

Introductory React.

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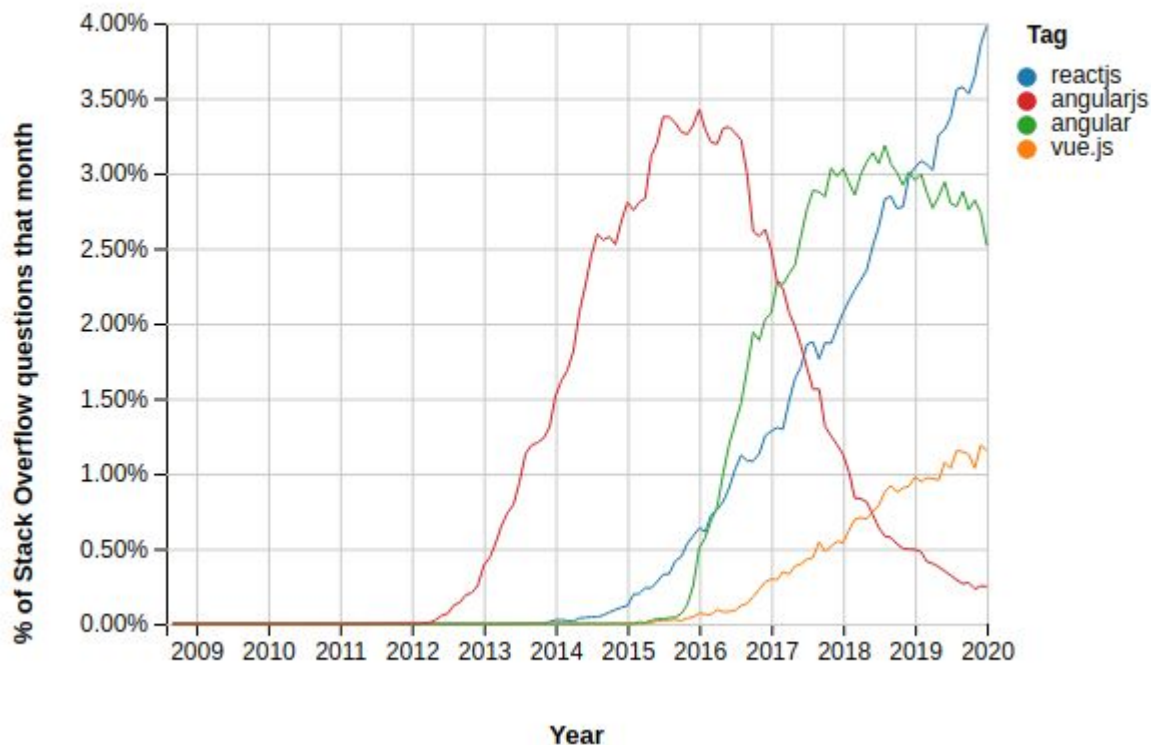
What is it?

A Javascript library created by facebook to:

- Build fast and interactive user interfaces
- A front end technology (runs on the browser)

What is it?

- The most popular front-end framework



Components

The building blocks



- A piece of the UI
- Independent
- Isolated
- Reusable

```
<div>  
  <NavBar></NavBar>  
  <Item></Item>  
</div>
```

Complex UI with simple pieces



Root component



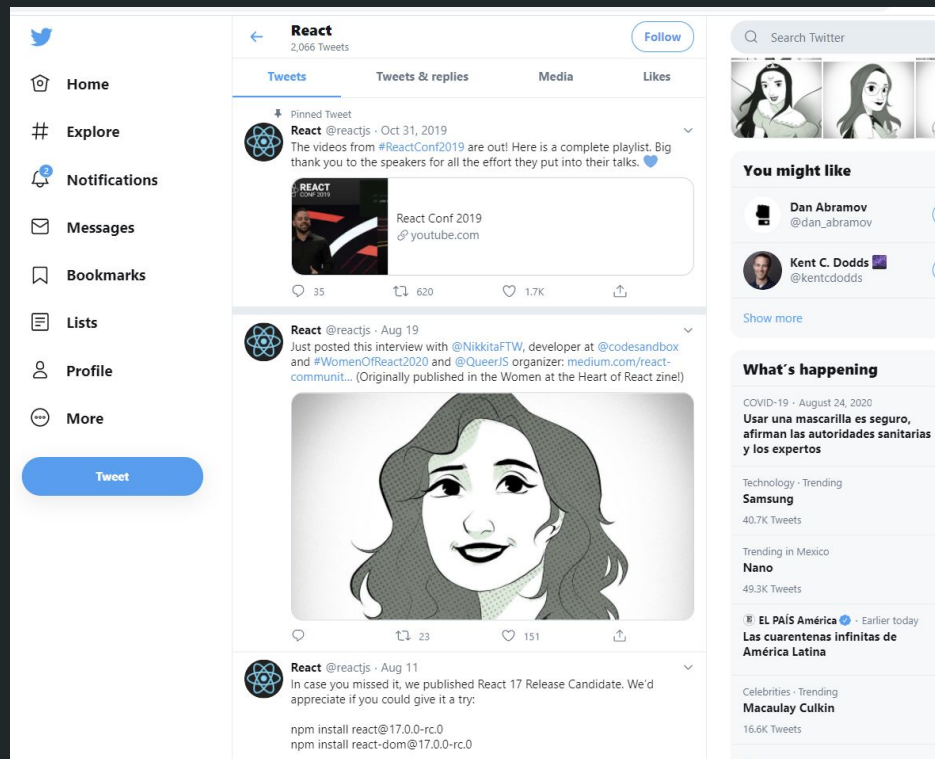
Every react app has at least one component called
Root Component

Represents the entire application and contain other
Child Components



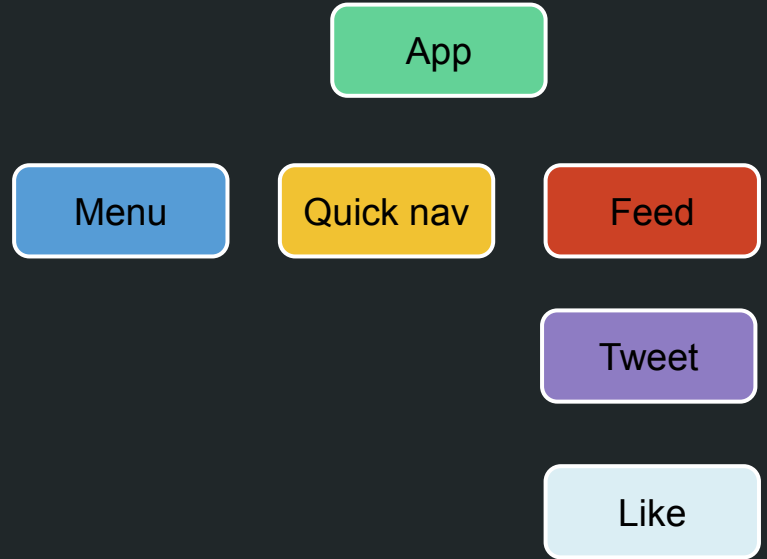
Every React app is basically a

Component Tree



Every React app is basically a

Component Tree



Class Component

Implementation

```
import React, { Component } from 'react';
```

Unsaved changes (cannot determine recent change or authors)

```
class NavBar extends Component {
```

```
  render() {
```

```
    return (
```

```
      <nav className="navbar navbar-expand
```

```
        <ul>
```

```
          <li>Menu 1</li>
```

```
          <li>Menu 2</li>
```

```
          <li>Menu 3</li>
```

```
        </ul>
```

```
      </nav>
```

```
    );
```

```
  }
```

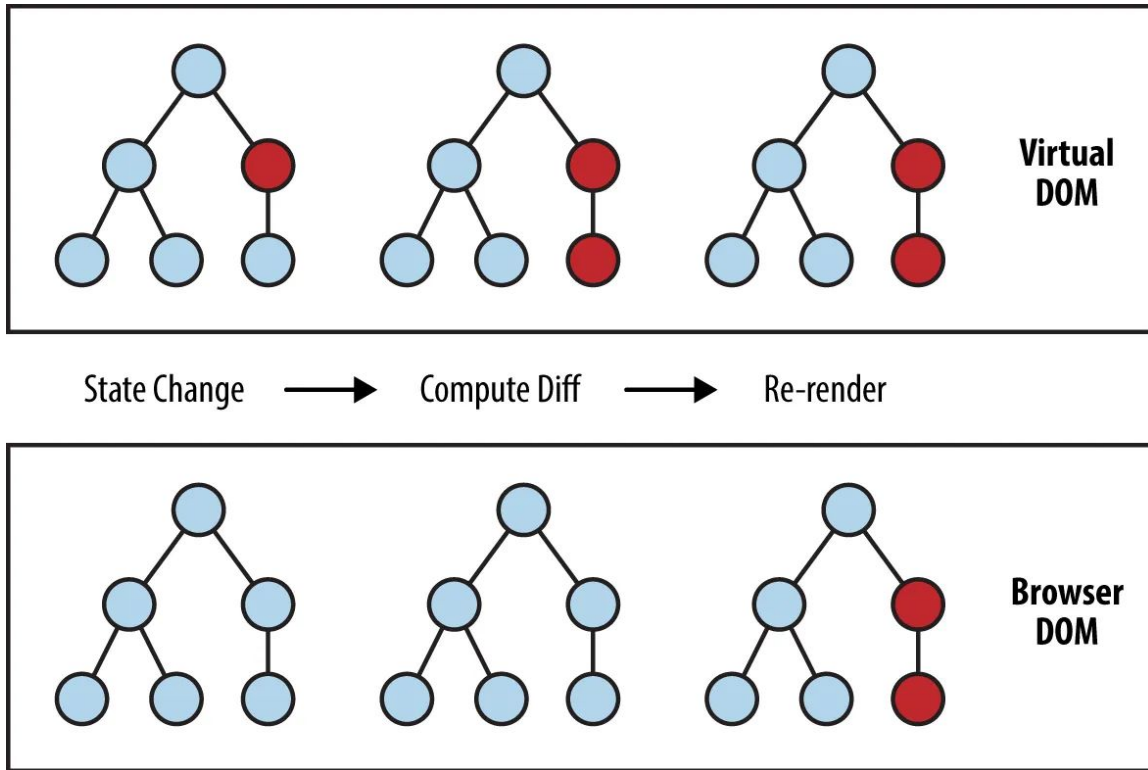
```
}
```

```
export default NavBar;
```

Virtual DOM

Virtual DOM is **in-memory** representation of the Real DOM.

It is a lightweight JavaScript object which is a copy of the Real DOM.

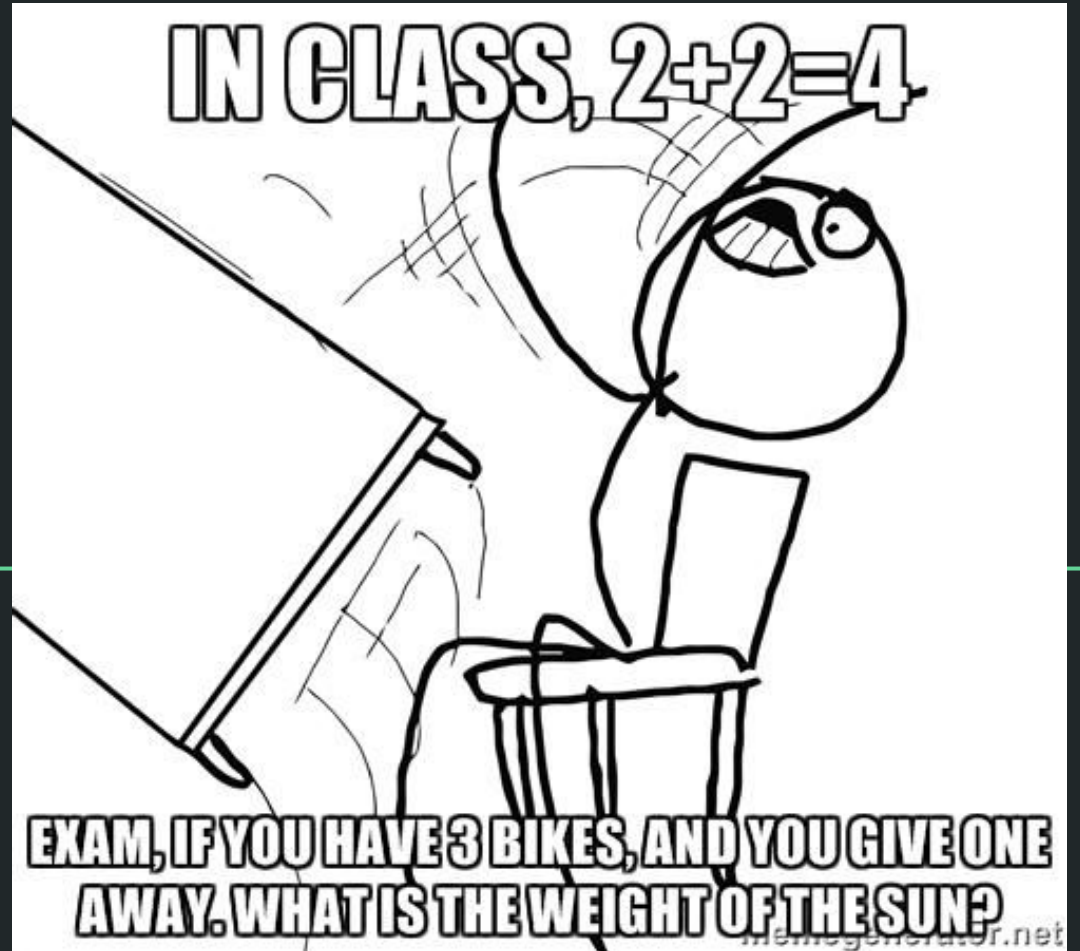


Virtual DOM

1. No need to query DOM to access elements
No more: `document.getElementById`
2. Simple change the state of the components
3. And React will automatically update the DOM to match the state

The UI **reacts** to state changes

Time to practice



Implement

- Increase
- Decrease
- Don't allowed **less than** zero



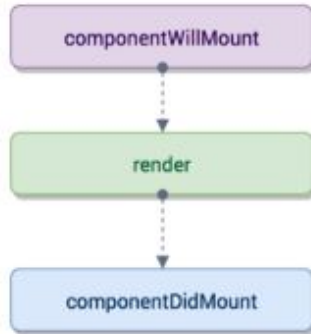
Components lifecycle

Let hang from the hooks

Initialization

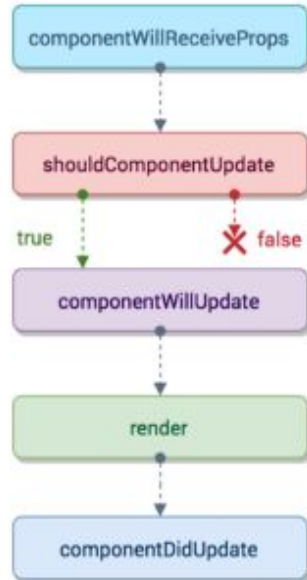
setup props and state

Mounting

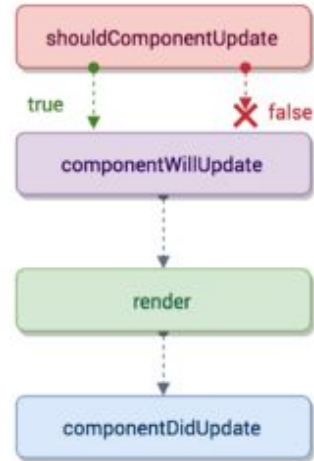


Updation

props



states



Unmounting

componentWillUnmount