DEVELOPMENTARC®

React In-Depth:

Developing production applications with React

A free open source GitBook

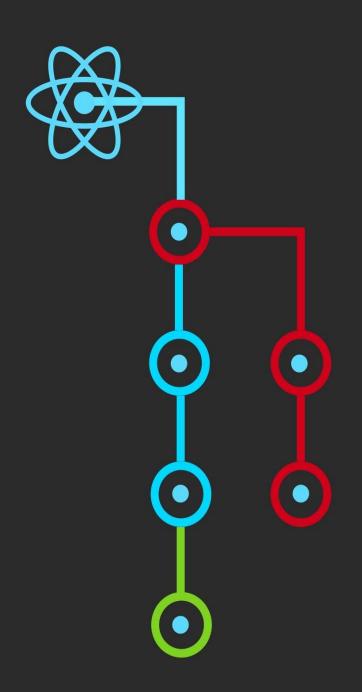


Table of Contents

Introduction	1.1
[WIP] React From the Inside Out	1.2
The React Life Cycle	1.3
Life Cycle Methods Overview	1.3.1
Birth/Mounting In-depth	1.3.2
Initialization & Construction	1.3.2.1
Pre-Mounting with componentWillMount()	1.3.2.2
Component render()	1.3.2.3
Managing Component Children and Mounting	1.3.2.4
Post-Mount with componentDidMount()	1.3.2.5
Growth/Update In-depth	1.3.3
Updating and componentWillReceiveProps()	1.3.3.1
Using shouldComponentUpdate()	1.3.3.2
Tapping into componentWillUpdate()	1.3.3.3
Re-rendering and Children Updates	1.3.3.4
Post-Render with componentDidUpdate()	1.3.3.5
Death/Unmount In-depth	1.3.4
The Life Cycle Recap	1.3.5
Component Evolution and Composition	1.4
The Evolution of a List Component	1.4.1
Rendering different content	1.4.2
Higher Order Components	1.4.3
About the Authors	1.5

React In-depth: An exploration of UI development

At DevelopmentArc® we have a love affair with UI application development. We truly enjoy the exploration of technologies and frameworks. This process helps us better understand the end-goals and complexity of the application stack.

We discovered early on the need to apply true software development principles to the user interface. This discovery started a long time ago with technologies like Authorware/Toolbook and Director. Quickly we moved to HTML 1.0 and began to build systems with JavaScript frameworks like Prototype.js. With the release of the Flex framework, our focus again shifted to a new platform, Flash.

For a majority, Flash was a negative experience and UI technology. While many arguments are true, we found Flash to be the most advanced cross-platform rendering system available at the time. Flex gave us the application framework necessary to build the large and complex applications clients were requesting. All the while, Flex lent itself to the management of large and diverse teams. Our obsession with Flex included a deep understand of the application and component life cycles, resulting in a 90-page white paper. The paper is still available and continues to be referenced today. With the collapse of the Flash Platform and Flex, we find ourselves back in HTML and JavaScript world. This time our obsession is React.js

Throughout the years we have continued to try and push the boundaries of UI technologies. Starting, in late 2014, we began initial research and then full adoption of React.js for our UI layer in for web applications.

The initial process of moving to React was a blend of excitement and at times, pure frustration. React brings in both existing UI paradigms and also new patterns that can take a bit of time to adjust your own mind-set to. Once we had fully grokked React, we found that it has opened the possibilities for our current and future projects.

Our goal with this GitBook is to document our process, share our research and try to organize our experiences into a single living document. Too be honest, this is a pretty lofty goal. We may not achieve this goal, but hopefully we can get some helpful thoughts down.

We have found the longer you write code, the more you learn and then shortly forget. This means that our writings are just as much for ourselves as for others. With that in mind we hope that as this document grows it will help you, just as much as it helped us to put our own thoughts down.

James & Aaron

[WIP] React From The Inside Out

This section is currently being researched

In the meantime, there are ton of getting started resources already available. If you are new to React we recommend spending some time looking at these fantastic resources:

- React Official Site
- Awesome React A comprehensive list of resources
- Learning React, Getting Started Basic intro article

From a book development perspective, our first focus will be on the Life Cycle chapters and we will circle back to this section soon.

Guiding Principals to learning React

Unlike most intro books, we want to have different goals for our Basics Section. We will dig into the underpinnings of React and look at how to create applications from the bottom up. We feel that understanding the internals of a UI system helps drive development choices. We plan to explore React from this guiding principal.

Click here to download full PDF material