## Modules and Concurrency



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Modules
(exports/require)

Concurrency
(Without THREADS!)



#### Defining and Using Node Modules



# What exactly is a Module?



# Module (In Node.js)

A file (or a folder) that contains code



### Node's Global Object



# The Event Loop



## The Event Loop

What Node uses to process asynchronous actions and interface them for you so that you don't have to deal with threads



#### Errors vs Exceptions



#### Errors vs Exceptions

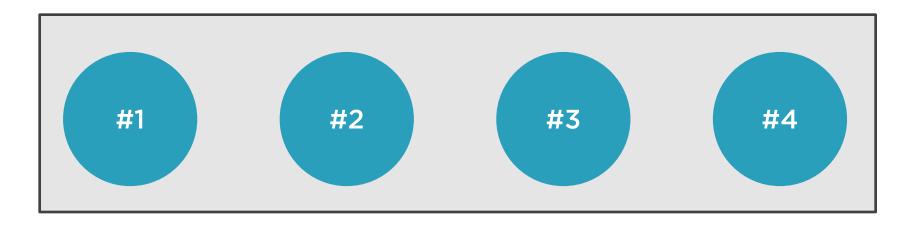
Error is "Problem"

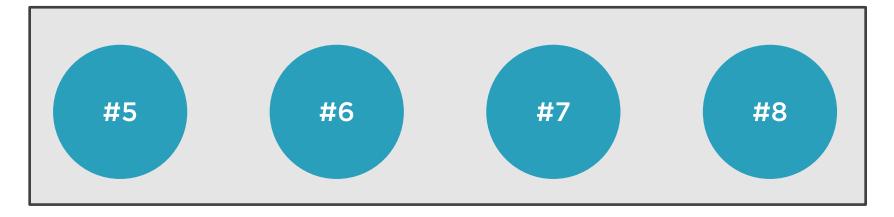
**Exception is "Condition"** 



#### Node Clusters





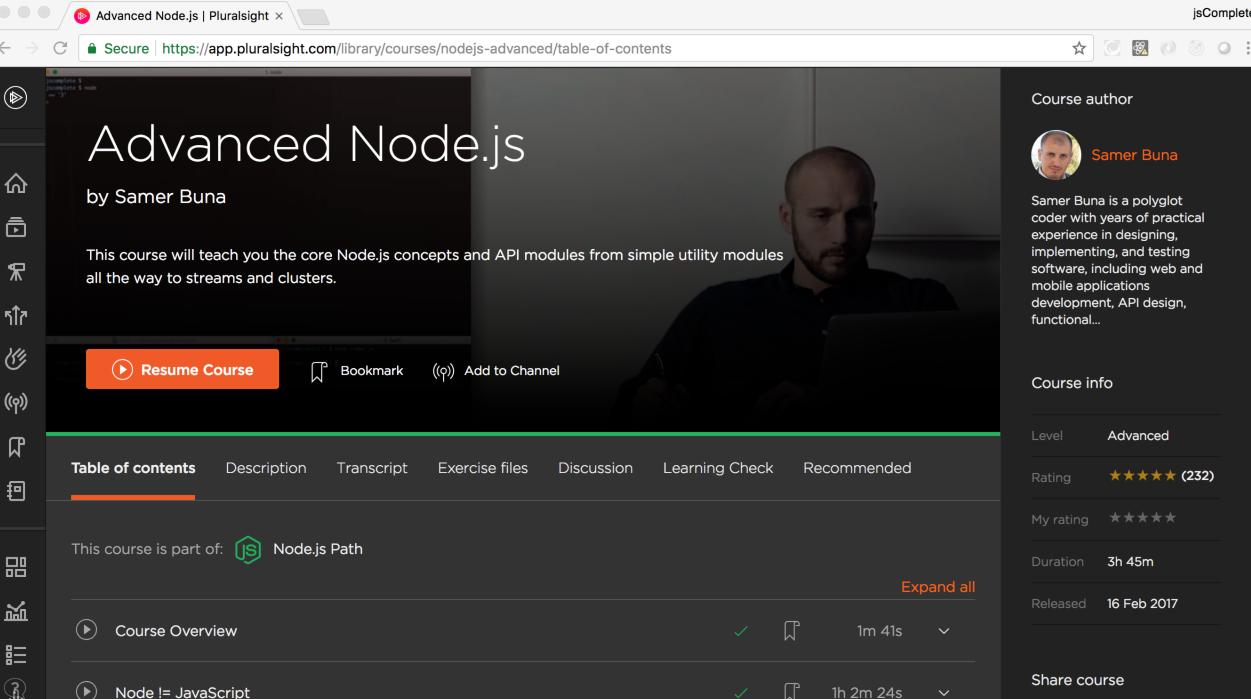












i Not Secure pm2.keymetrics.io











**Quick Start** 

**Documentation** 

**Tutorials** 

**Modules** 



**Monitor PM2** 



Advanced, production process manager for Node.js

npm install pm2 -g

#### Features

A Complete feature set for production environment, built with a worldwide community of developers and enterprises

- ✓ Behavior configuration
- ✓ Source map support
- ✓ Container Integratio
- ✓ Watch & Reload
- ✓ Log management

✓ Cluster Mode

Check out the related section in the new documentation

- ✓ Startup Scripts
- ✓ Deployment workflow

#### Node's Asynchronous Patterns



#### **Event Emitters**



#### Wrap Up



**Node Modules** 

Types of APIs

The "global" Object

The "Event Loop"

**Error handling** 

**Clusters** 

Asynchronous patterns

**EventEmitter** 



### Next Up



**Working with Web Servers** 

