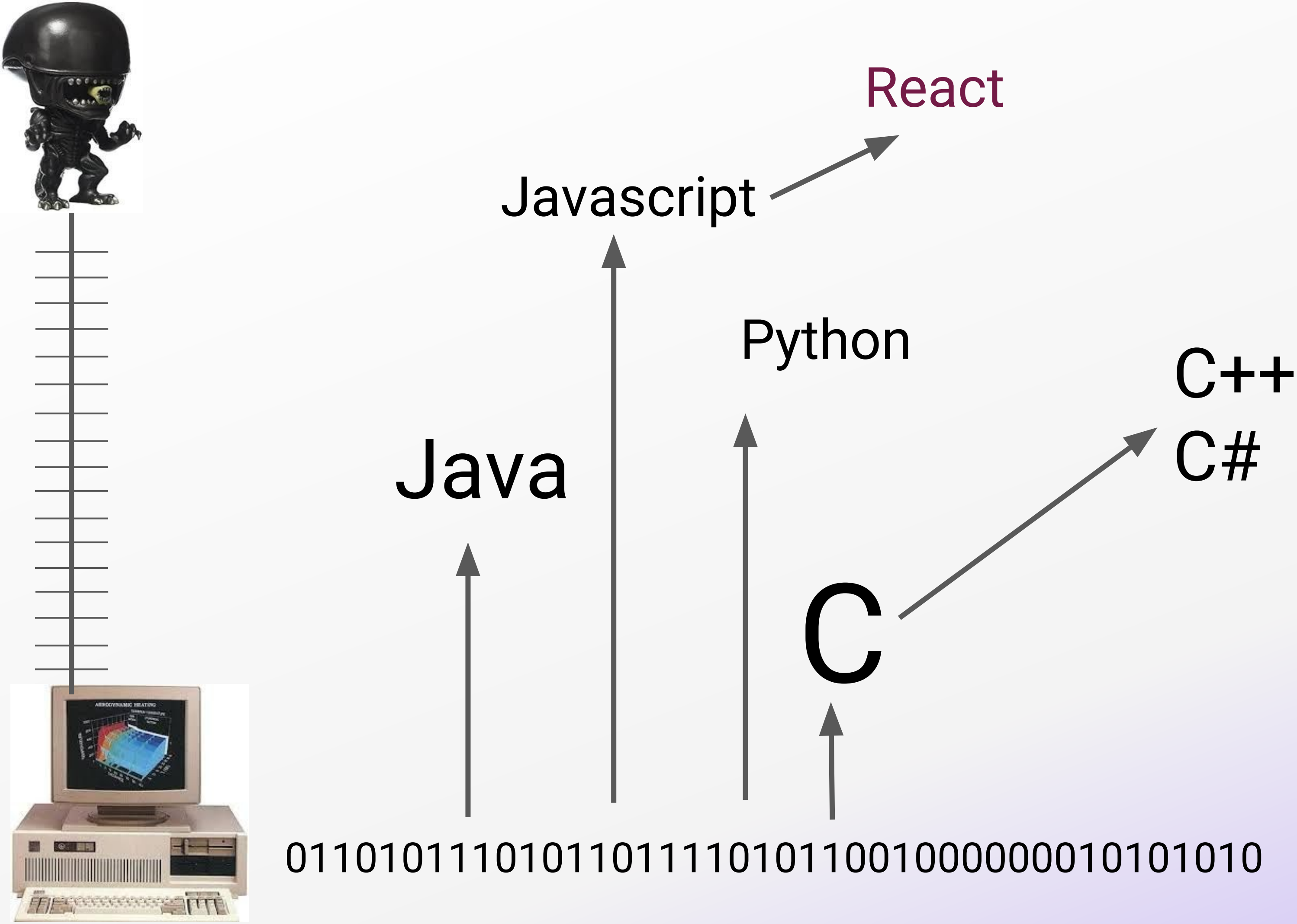
t4tech

t4tech

https://t4tech-nyc.github.io

https://github.com/t4tech-nyc



React

Javascript

Python

C++

C#

Java

C

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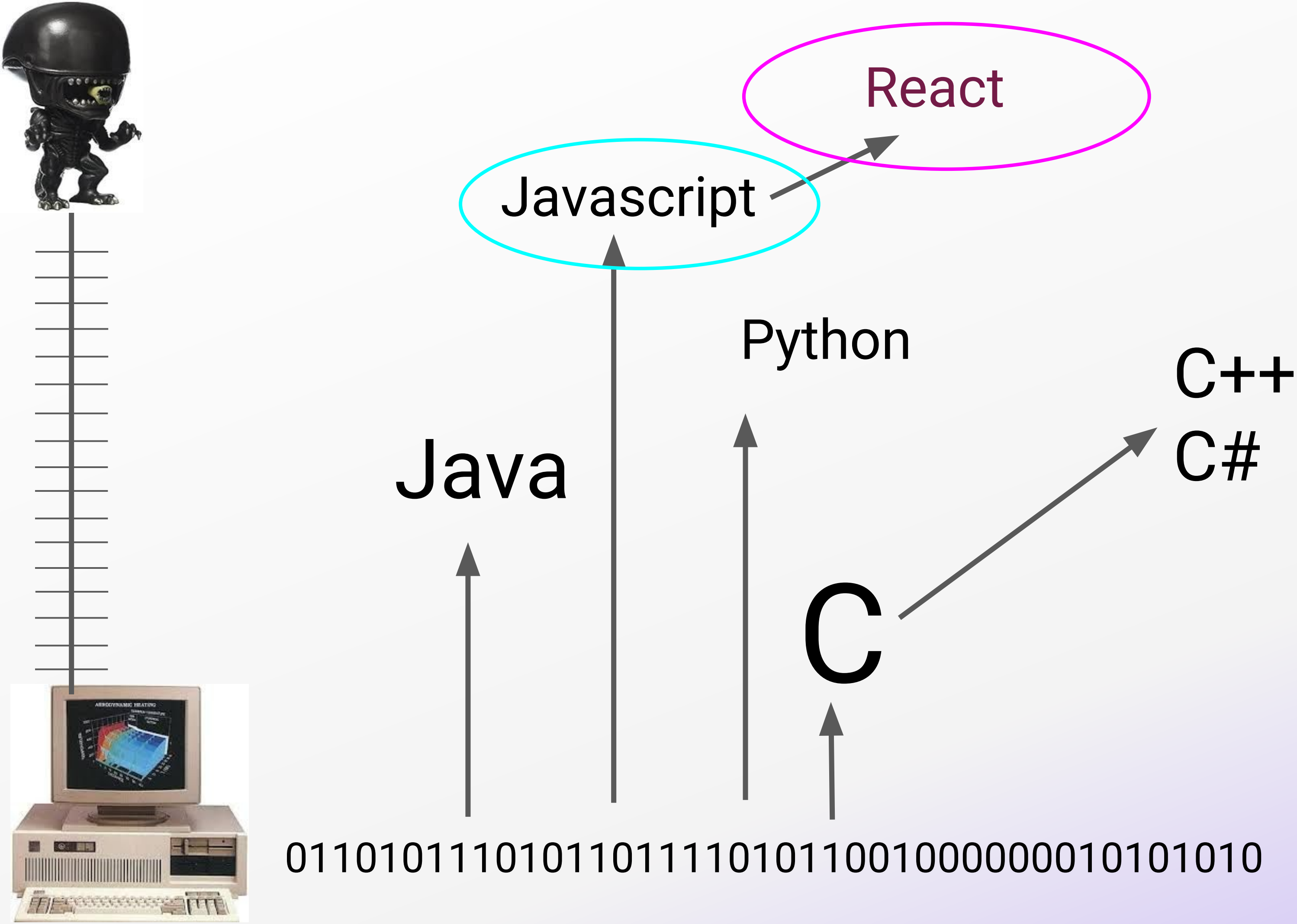

React

Javascript

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React.js

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Javascript library for front end development

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Useful for state management

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Promotes modularity

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One way data flow

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State =

Modularity =

One Way Data Flow =

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State = The given truth of an application *at that moment in time*

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Modularity = Reusable, flexible, bite-size building blocks

One Way Data Flow =

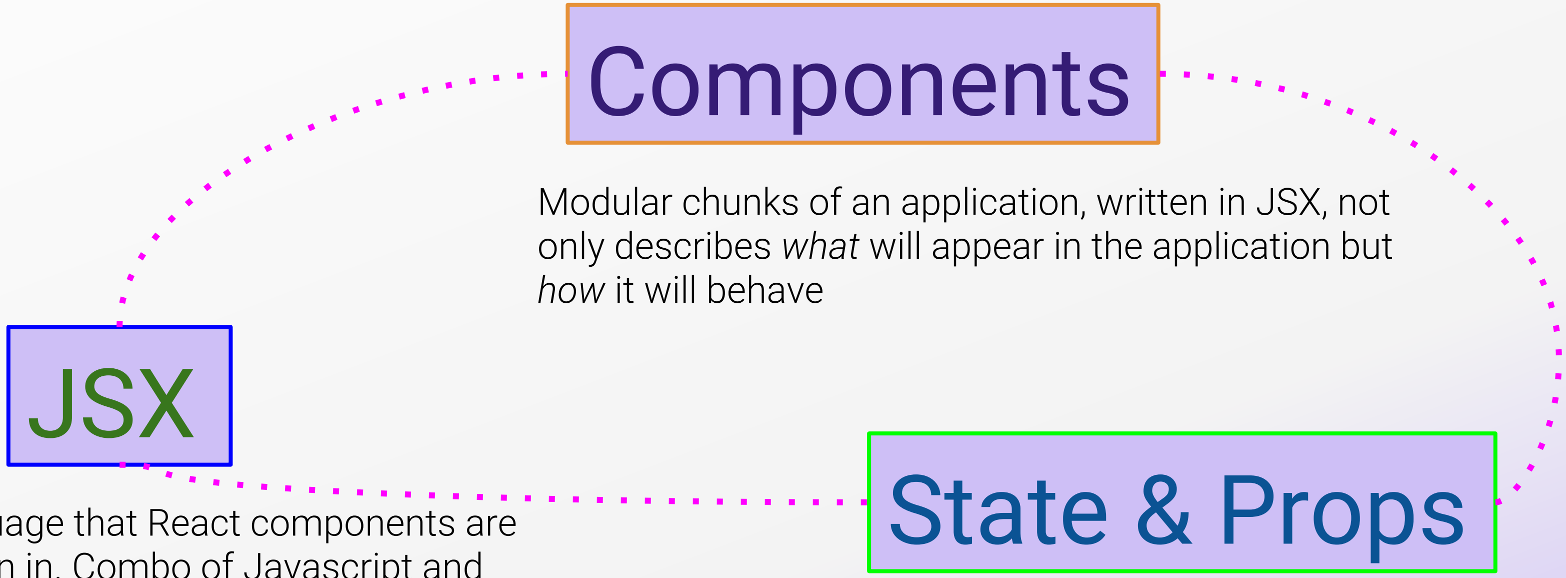
React.js

State = The given truth of an application *at that moment in time*

Modularity = Reusable, flexible, bite-size building blocks

One Way Data Flow = Data flows from the top down, things are inherited hierarchically

React.js



Components

Modular chunks of an application, written in JSX, not only describes *what* will appear in the application but *how* it will behave

JSX

Language that React components are written in. Combo of Javascript and HTML (XML)

State & Props

Built in vaults within components used to store, generate, and pass along data

JSX

HTML + Javascript

JSX

```
<html>
    <body>
        <h1 id=”titleHeader”>
            my cool ass webpage
        </h1>

        <p id=”favePokemonText”>
            My favorite pokemon is
                <span id=”fave”>
                    Pikachu
                </span>
        </p>
    </body>
</html>
```

JSX

```
<html>
    <body>
        <h1 id=”titleHeader”>
            my cool ass webpage
        </h1>

        <p id=”favePokemonText”>
            My favorite pokemon is
                <span id=”fave”>
                    Pikachu
                </span>
        </p>
    </body>
</html>
```

```
let myFavePokemon = ‘Ninetails’

document.getElementById(‘fave’)
    .innerHTML = myFavePokemon
```

JSX

```
<html>
    <body>
        <h1 id=”titleHeader”>
            my cool ass webpage
        </h1>

        <p id=”favePokemonText”>
            My favorite pokemon is
                <span id=”fave”>
                    Pikachu
                </span>
        </p>
    </body>
</html>
```

```
let myFavePokemon = ‘Ninetails’

document.getElementById(‘fave’)
    .onClick(changePokemon)

let changePokemon = function() {
    document.getElementById(‘fave’)
        .innerHTML = myFavePokemon
    }
```

JSX

```
<h1 id=”titleHeader”>
    my cool ass webpage
</h1>

<p id=”favePokemonText”>
    My favorite pokemon is {myFavePokemon}
</p>
```

Components

Components

Written in JSX

Components

Written in JSX

Expects a “render” method

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Written in JSX

Expects a “render” method

May contain other components (inheritance)

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Written in JSX

Expects a “render” method

May contain other components (inheritance)

Possesses “lifecycle methods”

Components

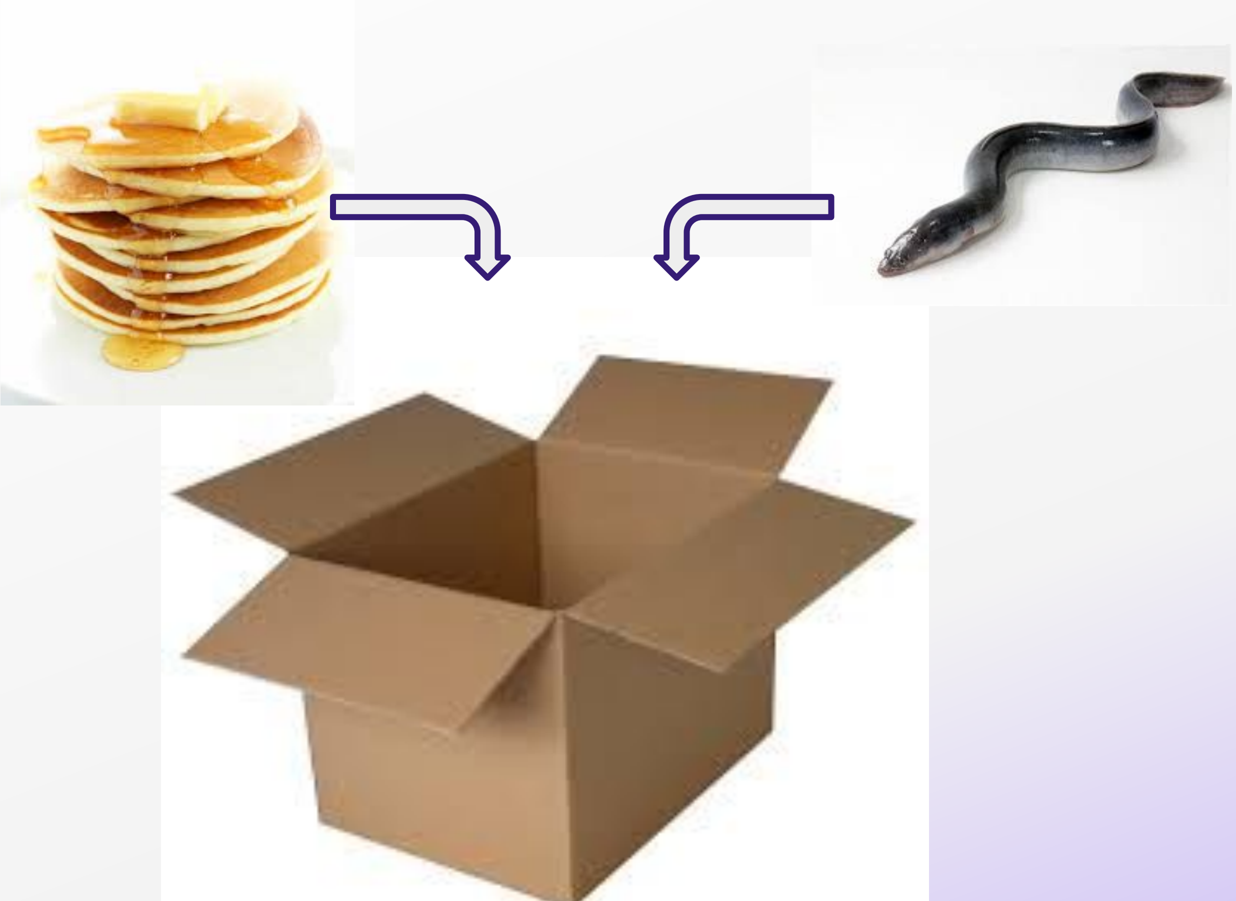
```
export default class MyComponent extends React.Component() {
        constructor(props) {
                super(props)

                This.state = { ...some stuff... }
        }

        render() {
                return(
                        <div> { ...other stuff ... } </div>
                )
        }
}
```

Props & State

Vaults baked into components made to store and pass along data

Props & State

Props & State

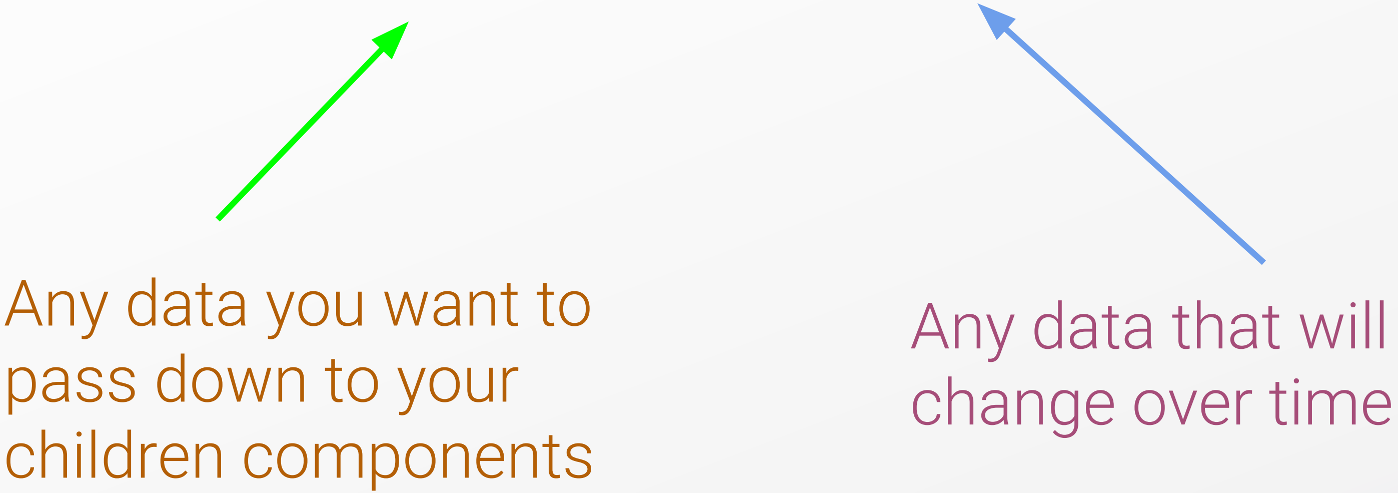


Props & State

Any data you want to pass down to your children components

Any data that will change over time

Props & State



Any data you want to pass down to your children components

Any data that will change over time

Props & State

```
export default class MyComponent extends React.Component() {
    constructor(props) {
        super(props)

        this.state = {
            myFavePokemon: ‘Ninetails’
        }
    }

    render() {
        return(
            <div>
                <h1> {this.state.myFavePokemon} </h1>
                <AnotherComponent favePoke={this.state.myFavePokemon} />
            </div>
        )
    }
}
```

That is it…

That is it...

Oh wait one last thing

Virtual Dom

hehe….

Virtual Dom

It’s complicated