REACT ROUTER

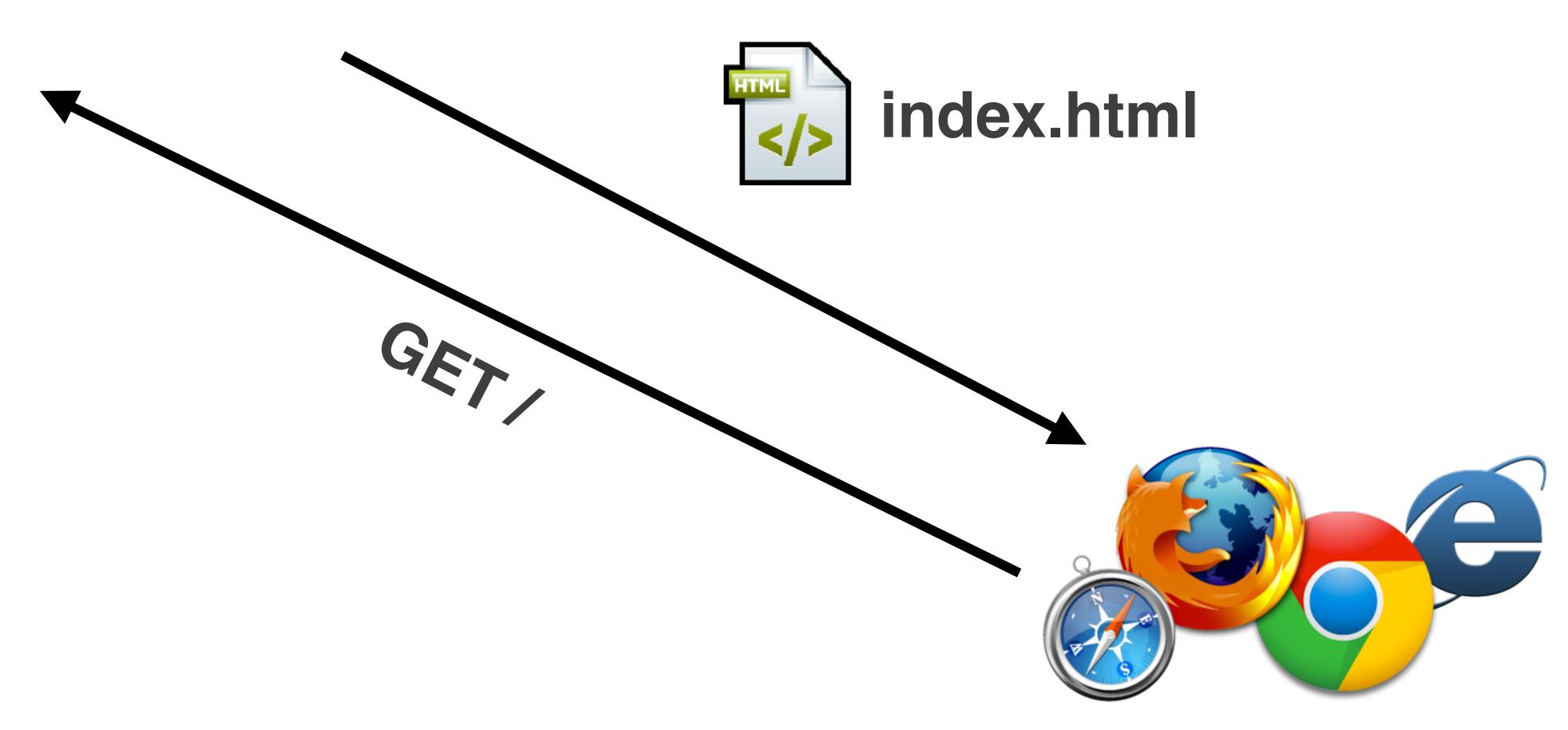
Declarative routing for React

REVIEW

NOT SINGLE PAGE APPLICATION



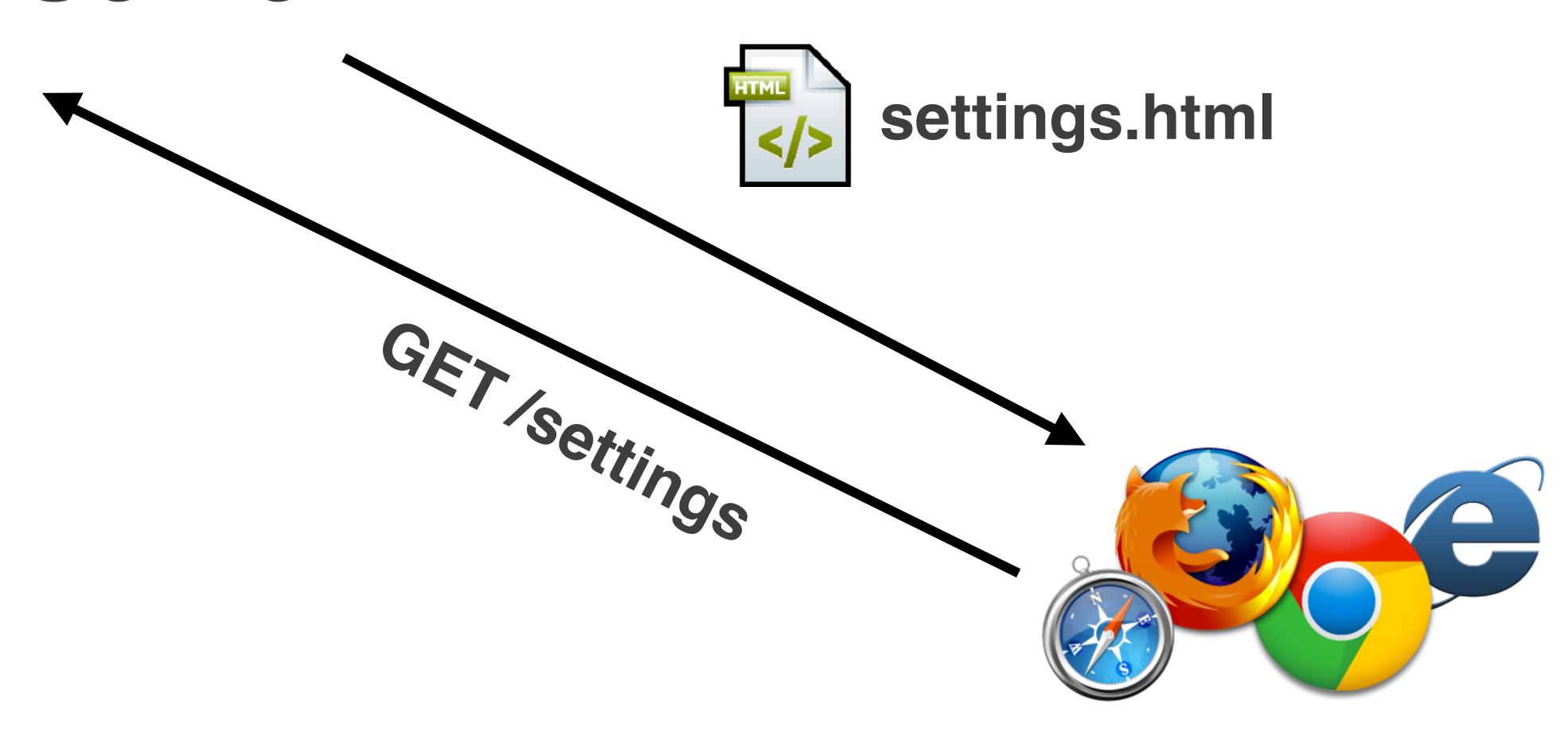
Server



User clicks on link...



Server



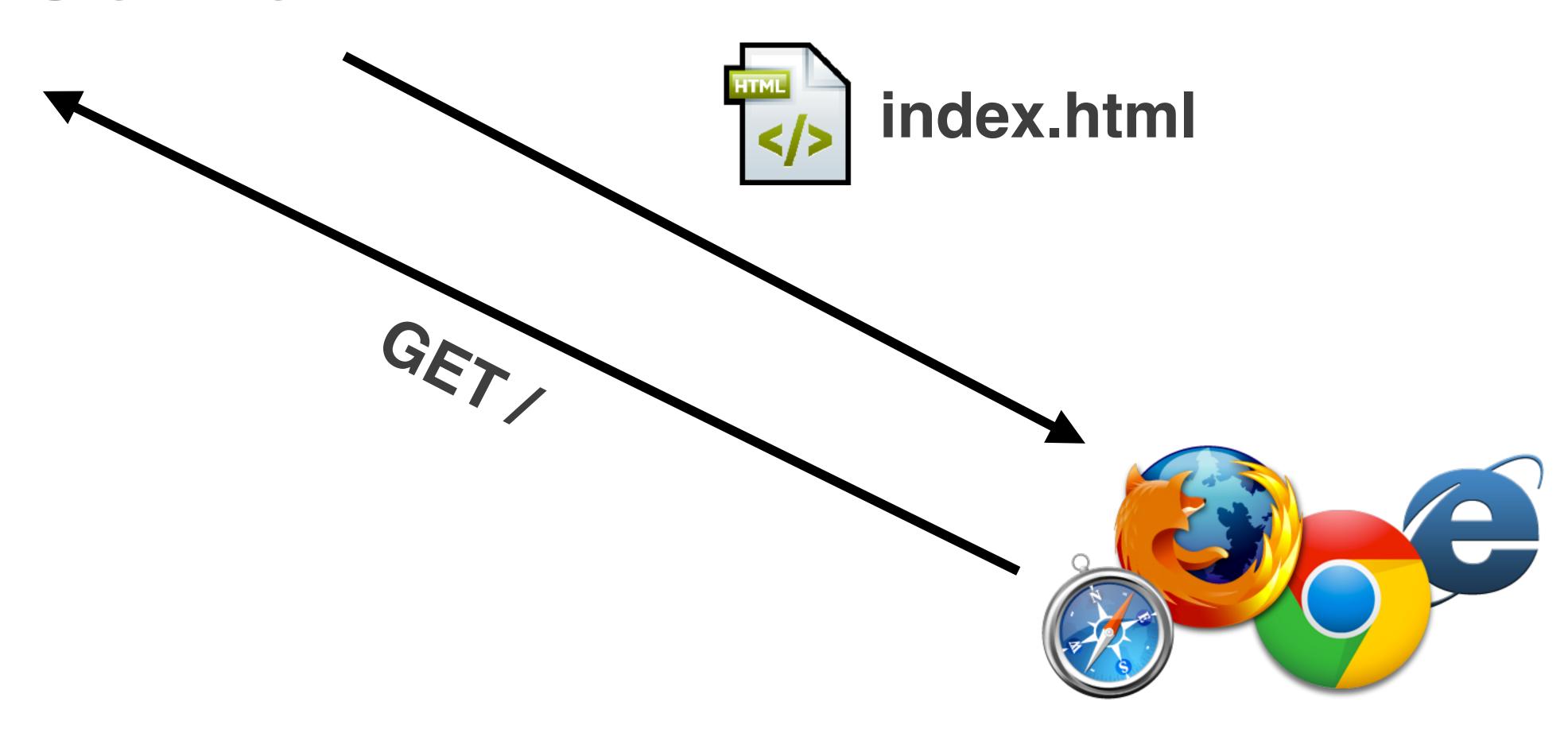
NOT SINGLE PAGE APPLICATIONS

- Views stored on the server, served up as HTML pages.
- When user goes to a new page, the browser navigates in totality, navigating, refreshing and retrieving a brand new HTML document.
- Each page, since it is a new page, retrieves stylesheets, script files, etc.

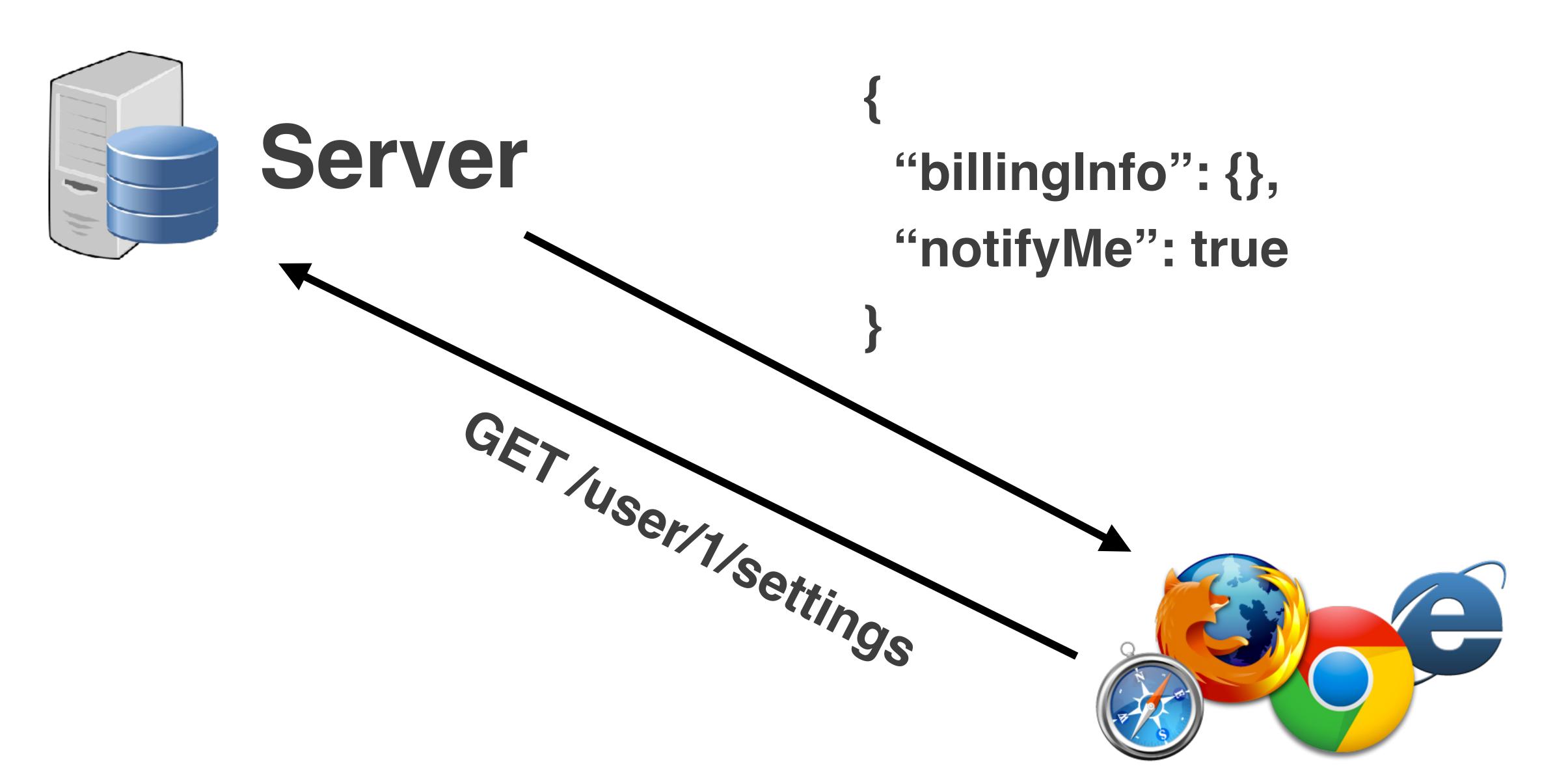
SINGLE PAGE APPLICATION (SPA)



Server



User clicks on link...



Display settings view

SINGLE PAGE APPLICATIONS

- On page change, a new page is not loaded. The front-end JavaScript replaces elements on existing DOM to update view.
- AJAX plays a big part to fill in the data
- Two options for dealing with the url bar:
 - Use the HTML5 Browser History API, OR
 - Manipulate the Document Fragment Identifier (#)



WHAT IS REACT-ROUTER?

- React Router keeps your Ul in sync with the URL.
- Ties into URL and history to allow for easy navigation to and between different parts of your application.
- Easily integrates nesting of components.

INGREDIENTS

INGREDIENT LIST

A Router (either HashRouter or BrowserRouter)

Routes

Links

"ROUTER" (HASH ROUTER OR BROWSER ROUTER)

ROUTER

- Answers simple question: Use the BrowserHistory API, or abuse the Document Fragment Identifier (#)
- Needs to be the parent of almost everything
 - Why? Because whenever the url changes, it's the Router component that changes its state, which causes everything beneath it to re-render

import {HashRouter as Router} from 'react-router-dom'

```
import {HashRouter as Router} from 'react-router-dom'
const Main = () => {
  return
    <Router>
      {/* basically everything else */}
    </Router>
```

ROUTE = PATH + COMPONENT

ROUTE = PATH + COMPONENT

<Route path='/somePath' component={SomeComponent} />

WHEN THE URL BAR MATCHES THE ONE SPECIFIED IN THE ROUTE, REACT-ROUTER CAUSES THAT COMPONENT'S RENDER FUNCTION TO EXECUTE

THIS MATCHING IS "FUZZY" (THINK "JUST LIKE APP.USE!")

LIKE AN "A" TAG BUT BETTER

<Link to='somePath'>Go to SomePath

