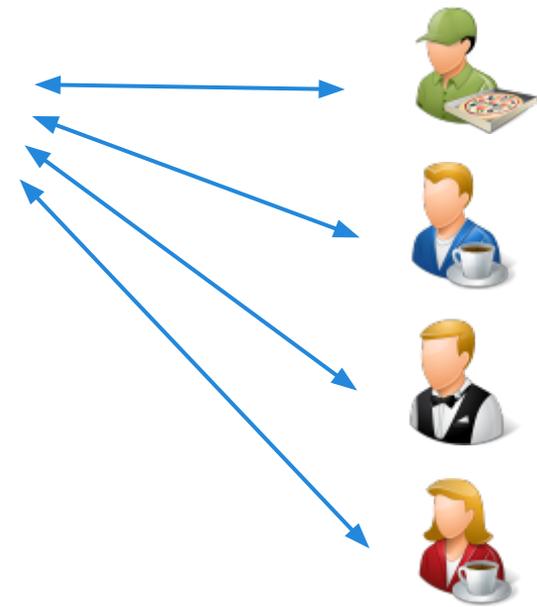
# Restaurant Example

## Event-Driven vs. Process-Driven

### Restaurant Saloon



### Restaurant Kitchen

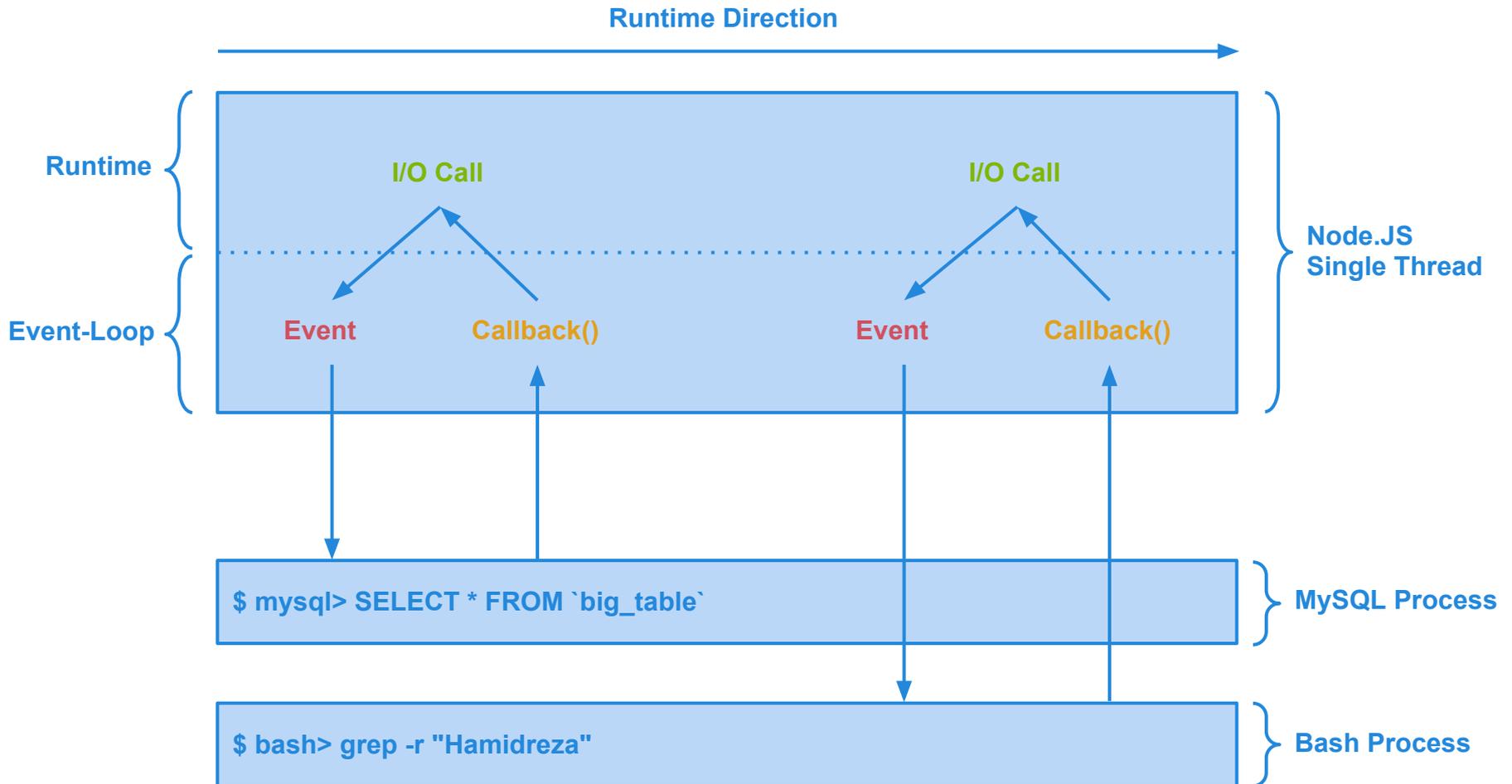


**NodeJS:** I am not a cooker or deliveryman, I am a smart and quick waiter!

**NodeJS:** Please **don't block me**, I have a lot of task to do!

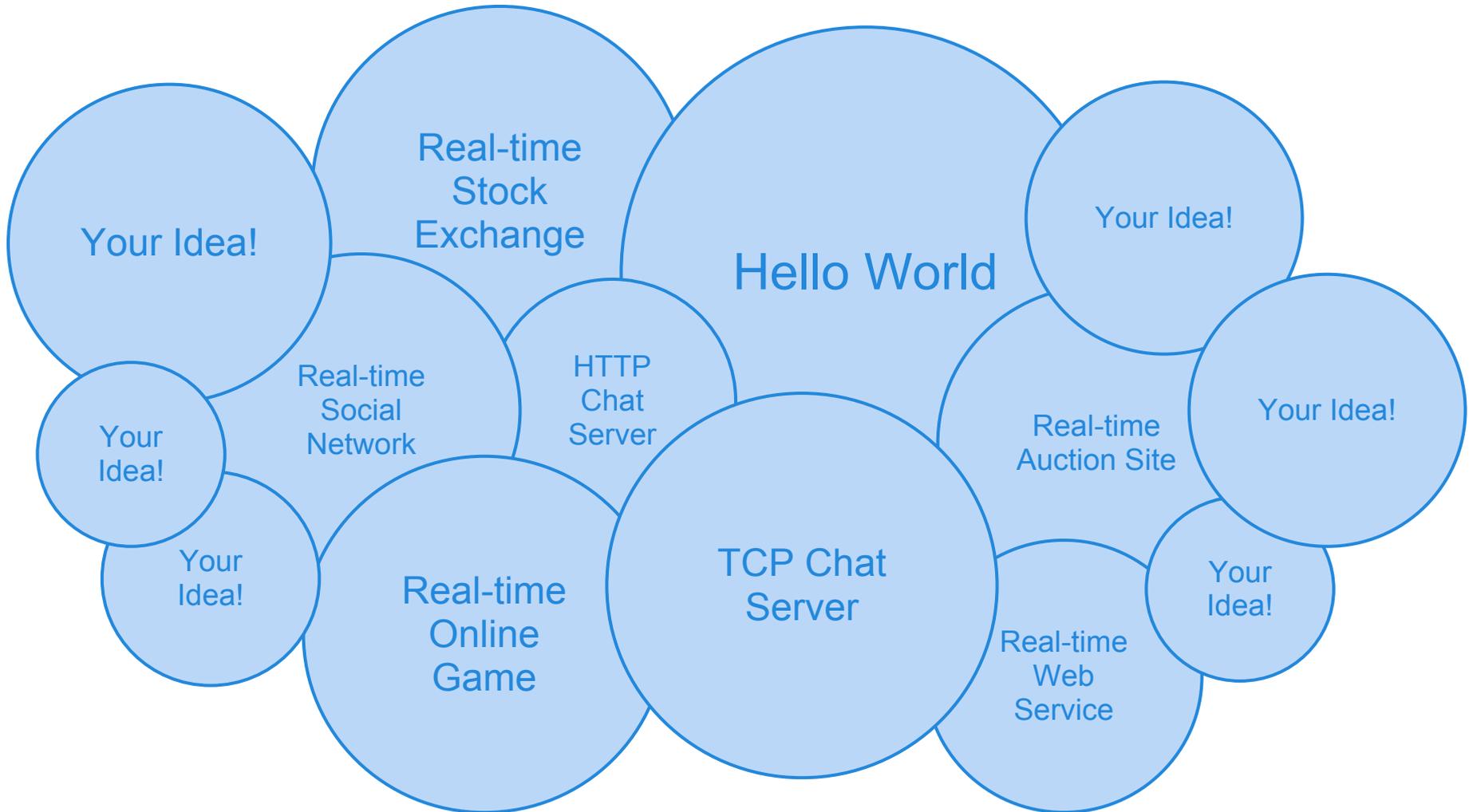
# Node.JS Architecture

Runtime > Event-Loop > Callback



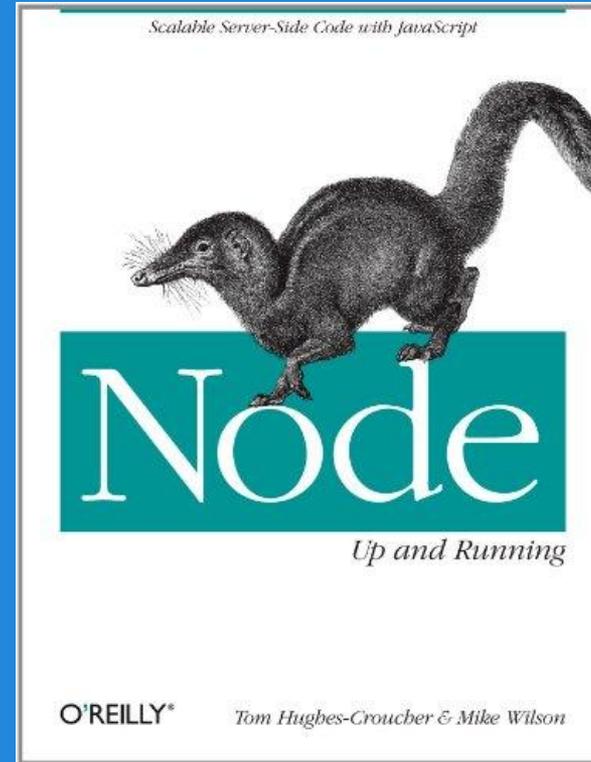
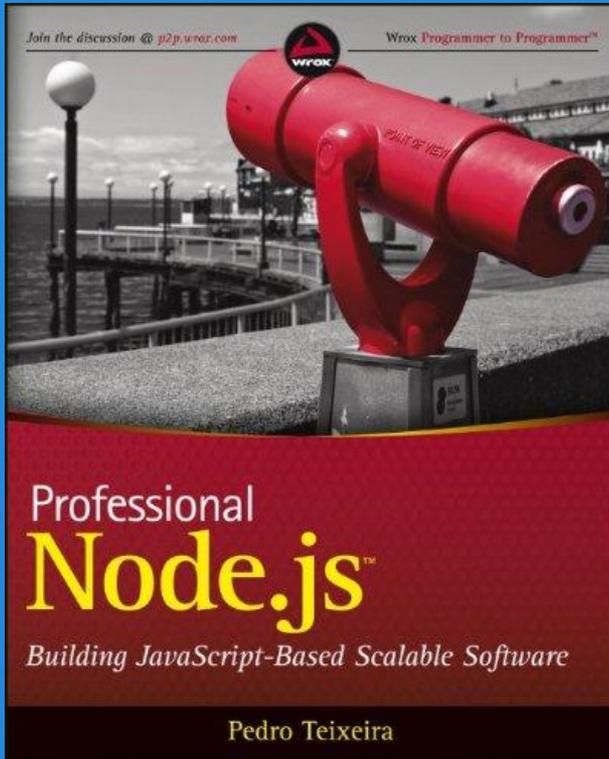
# Node.JS

Say my Hello to the Cloud World!



# Keep Reading ...

Node.JS is waiting for you!



*Let's code to have a better world!*

- The End -