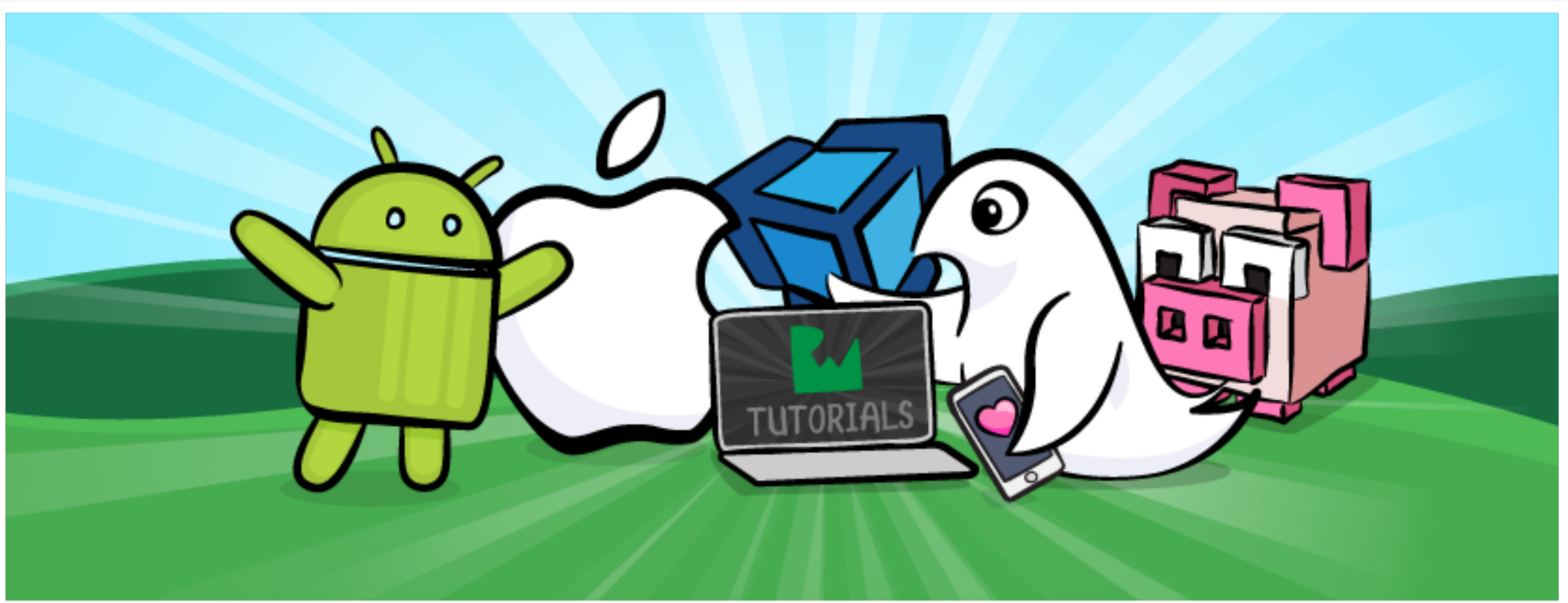
Starting with Server Side Swift

RAYWENDERLICH.COM


TUTORIALS

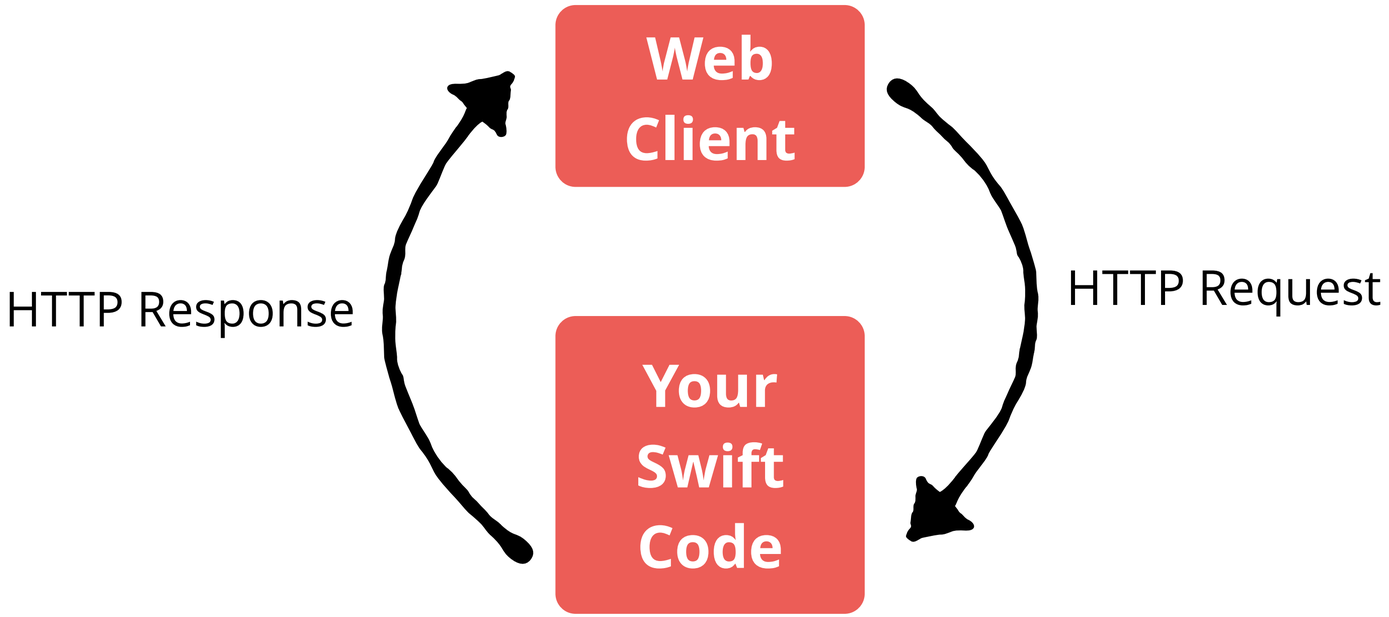
HE!

What is Swift?

- Programming language developed by Apple
- Major features
  - Compiled language
  - Modern syntax
  - Focus on safety
  - Playgrounds
- Open source!

What is Server Side Swift?

- Web apps, or web APIs, made with Swift



Why Server Side Swift?

- **Pros**
  - Great if you like Swift
  - Great if you are developing for Apple platforms
  - Great for performance [bit.ly/2lloKj9]
- **Cons**
  - Still early days of development
  - Compile times

Server Side Swift Framworks

Perfect
(10,613 stars)

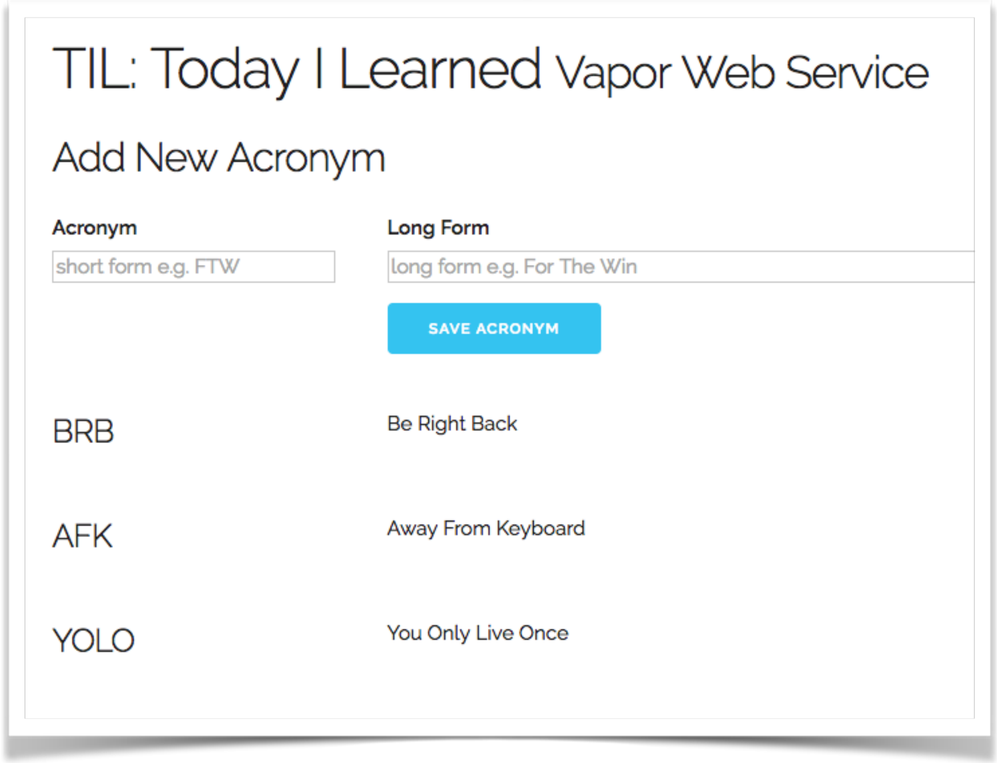
Vapor
(8,788 stars)

Kitura
(5,345 stars)

Zewo
(1,570 stars)

Starting Server Side Swift: 5 Demos

- **Demo 1**: Hello World
- **Demo 2**: Routing
- **Demo 3**: Templating
- **Demo 4**: Persistence
- **Demo 5**: Web App



Getting Set Up For Vapor

- Need Swift 3 Installed
  - **macOS**: Install Xcode 8
  - **Linux**: Instructions here: bit.ly/2m4EjlL
- Install Vapor command-line tools (optional)

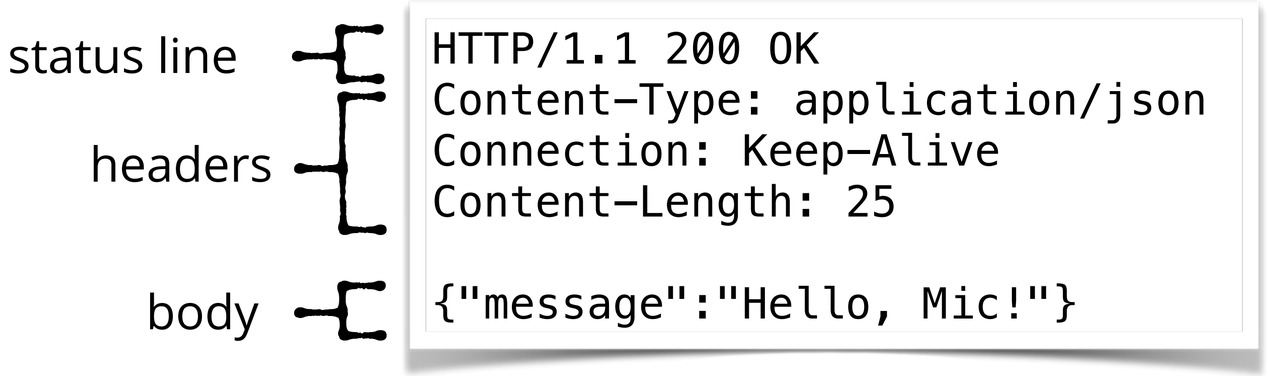
```
curl -sL toolbox.vapor.sh | bash
```

Demo 1: Hello World

HTTP Quick Review

HTTP Request

HTTP Response



Demo 2: Routing

Templating

hello.leaf

```
<!DOCTYPE html>
<html lang="en">

  <head>
    <title>Hello, World!</title>
  </head>
  <body>
    <h1>Hello, Ray!</h1>
  </body>

</html>
```

```
drop.get("template1") { request in
  return try drop.view.make("hello",
    Node(node: ["name": "Ray"]))
}
```

Demo 3: Templating

Fluent

MySQL

SQLite

PostgreSQL

MongoDB

Vapor + Fluent

Acronym: Model

short: String
long: String
id: Node?
exists: Bool

init(node:context)
makeNode(context:)
prepare()
revert()

```
// Save acronym
try acronym.save()
```

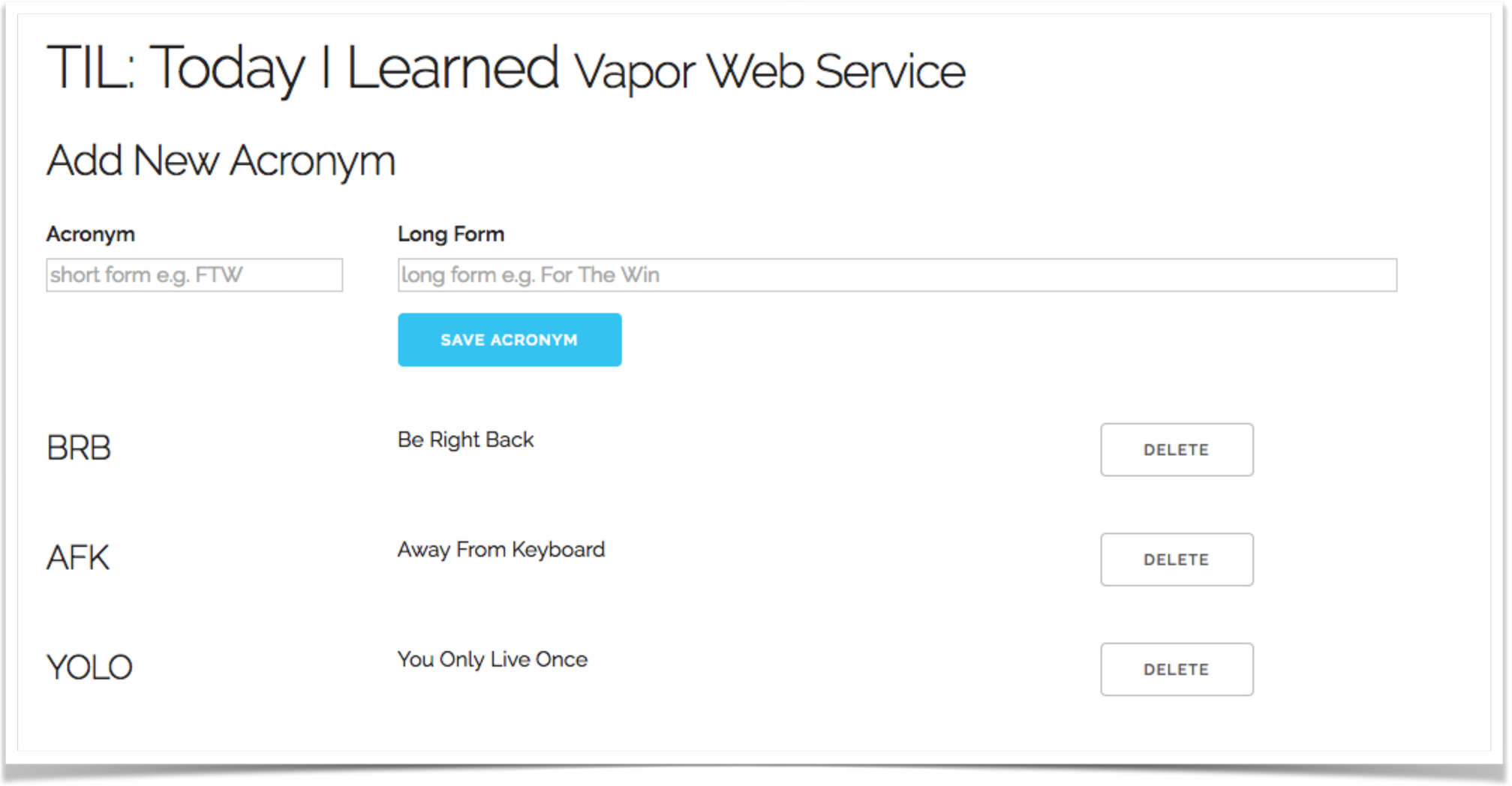
```
// Find all
Acronym.all()
```

```
// Filter
Acronym.query().filter
  ("short", "AFK").all()
```

```
// Delete
let query = try
Acronym.query().filter
  ("short", "AFK")
try query.delete()
```

Demo 4: Persistence

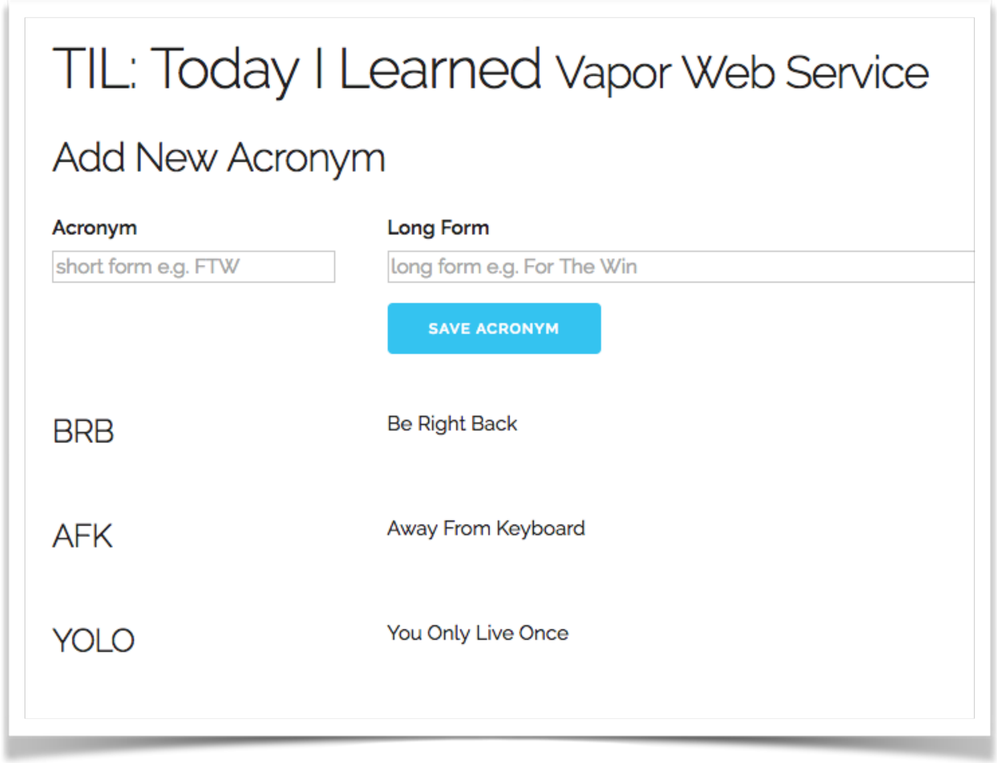
Making A Simple Web App



Demo 5: Web App

What You Learned

- Intro to Server Side Swift
- **Demo 1**: Hello World
- **Demo 2**: Routing
- **Demo 3**: Templating
- **Demo 4**: Persistence
- **Demo 5**: Web App



Where To Go From Here?

- 16 Screencasts on Server Side Swift
  - https://videos.raywenderlich.com/screencasts

- Twitter: @rwenderlich