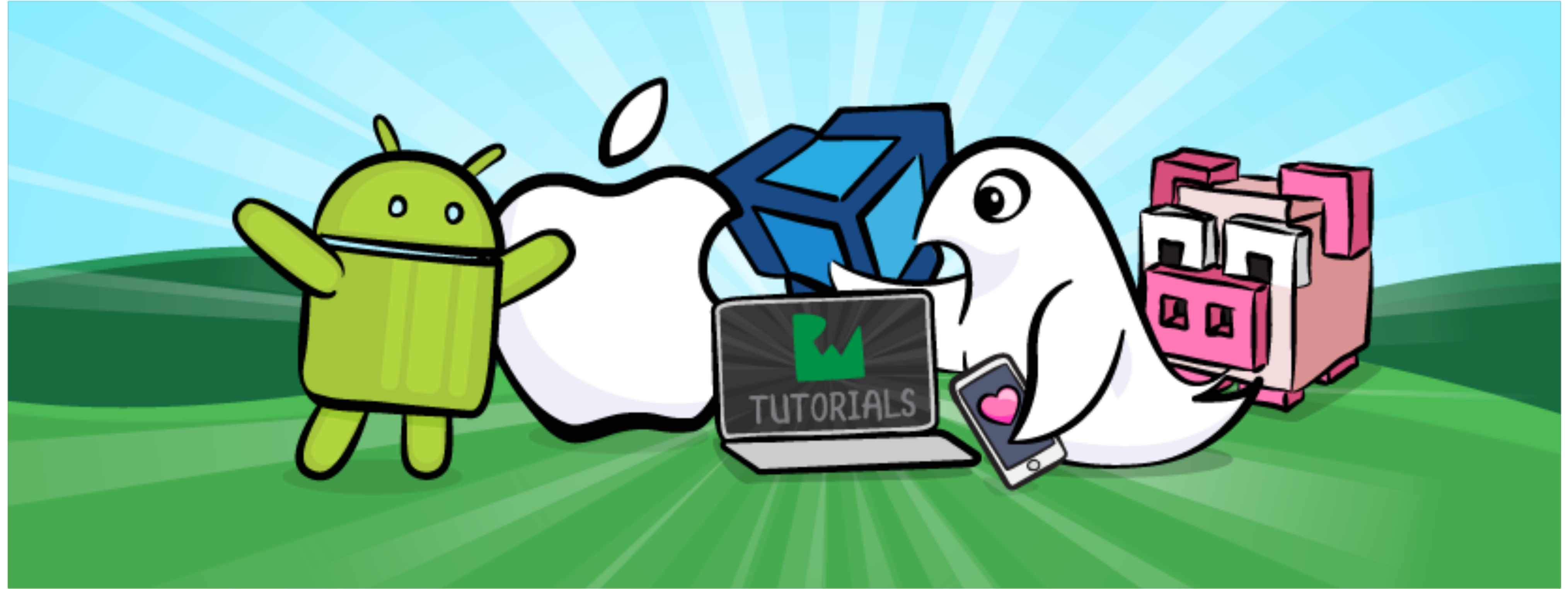


Starting with Server Side Swift



RAYWENDERLICH.COM





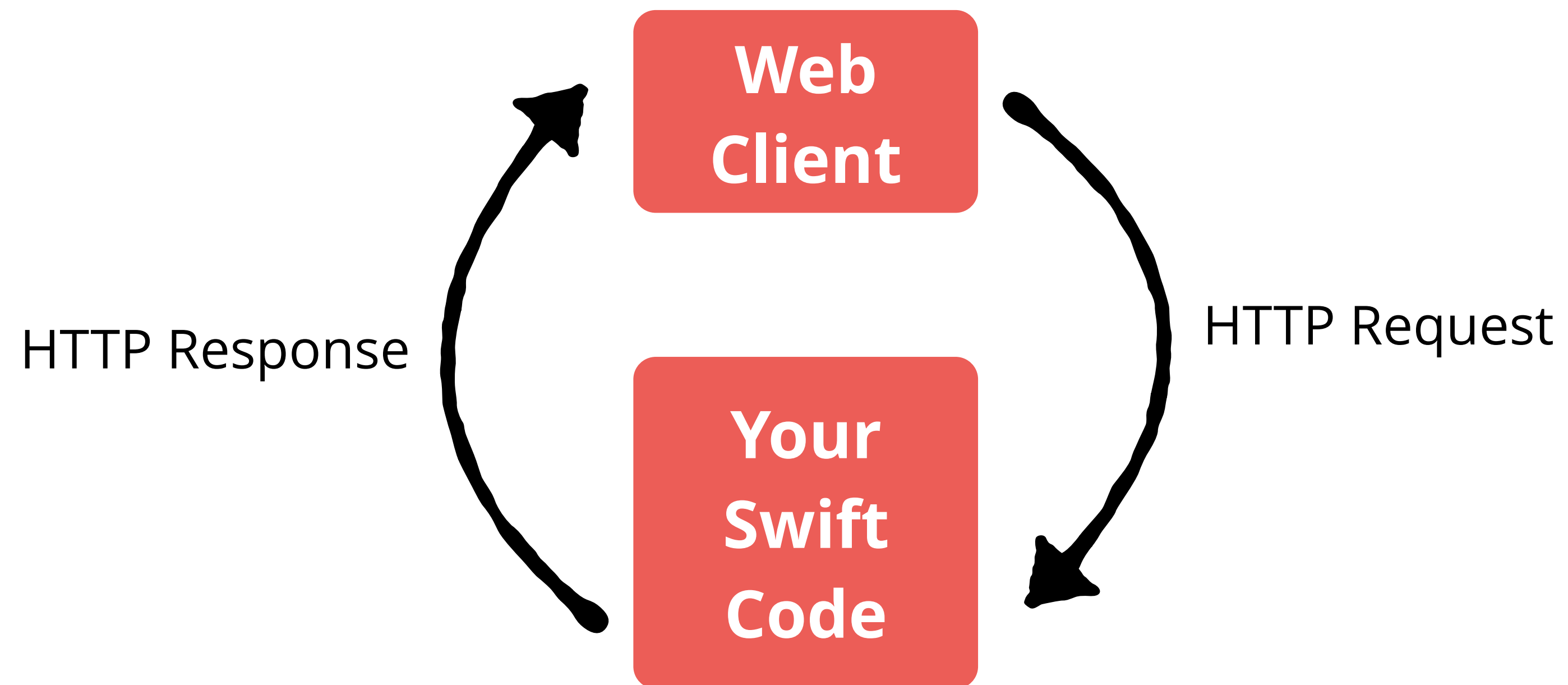
WHAT IS SWIFT?

- ⚙️ 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 FRAMEWORKS



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**

TIL: Today I Learned Vapor Web Service

Add New Acronym

Acronym	Long Form
<input type="text" value="short form e.g. FTW"/>	<input type="text" value="long form e.g. For The Win"/>
<button>SAVE ACRONYM</button>	
BRB	Be Right Back
AFK	Away From Keyboard
YOLO	You Only Live Once

GETTING SET UP FOR VAPOR

- ⚙️ Need Swift 3 Installed
 - ⚙️ **macOS:** Install Xcode 8
 - ⚙️ **Linux:** Instructions here: bit.ly/2m4EjIL
- ⚙️ Install Vapor command-line tools (optional)

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

DEMO 1: HELLO WORLD



HTTP QUICK REVIEW

HTTP Request

request line	┌	POST /hello HTTP/1.1
	├	Host: localhost:8080
	├	User-Agent: curl/7.51.0
headers	├	Accept: */*
	├	Content-Length: 8
	└	Content-Type: application/x-www-form-urlencoded
body	┌	name=Mic

HTTP Response

status line	┌	HTTP/1.1 200 OK
	├	Content-Type: application/json
headers	├	Connection: Keep-Alive
	└	Content-Length: 25
body	┌	{"message": "Hello, Mic!"}

DEMO 2: ROUTING



TEMPLATING

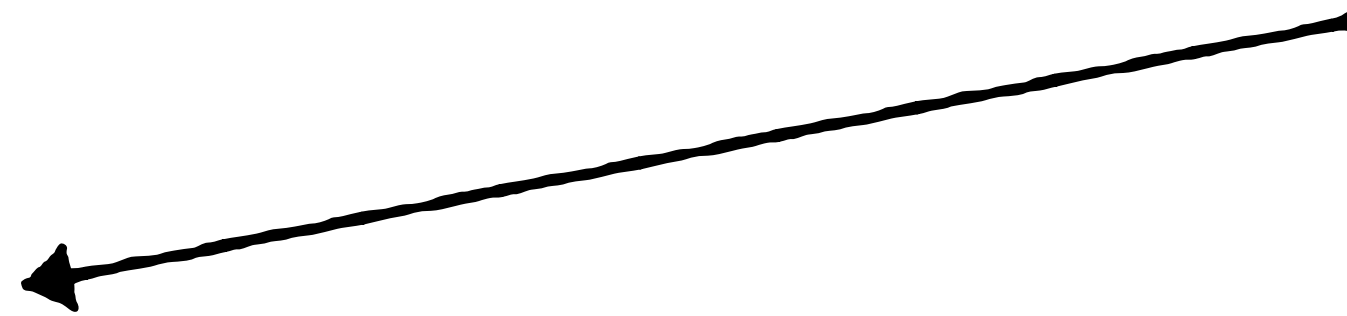
hello.leaf

```
<!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



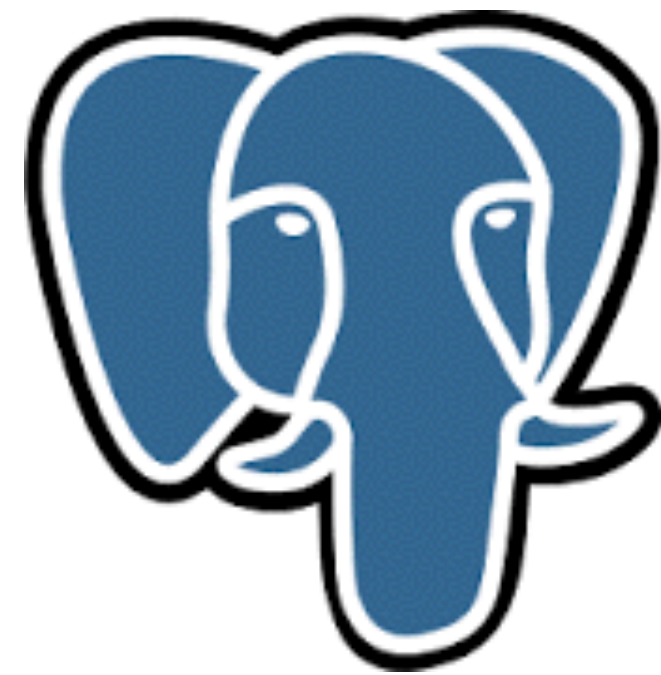
FLUENT



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

TIL: Today I Learned Vapor Web Service

Add New Acronym

Acronym

short form e.g. FTW

Long Form

long form e.g. For The Win

SAVE ACRONYM

BRB

Be Right Back

DELETE

AFK

Away From Keyboard

DELETE

YOLO

You Only Live Once

DELETE

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**

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WHERE TO GO FROM HERE?

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



- ⚙️ Twitter: [@rwenderlich](https://twitter.com/rwenderlich)