

WEB DEVELOPMENT WITH REACTJS

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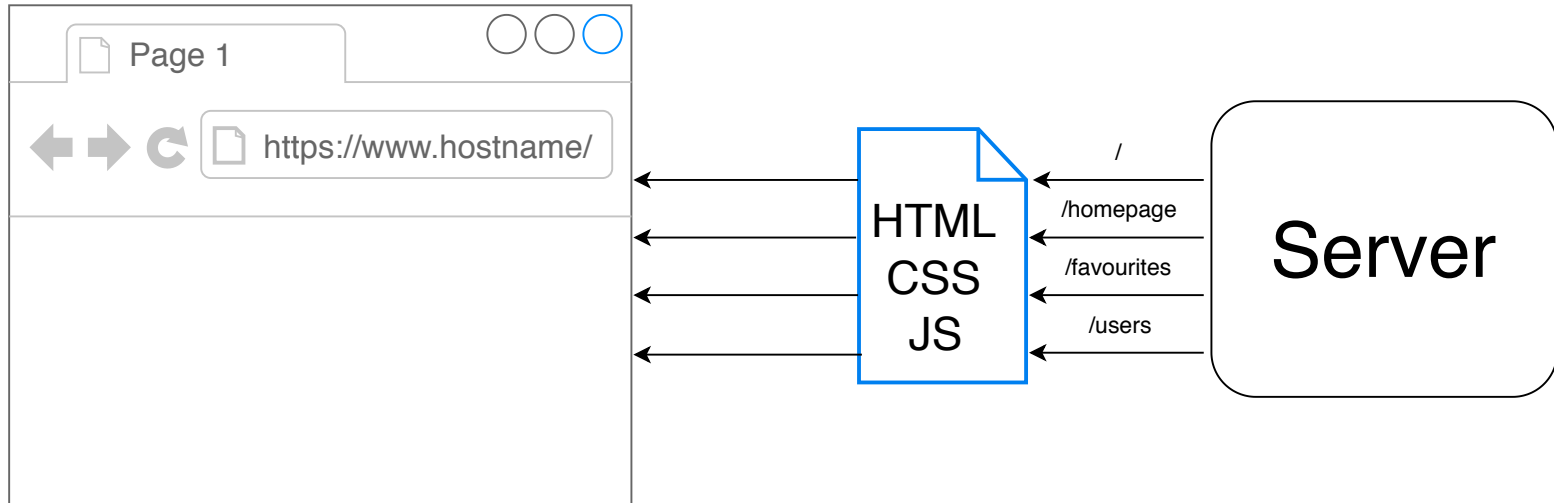
OBJECTIVES

- be comfortable with most frequently used JS syntax in ReactJS
- understand the most common ReactJS concepts/ patterns
- gain hands-on experience in writing ReactJS web apps

ReactJS concepts

- reusable components
- component state
- data hierarchy
- state management across app
- routing
- React Context

TRADITIONAL CLIENT SERVER WEB PAGE



DOCUMENT

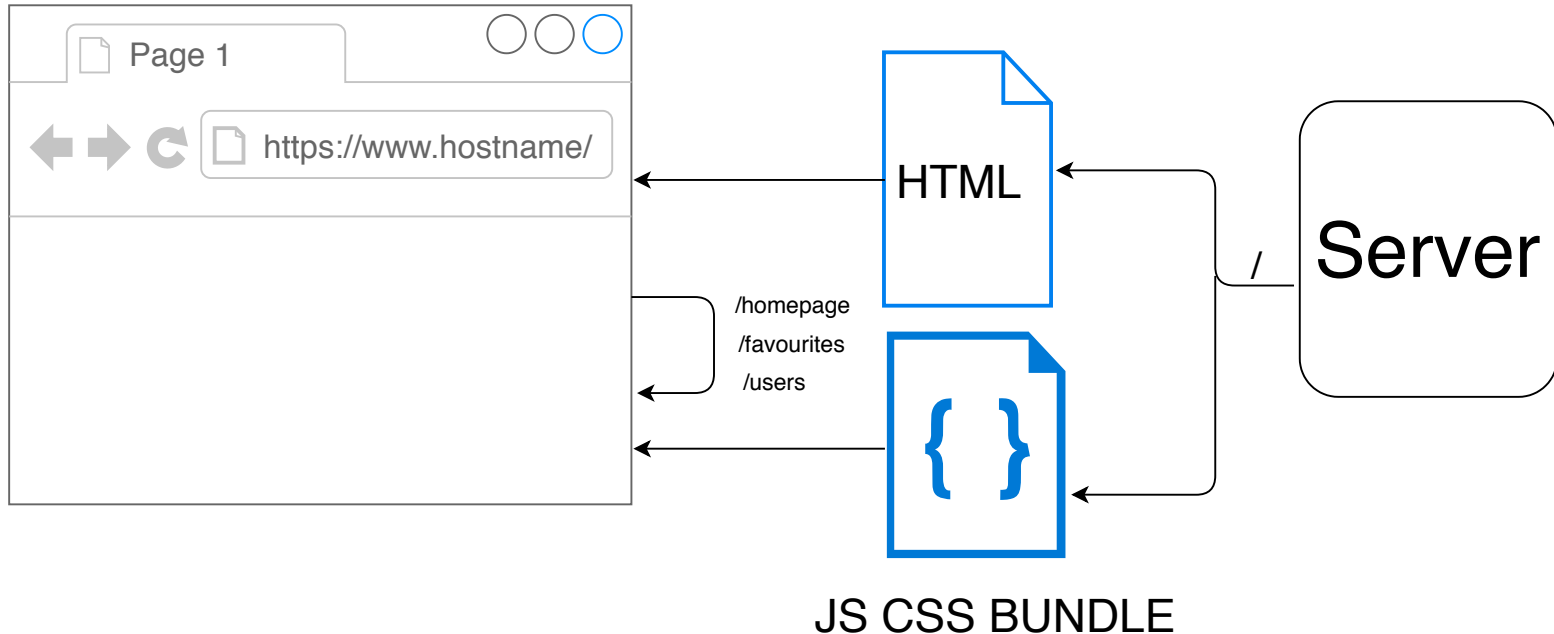


HTML - structure

CSS - presentation

JS - behaviour

SINGLE PAGE APPLICATIONS



BUZZWORDS

NodeJS

callback

npm

ES6

third party
component

JSX

REST API

create-react-app

ESLint

Resources

Repository: <https://github.com/sahilaug/reactjscrashcourse>

REACTJS

- UI library - NOT a framework
- fast rendering
- reusable components
- open-sourced by Facebook in 2013
- JSX

Types of Components

- presentation components
- stateful components

JS Basics (variables)

- var
- let
- const

JS (Ternary Operator)

```
if (condition) {  
    statement1();  
} else {  
    statement2();  
}
```

condition ? statement1 : statement2

JS Basics (function)

```
function add(a, b) {  
    return a + b;  
}
```

JS Basics (arrow function)

```
const add = (a, b) => {  
  return a + b;  
}
```

Other ES6 concepts

- imports
- classes

State vs Props

- mutable using `setState`
- managed by the component
- component and its children rerender if the state changes

- immutable
- passed down by parent
- only component whose props change rerenders

Routing

- React Router - Route, Link, NavLink
- Reach Router

JSON Objects

- JavaScript Object Notation
- lightweight format to represent objects
- easy to read

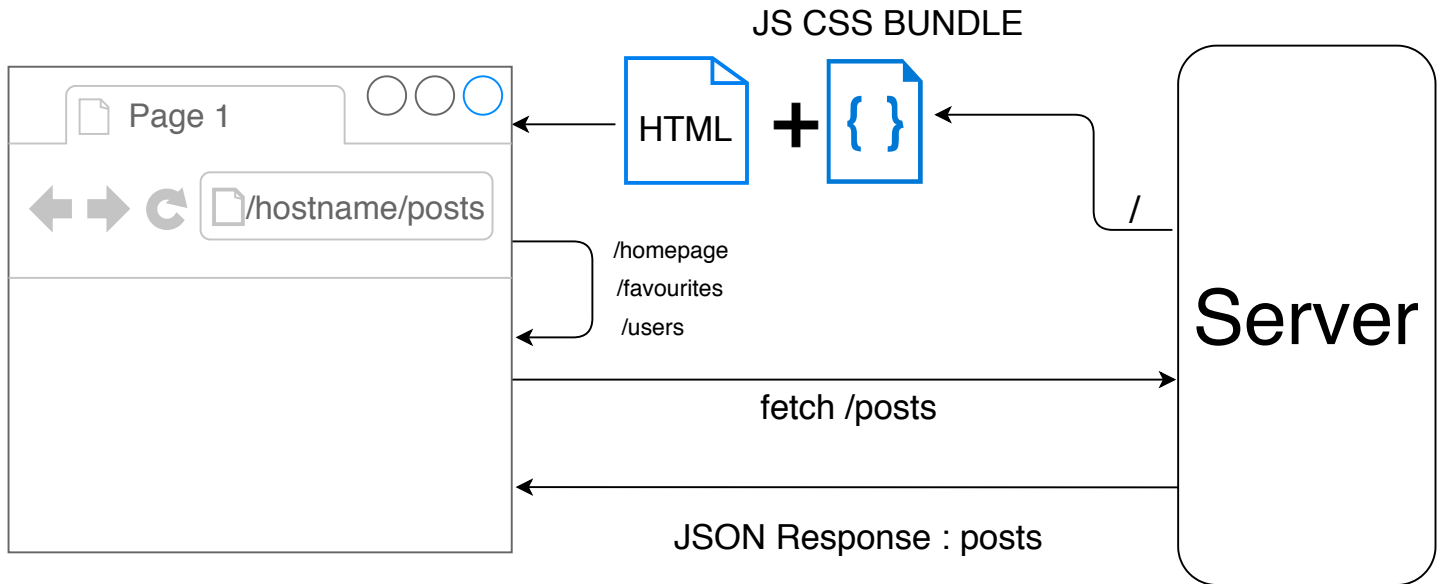
```
const name = {  
  firstName: "Jason",  
  lastName: "Bourne"  
}
```

ASYNCHRONOUS JS

- callbacks
- promises
- async await

Eg: <http://api.tvmaze.com/search/shows?q=breaking%20bad>

AJAX API CALLS



HOW TO MAKE API CALLS ?

- fetch
- axios

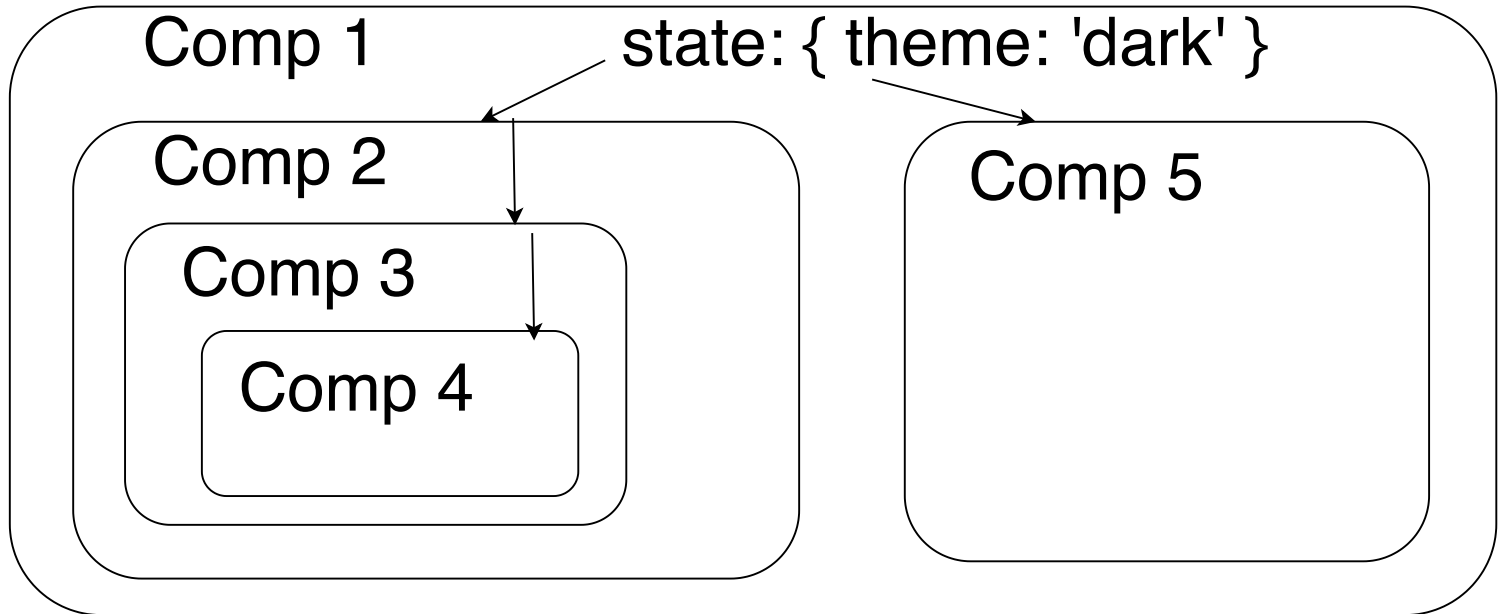
JS (Iterators)

- map
- filter

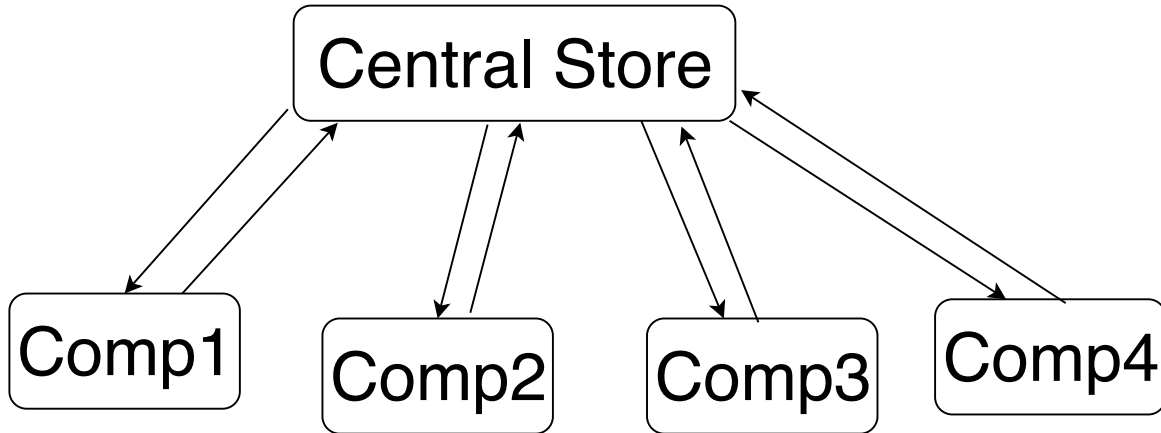
JS (Destructuring)

- Object Destructuring
- Array Destructuring

One Way Data Flow



Two Way Data Flow



Two Way Data Flow

- React Context
- Redux

EXERCISE 1

- Create a new tab comedy, with all episodes belonging to comedy genre

* Hint : favourites tab

EXERCISE 2

- Create a search tab in the header. The app should search for the episodes related to the entered search term

Q n A

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