Advanced Node.js

NODE != JAVASCRIPT

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Pure Node.js

Node Is Popular!

- Server side framework
- Mobiles and IoT
- Desktop applications
- Millions of users
- Largest ecosystem

Node's Popularity

JavaScript

Full-stack

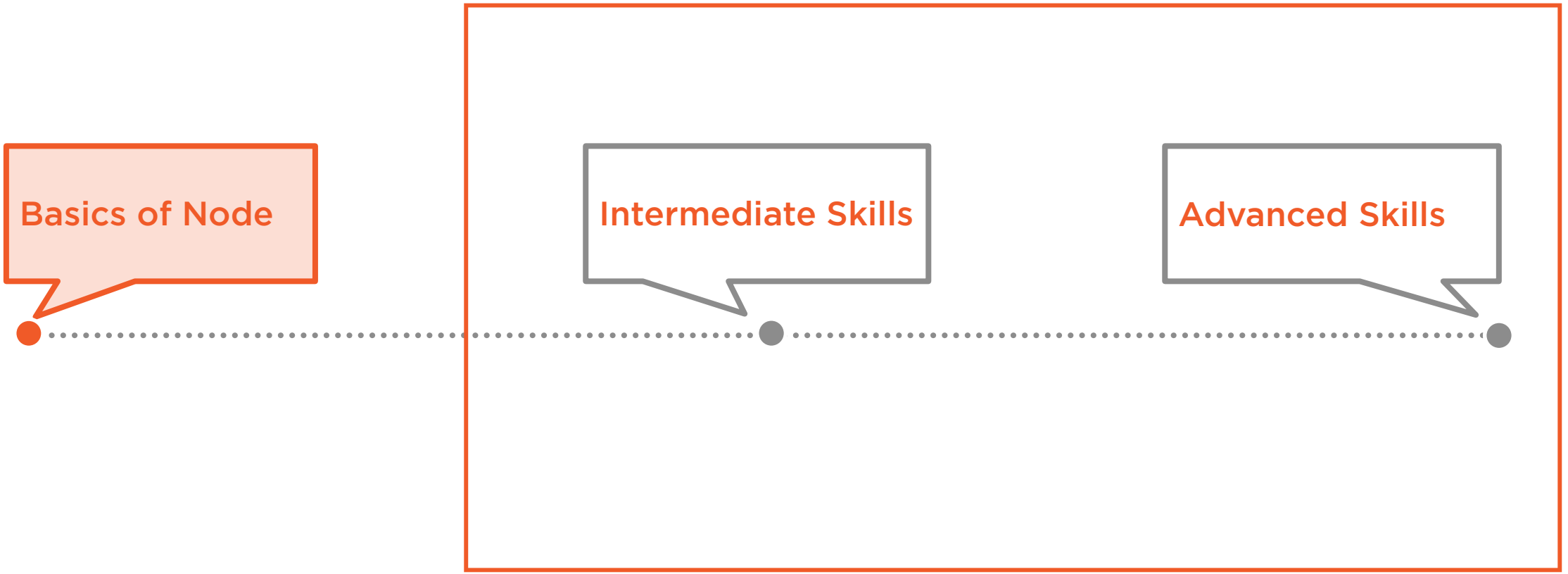
Non-blocking

Event-driven

Virtual Machine

Single-thread

This Course



Is This Course Not for You?

The event-loop

V8 and the Call Stack

Sockets

Event Emitters

Streams

Clusters

This Course

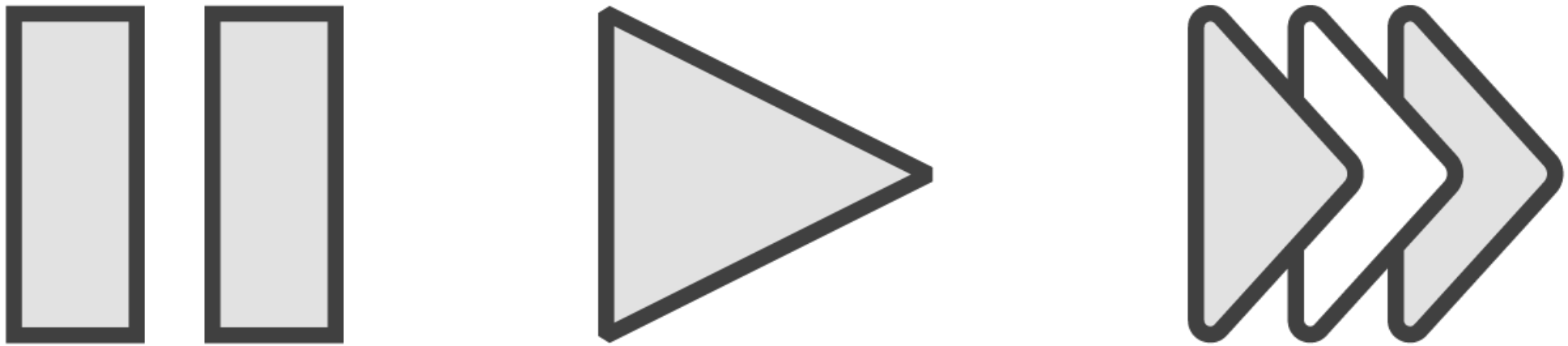
No JavaScript

Using Node

Practical Examples

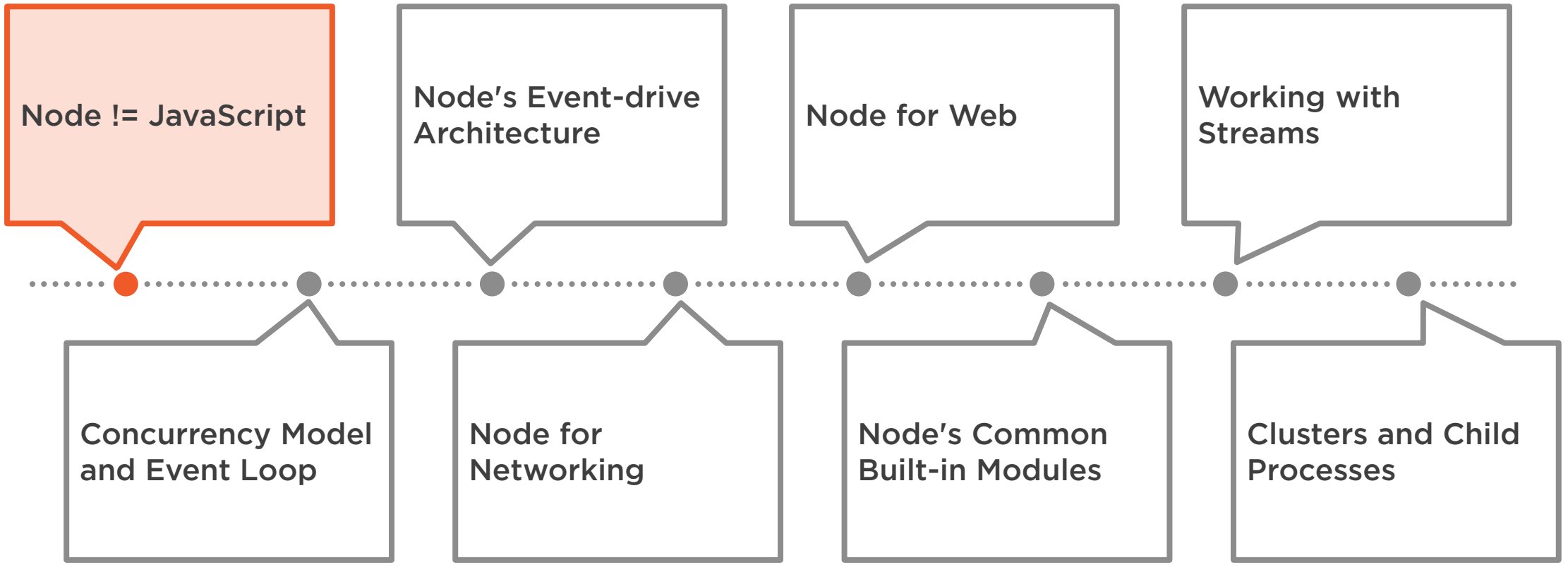
What's Not Covered

- The history of Node.js
- JavaScript and ES2015
- Installation and basics
- Less important parts of the API
- NPM packages
- External services
- Deploying



Do the examples yourself

Course Overview



Node's Architecture: V8 and libuv

Node VMs

V8

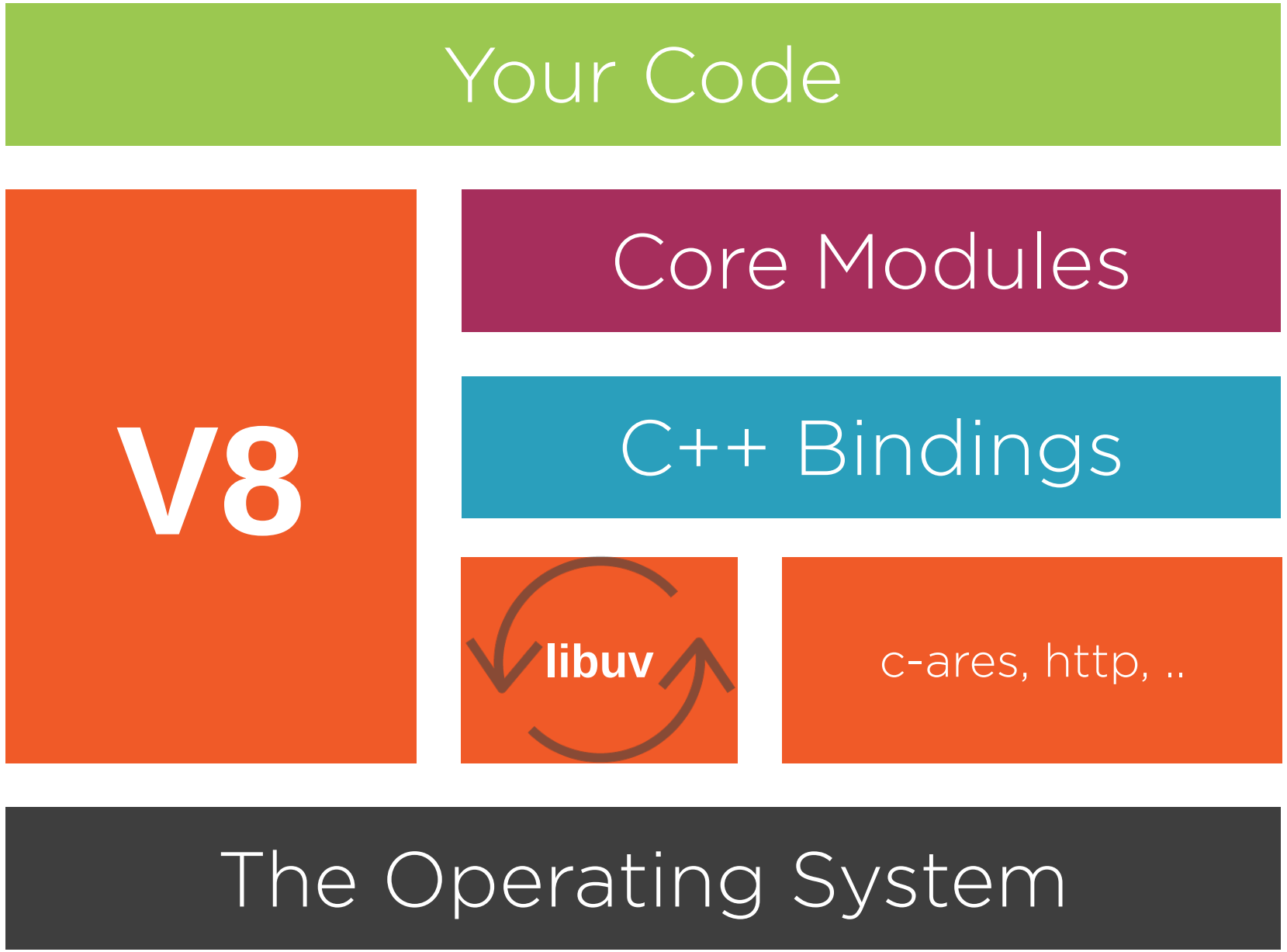
Chakra

V8 Feature Groups

Shipping

Staged

In Progress


Your Code
V8
Core Modules
C++ Bindings
libuv
c-ares, http, ..
The Operating System

http-parser

c-ares

OpenSSL

zlib

Node's CLI and REPL

Global Object, Process, and Buffer

How require() Actually Works

require("module")

require("something")

Resolving

Loading

Wrapping

Evaluating

Caching

JSON and C++ Addons

Wrapping and Caching Modules

Know Your NPM

Summary

- V8 and libuv
- CLI and REPL
- The global object
- Process, Buffer, StringDecoder
- The require module
- JSON and C++ Addons
- Wrapping and Caching
- NPM