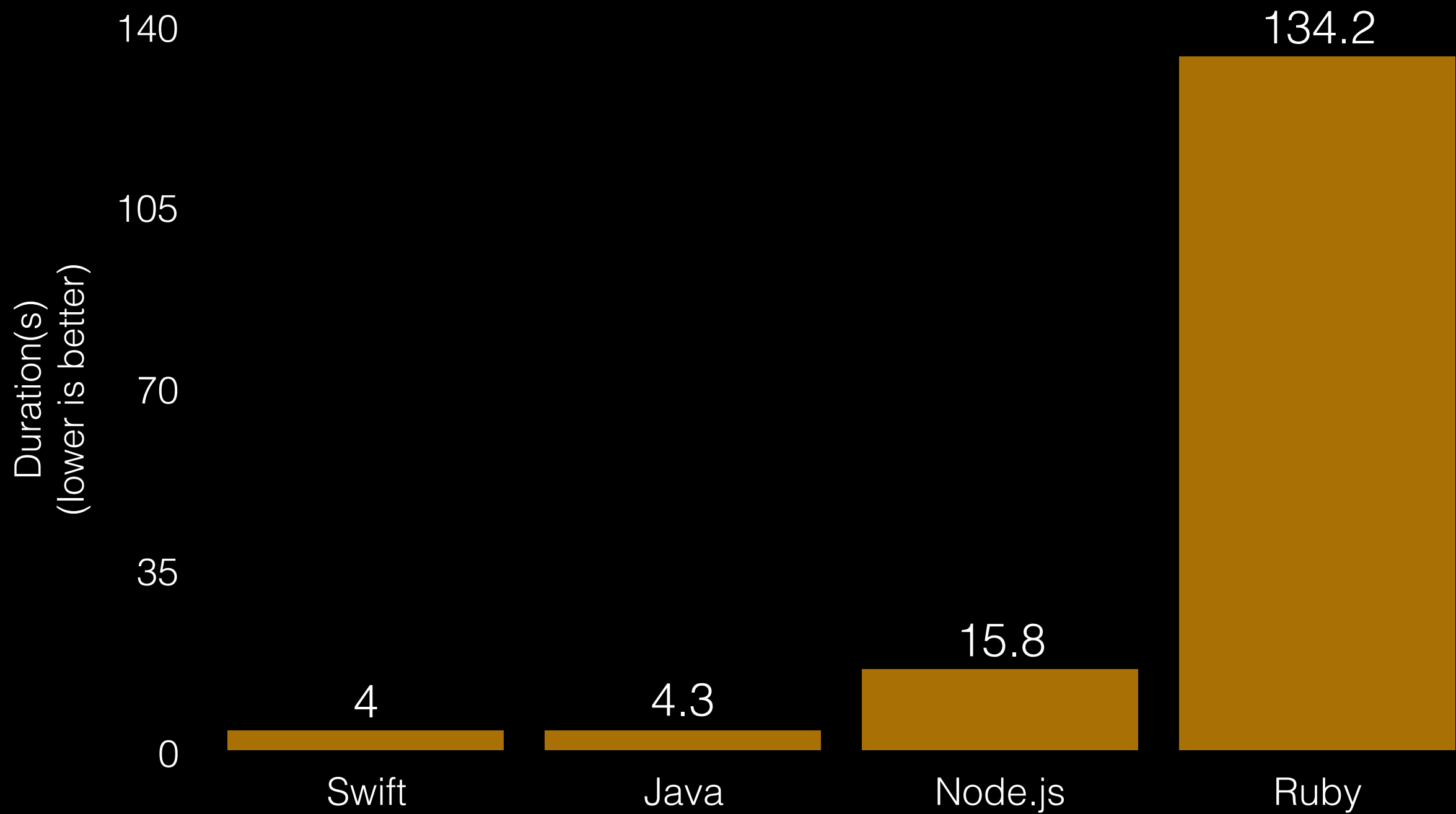


Server Side Swift . Perfect

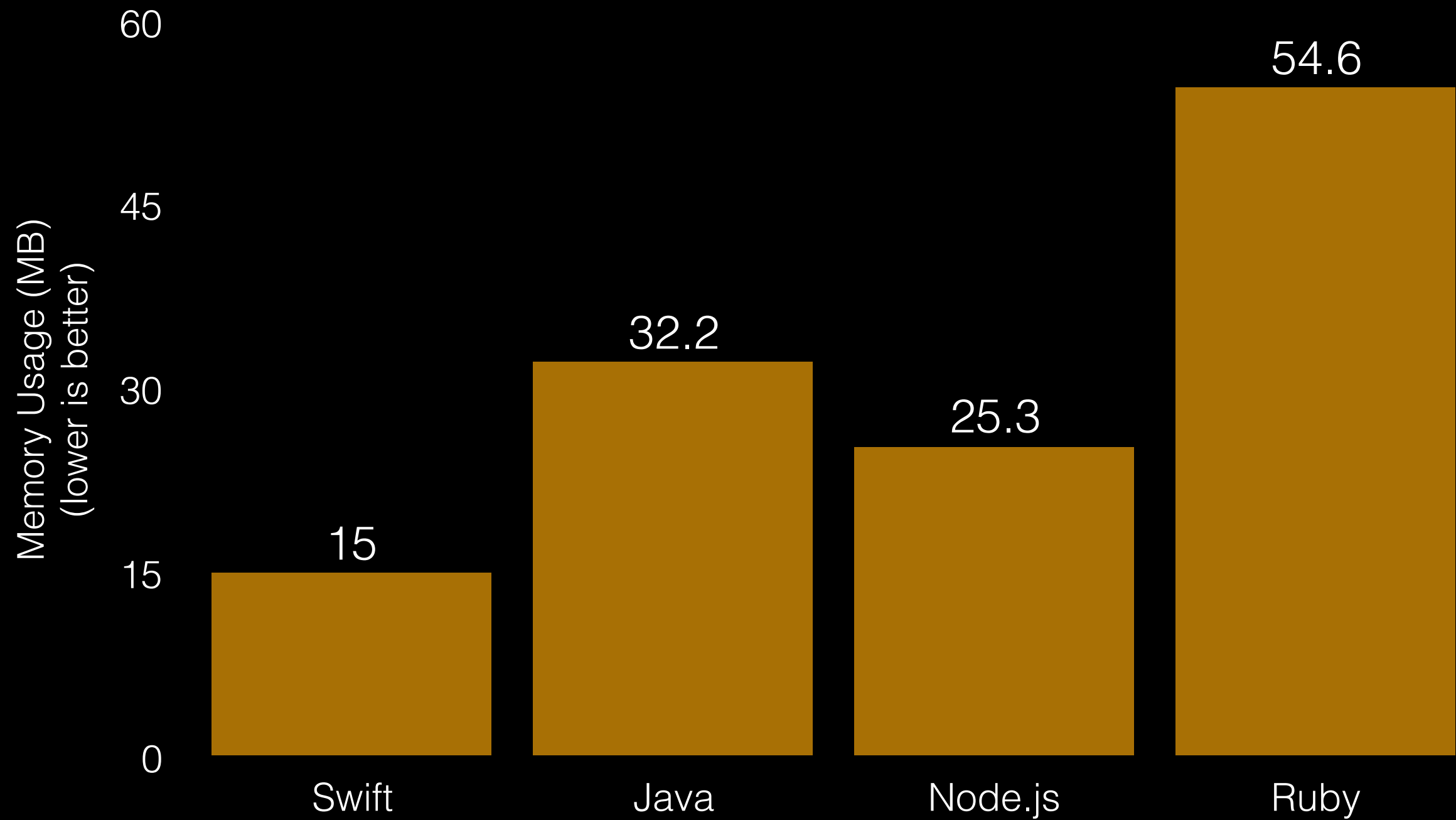
~ Smit Sonani
sonanismet@gmail.com


Why Swift @Server?

Performant Application



Low Memory



- **Modern** ~ *Functional, Protocol-Oriented*
- **Safe** ~ *Static Typed, guard, defer, if let, do - try - catch*
- **Interactive** ~ *Playgrounds*
- **2nd Most**  ~ *In 2016, After Rust*
- **In Top 10** ~ *TIOBE Index, March 2017*
- **Integrated developer experience**

Frameworks . *Swift*

- Perfect

- ✓ 10k+ ★

- ✓ Like rails for swift

- ✓ largest set of features

- Vapor

- ✓ 9k+ ★

- ✓ Laravel-inspired

- ✓ Easy-to-learn and use comparatively

- ✓ Screenscasts available @RayWenderlich.com

- Kitura

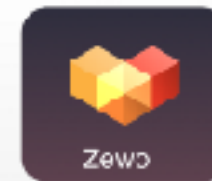
- ✓ 5.4k+ ★

- ✓ Express.js-inspired framework

- ✓ Syntax similar to Vapor

Benchmarks . *frameworks*

Results Summary



Build Times

1. --clean=dist	2nd Place	4th Place	1st Place	3rd Place	N/A
1. --clean	3rd Place	4th Place	2nd Place	1st Place	N/A

Memory Usage

1. Starting Usage	1st Place	4th Place	3rd Place	2nd Place	5th Place
2. Peak Lower Load	1st Place	5th Place	4th Place	2nd Place	3rd Place
3. Peak Higher Load	1st Place	5th Place	4th Place	2nd Place	3rd Place

Thread Usage

1. Starting Threads	1	1	4	1	7
2. Under Load	5	11	11	1	11

Blog Benchmarks

1. Requests/Sec	1st Place	2nd Place	4th Place	5th Place	3rd Place
2. Latency	2nd Place	4th Place	1st Place	5th Place	3rd Place

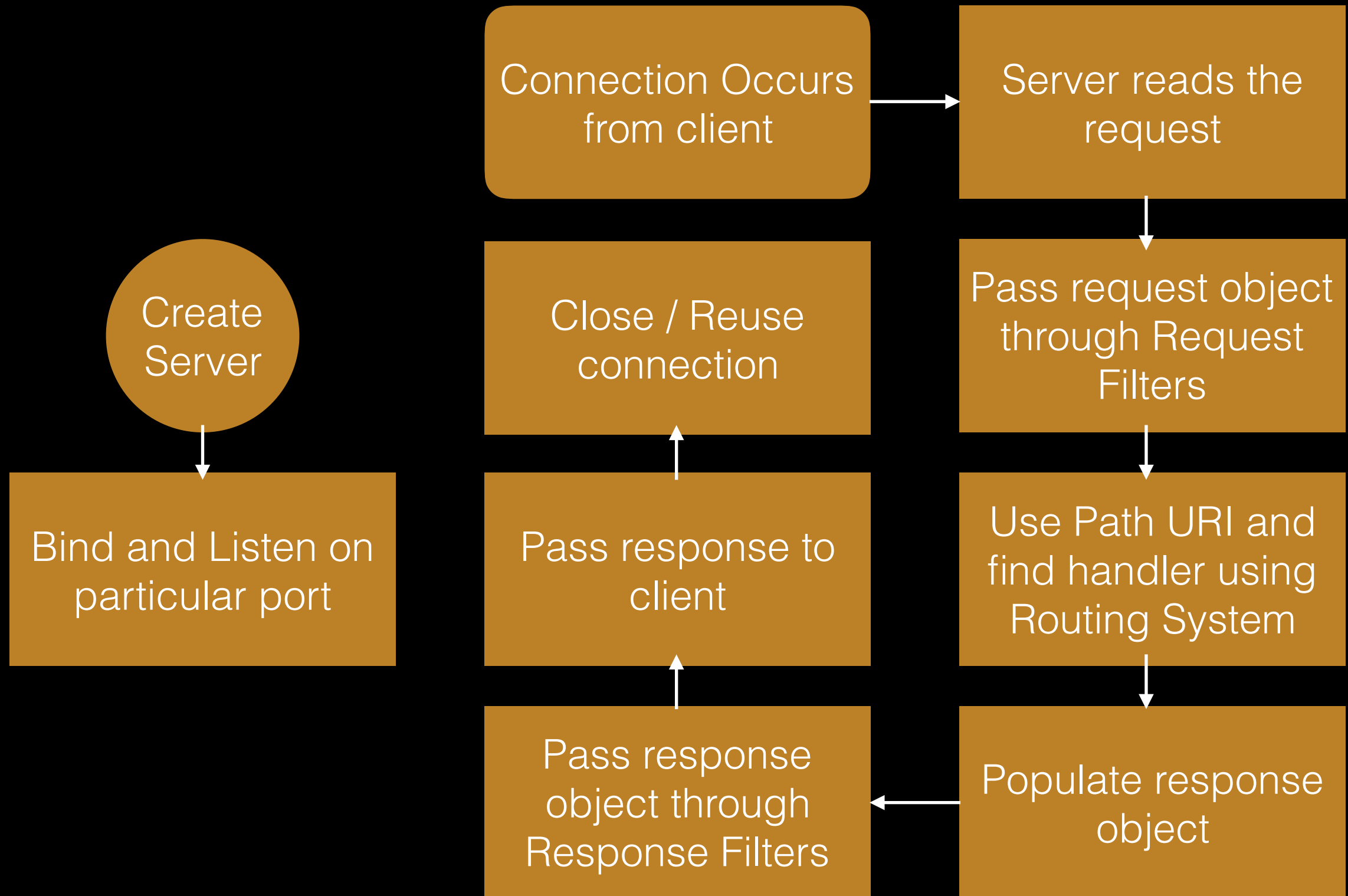
JSON Benchmarks

1. Requests/Sec	1st Place	3rd Place	2nd Place	5th Place	4th Place
2. Latency	1st Place	5th Place	2nd Place	4th Place	3rd Place

Perfect . *features*

- Web Request / Response Handling
- Authentication ~ *using Turnstile*
- StORM
- Session Management ~ *using StORM and Database*
- Templating ~ *Mustache*
- DB Connectors ~ *PostgreSQL, MongoDB, MySQL, etc*
- Cloud hosting support ~ *AWS, Google Cloud Platforms, Heroku, etc*
- *many others @ <http://perfect.org>*

Request / Response . *cycle*



Route . *types*

Type

Example

Variable

/foo/{bar}/baz

Literal

/foo/bar/baz

Wildcard

/foo//baz*

Trailing Wildcard */foo/***

Priority



Demo . *RESTful API Server*

`SessionError.doubt(description: Any)`

Thank.*you* !!!