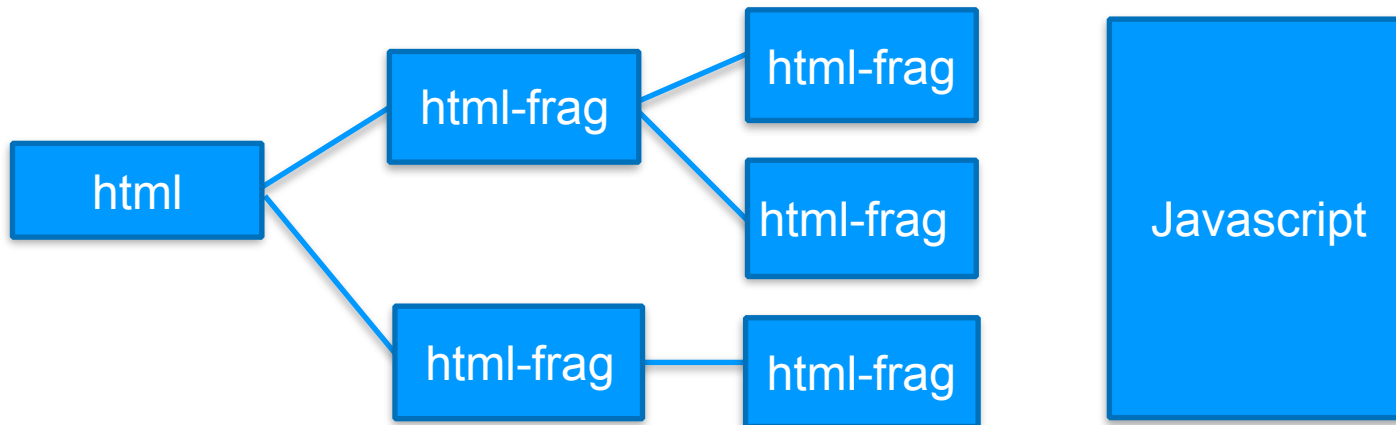
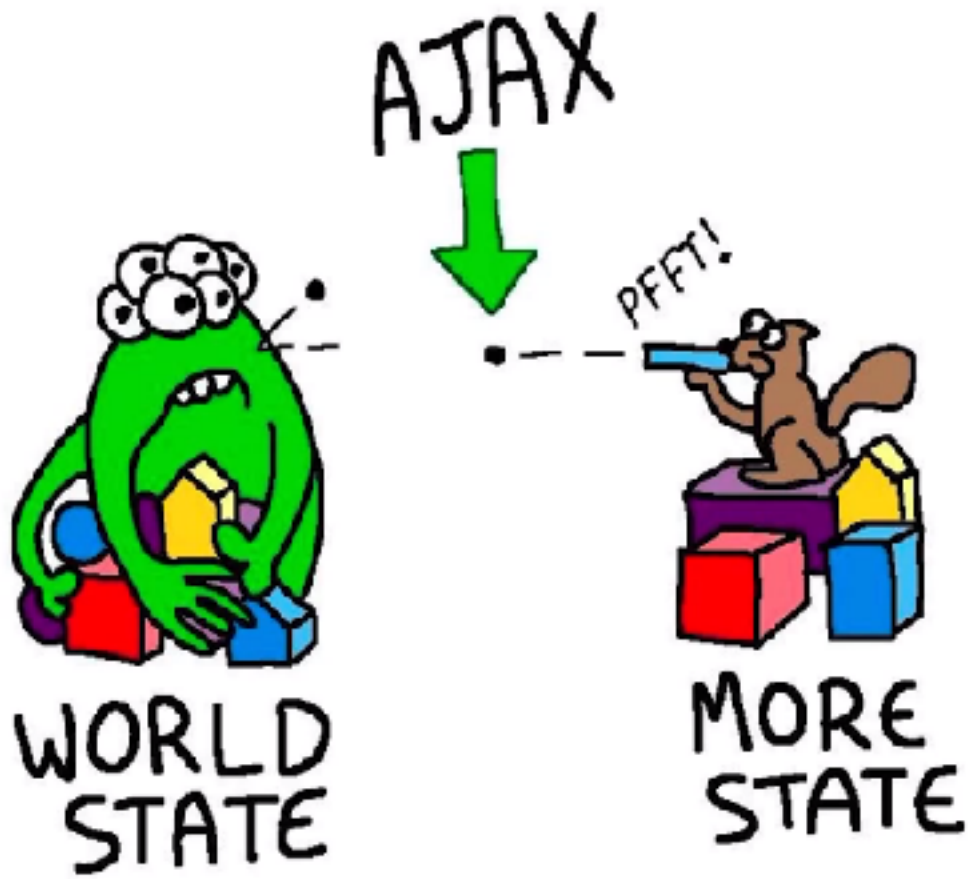


Agenda

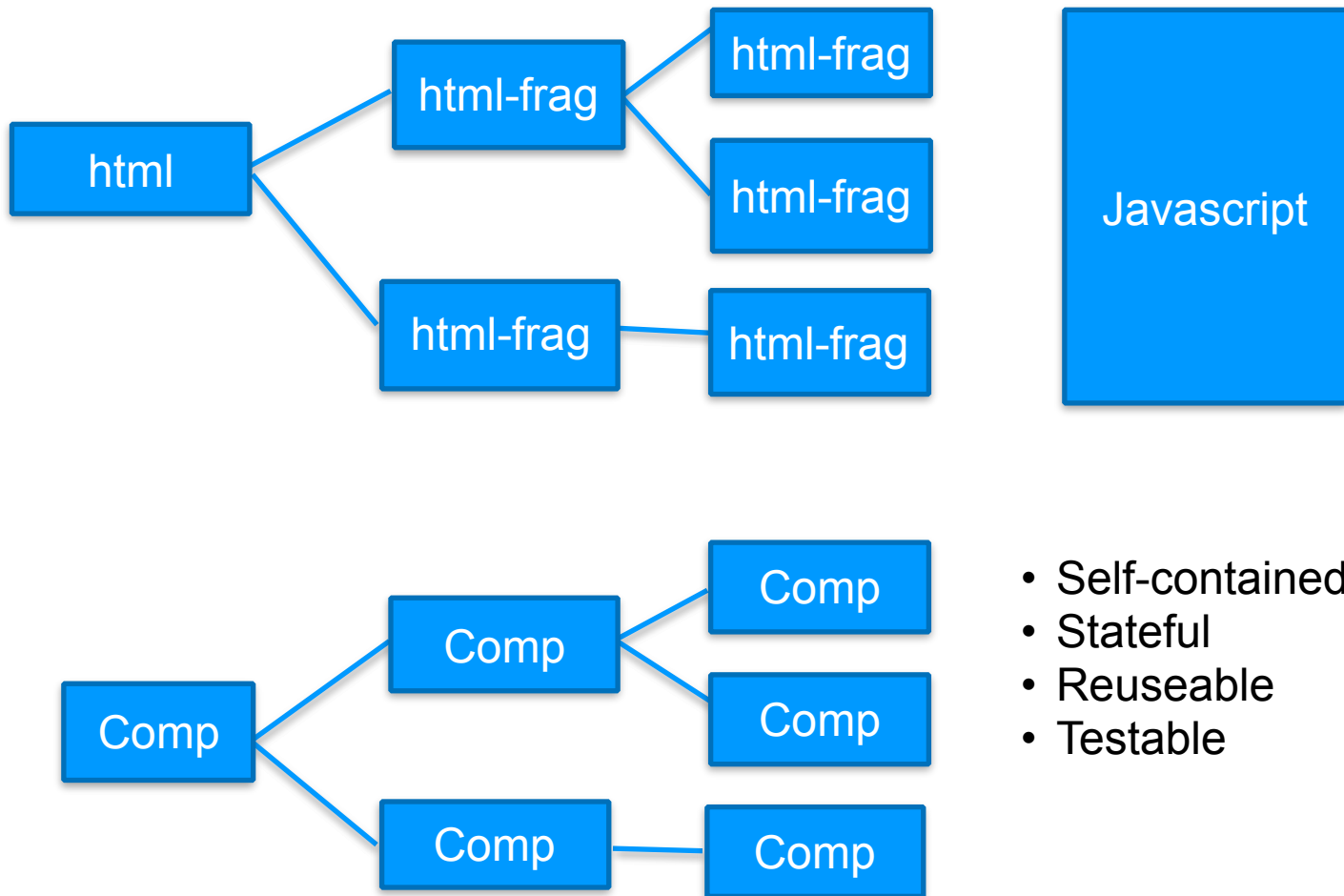
- Problem
 - When web-pages grow more complex
 - Fragmentation (code and state)
 - DOM-manipulations
- Solution
 - Components
 - React
 - Flux pattern
 - Server-side rendering

When web-pages grow





Separation of concerns



React

- View technology by Facebook
- Open Source
- 2-3 years old
- Battle-tested on 1.3 billion users





Demo

Manual DOM-manipulation

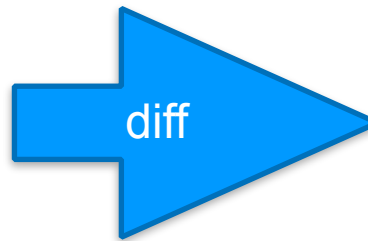
- Lots of code
 - Complicated to write (and optimize)
 - Easy to break
 - Hard to unit-test
-
- We should instead focus producing user-value

Virtual DOM

$f(\text{input, state}) \rightarrow \text{Virtual DOM}$

Virtual DOM

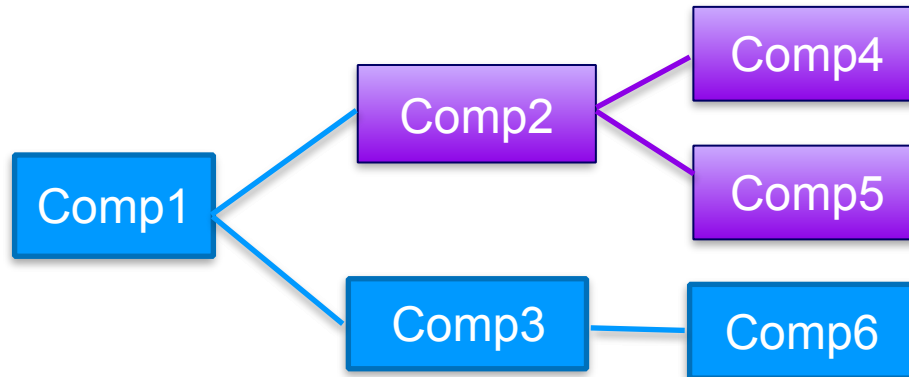
```
<div>  
  Number: <span>1</span>  
</div>
```



span.innerHTML = "2"

```
<div>  
  Number: <span>2</span>  
</div>
```

One-way data flow



Migration

- Easy to use together with existing technologies
- Everything new
- Migrating existing
- Start from inside



Flux