Day 57

React, Gently

The Coding Bootcamp | June 1, 2017

A Throwback!

Obstacle #1 – The Great Confusion

MY CODE DOESN'T WORK AND I DON'T KNOW WHY
MY CODE WORKS AND I DON'T KNOW WHY

Obstacle #2 – The Great Doubt

Silly Instructor…

“Duh. I remember.

I’ve felt dumb everyday since we started.”

Silly Student…

Nah Brah.

You about to feel waaaaay MOARRR dumb.

Welcome to ReactJS!!!

Note: This will not be you.

Do not treat this class as a “spoon feeding” session.

Note: This will be you.

Instead, it’s meant to be an immersion and exposure.

Resources To Use:

- **Facebook React Official Documentation**
  https://facebook.github.io/react/

- **Code School React Tutorial**
  https://www.codeschool.com/courses/powering-up-with-react

- **EggHead.io**

- **Build With React Tutorial**
  http://buildwithreact.com/tutorial

- **Dev Pen – React in 15 Minutes**
  https://www.youtube.com/watch?v=PGUMRVowdv8

- **Just YouTube things…**

- **Just read everything..**

So… What is React?

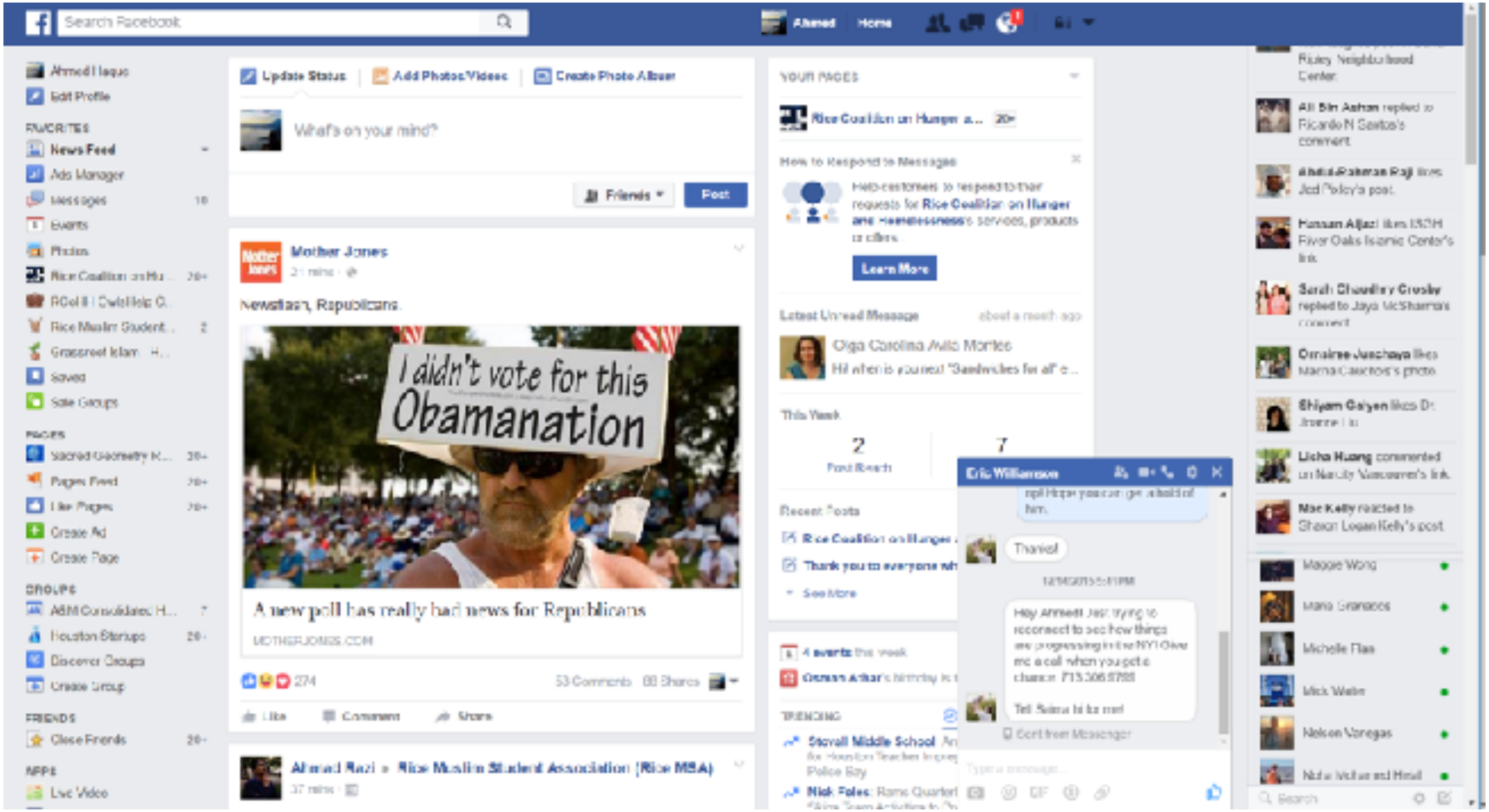
- **React** is an open-source Javascript Library developed by Facebook specifically for the task of developing User Interfaces.
- It was developed for the purpose of building large **apps with data that rapidly changes** over time.
- It relies on a **component-based architecture**. Each element of the UI is treated as sub-components of larger components.

But… what is React Not?

- React is not a plug-and-play UI beautifier.
- React is not a “magic bullet” to building awesome User Interfaces with a touch of a mouse.
- It is not as simple to use as libraries like jQuery or Firebase – which are intended for limited use strict purposes.
- ***Instead, react serves as a sort of “design-paradigm” and organization strategy for building complex front-end applications.***

No. It’s not magic.

Facebook’s UI Complexities



Newsflash, Republicans.

A new poll has really bad news for Republicans

MOTHERJONES.COM

Help customers to respond to their requests for Rice Coalition on Hunger and Homelessness's services, products or offers.

Olga Carolina Avila Montes

Hi when is your next "Sandwiches for all" e...

Stovall Middle School: An... for Houston Teacher Injured... Police Say

Nick Foles: Rams Quarterb... "Skins Team Activities to Do..."

...up! Hope you can get a hold of him.

Thanks!

12/16/2015 5:31PM

Hey Ahmed! Just trying to reconnect to see how things are progressing in the NYI Give me a call when you get a chance. 713 506 5788

Tell Saima hi for me!

...Ripley Neighborhood Center.

Ali Bin Ashan replied to Ricardo N Santos's comment.

Abdul-Rahman Raji likes Jed Foley's post.

Hassan Aljazi likes ISGH River Oaks Islamic Center's link.

Sarah Chaudhry Crosby replied to Jaya McSharma's comment.

Omairee Junchaya likes Mama Cauchos's photo.

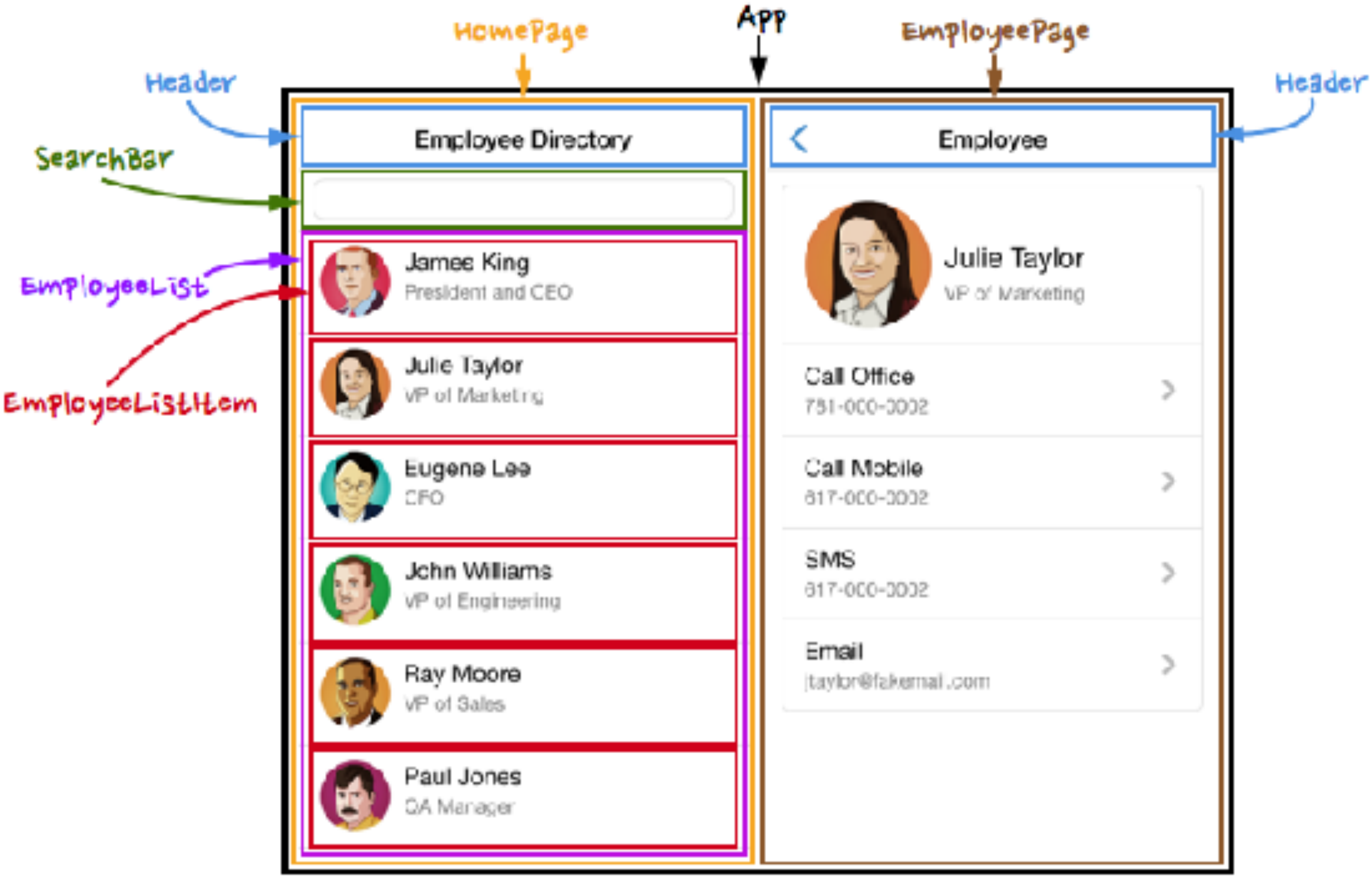
Shiyam Galyen likes Dr. Jhanne Liu

Lisha Huang commented on Nancy Vancouver's link.

Mae Kelly reacted to Sharon Logan Kelly's post.

- **Facebook’s website buzzes with interactive options, live-updating data, and tightly interacting elements.** This poses a challenge to simple DOM manipulation strategies.

The Concept of Components



Employee Directory

James King
President and CEO

Julie Taylor
VP of Marketing

Eugene Lee
CFO

John Williams
VP of Engineering

Ray Moore
VP of Sales

Paul Jones
QA Manager

Employee

Julie Taylor
VP of Marketing

Call Office
781-000-0002

Call Mobile
617-000-0002

SMS
617-000-0002

Email
jtaylor@fakemail.com

- Using React, UI elements are broken down into re-usable sub-components.
- Each sub-component behaves in a way that it is fully contained

Power of Components!

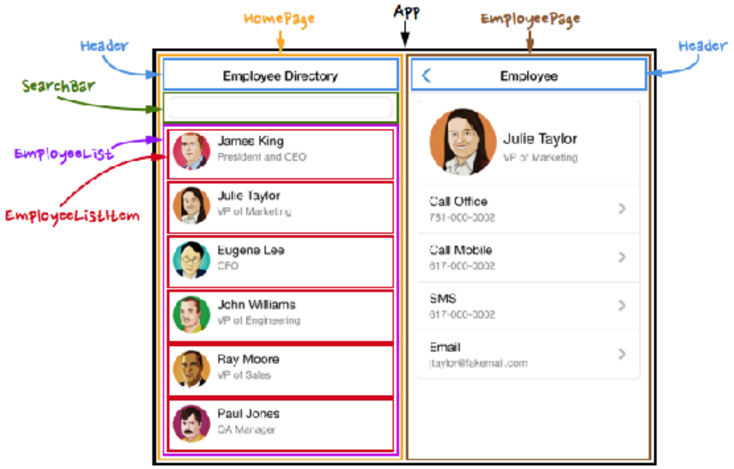
By separating elements out into components...

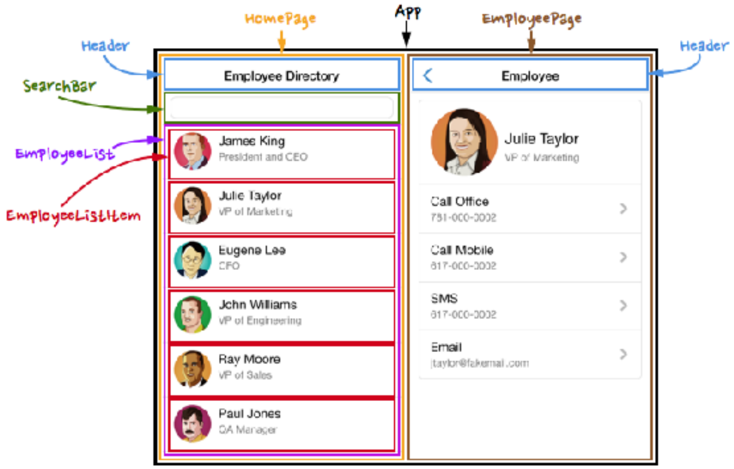
- Layout and Logic are kept bundled together in a self-contained package.

- Components can easily be re-used in various points in the application without needing to be re-coded.

- Components can be more easily tested. (i.e. having one re-usable component means only one UI element needs to be tested).

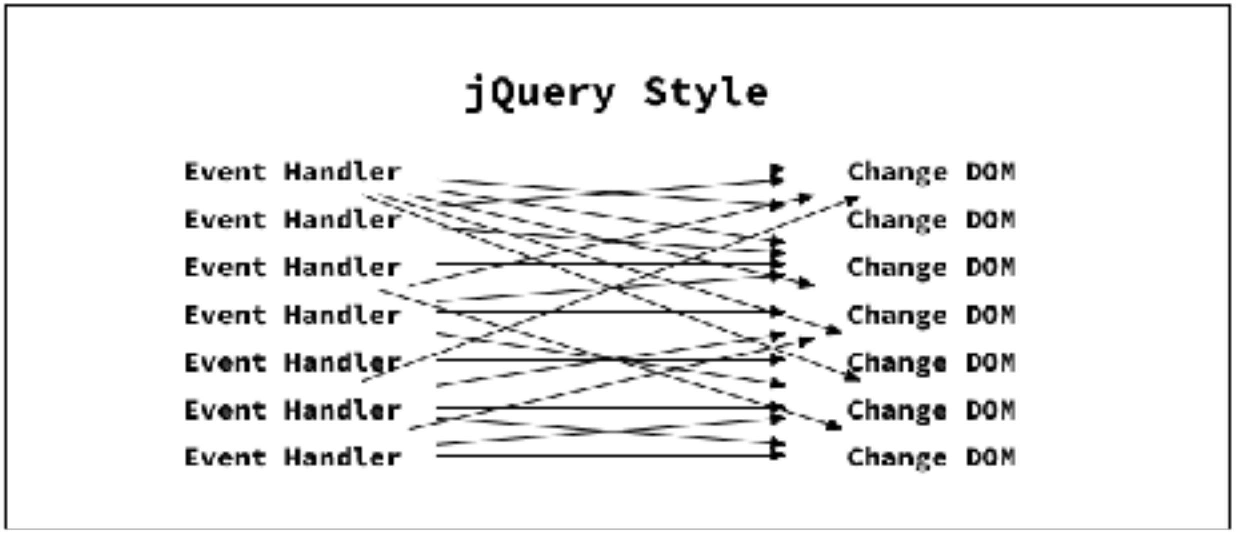
<u>For complex applications each of these can be critical in finding bugs and saving time.</u>





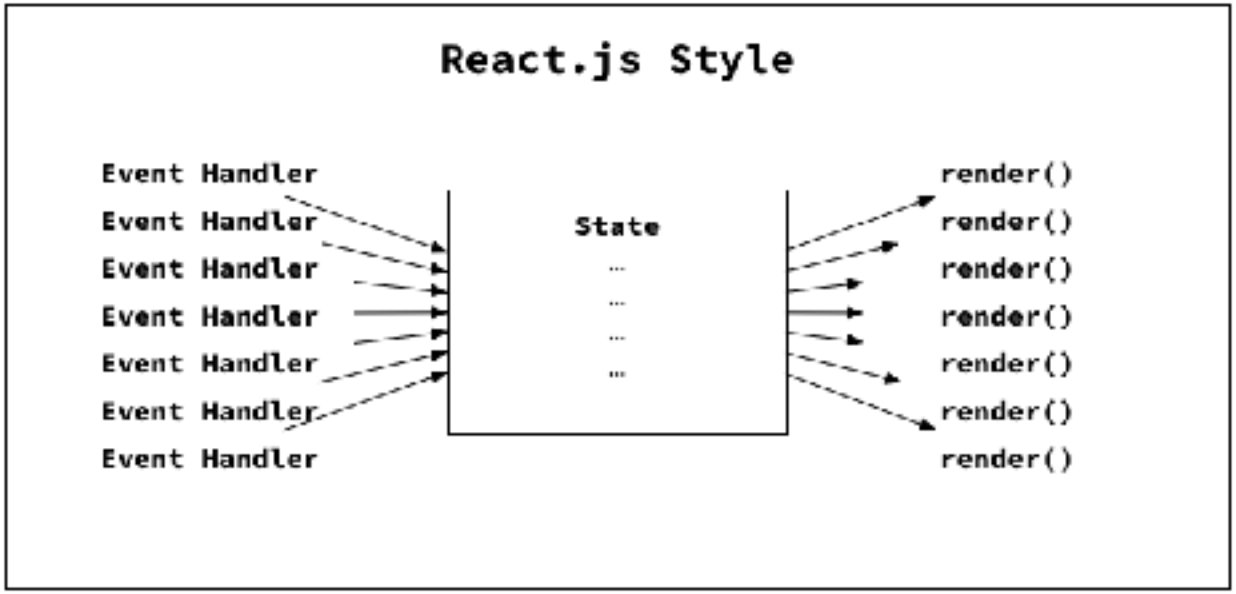
Data Shifting Applications

Why Can’t I jQuery Everything?



Jquery

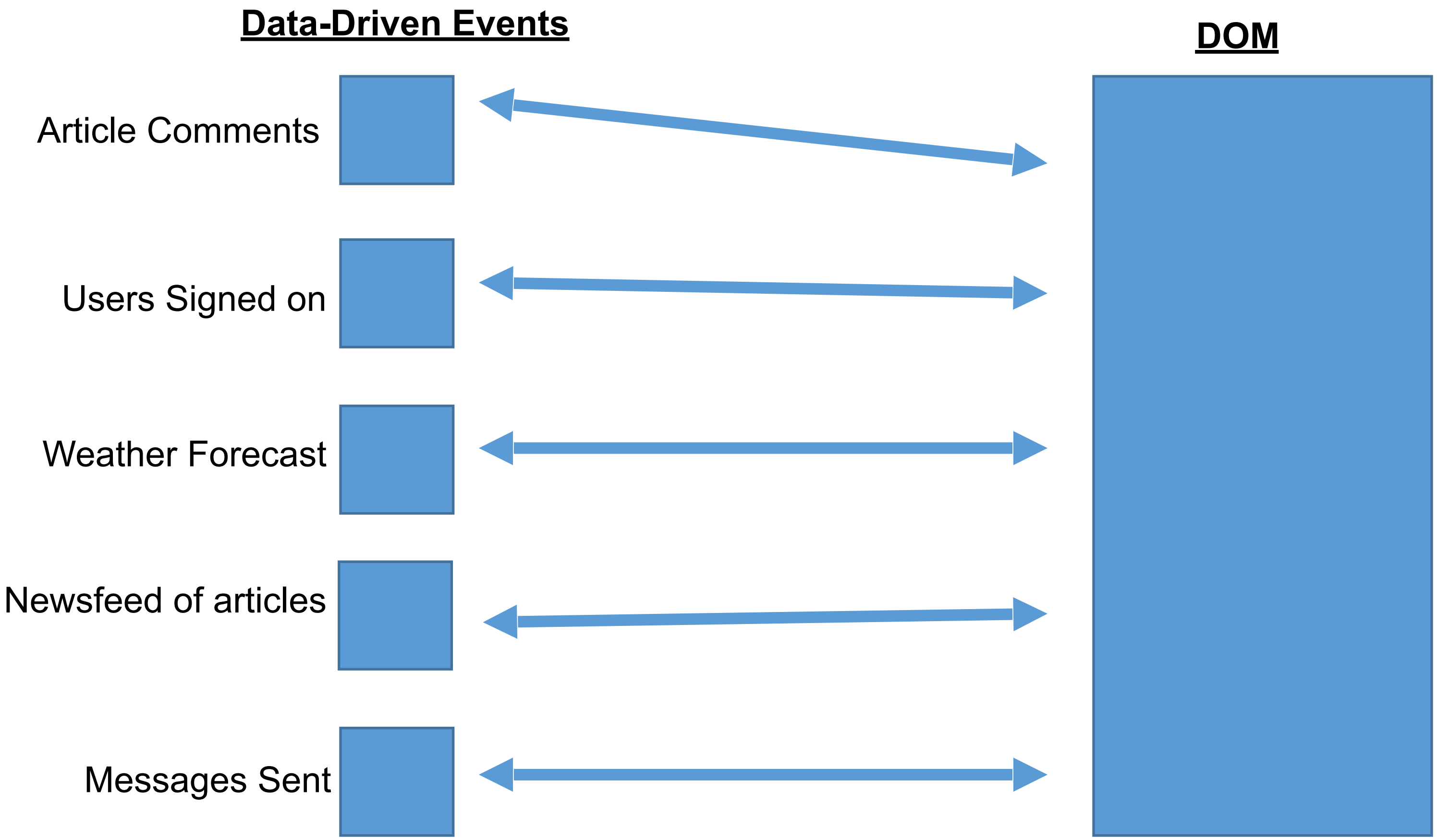
- Without an organization structure, code quickly become a series of erratic DOM Manipulations



React

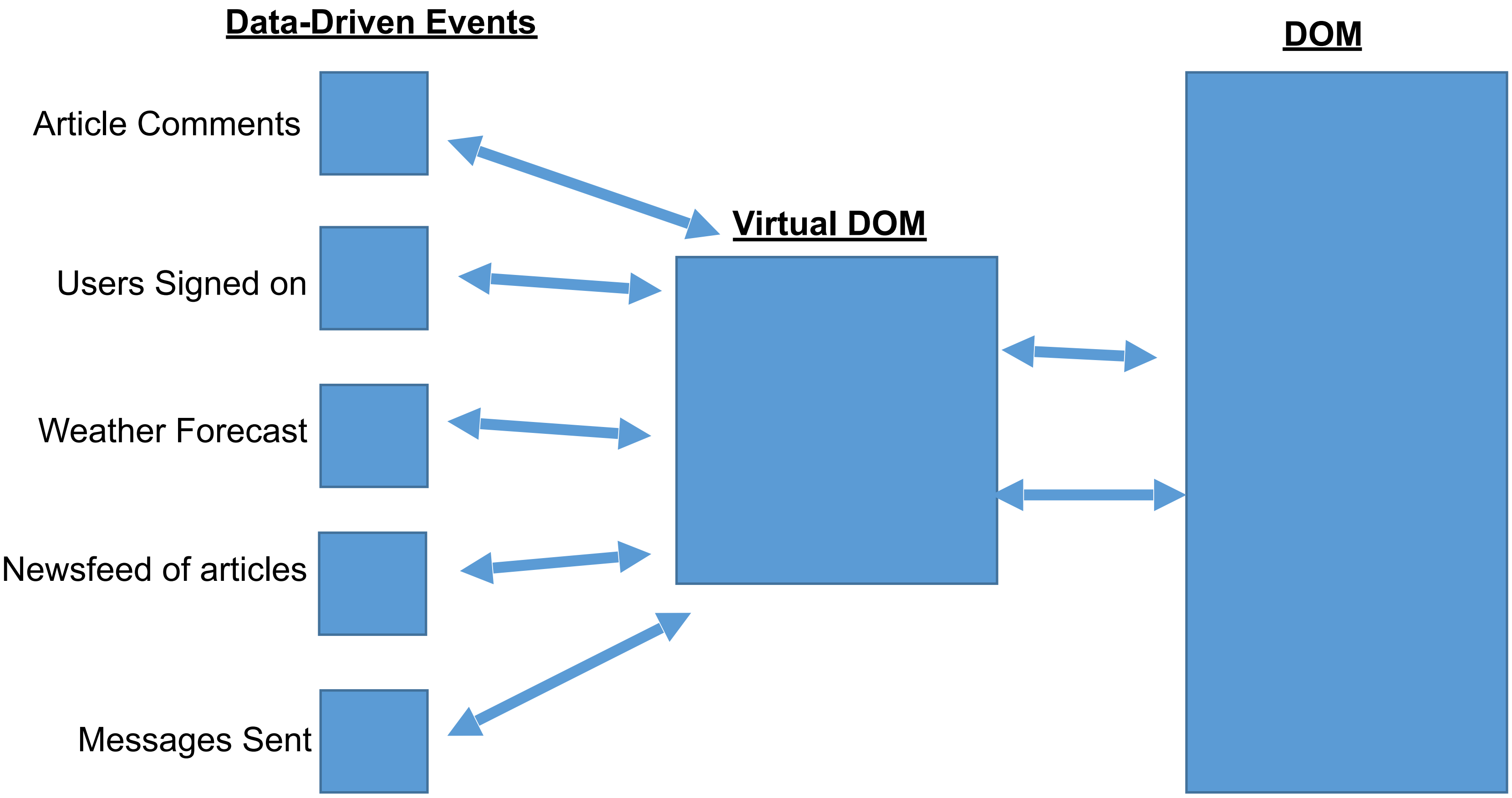
- In contrast, React utilizes a state or Virtual DOM that acts as a middle man with pre-defined rules for how each component will behave.

Rapid Data Changes: Option #1 –jQuery



Constantly manipulating DOM is slow.

Rapid Data Changes: Option #2 - React



Virtual DOM serves as intermediary

Digging into Docs

Documentation Immersion

With your Project Groups…
Answer each of the questions slacked out to you.

Really try on this activity!

A Gentle Intro

Questions