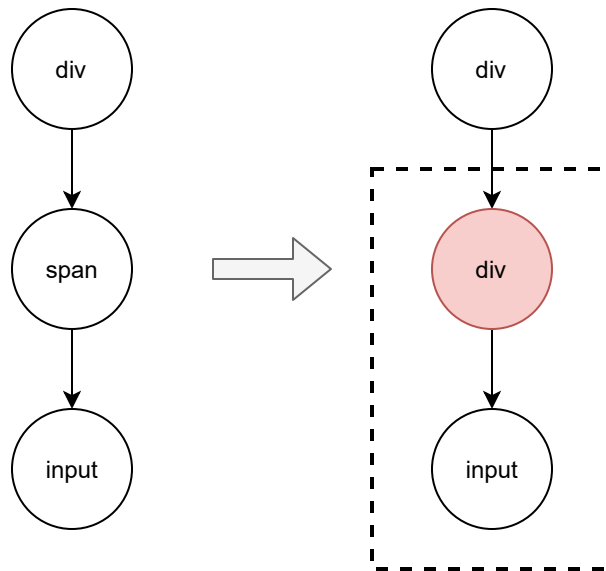# MAKING <REACT /> WICKED FAST

Dylan Paulus

React, when rendering, implements a heuristic O(n) algorithm based on two assumptions

- Two elements of different types will produce different trees

- A child element containing a consistent key prop is likely stable

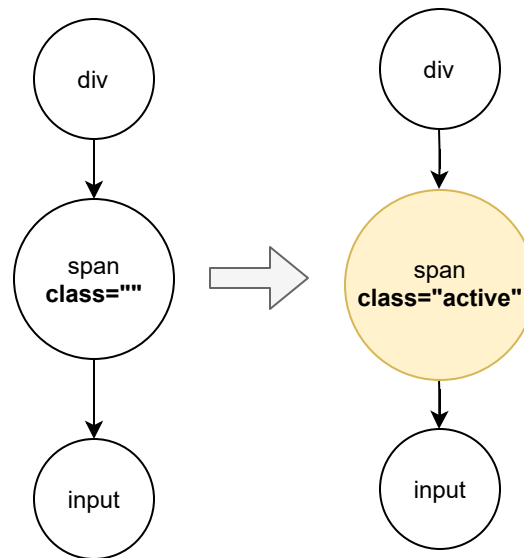*Two elements of different types will produce different trees*

Updating element types will destory and re-add the element

Changing Elements: https://codesandbox.io/s/2woyv5mrr0

Two elements of different types will produce different trees

Updating attributes will update the underlying DOM

Changing Attributes: https://codesandbox.io/s/jz0o5zn6oy

A child element containing a consistent key prop is likely stable

Keys

```
<ul>                      <ul>
  <li>Cap'n Jazz</li>       <li>Owen</li>
  <li>Owen</li>             <li>American
                            Football</li>
<li>Their/They're/There</ul>
</ul>
```

Questions?

(https://github.com/ganderzz/making-react-fast)