Black & White Series

React & JSX

Thinking in React

React
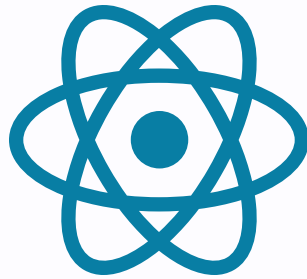
- https://react.dev/
- JavaScript Framework
- to produce interactive (reactive) interfaces
- founded in JSX and Components

First React Program

Available at: frameworks/react/1-basic-raw

First React Program

HTML Root Element

```html
<body>
  <div id="root"></div>
  ...
</body>
```

First React Program

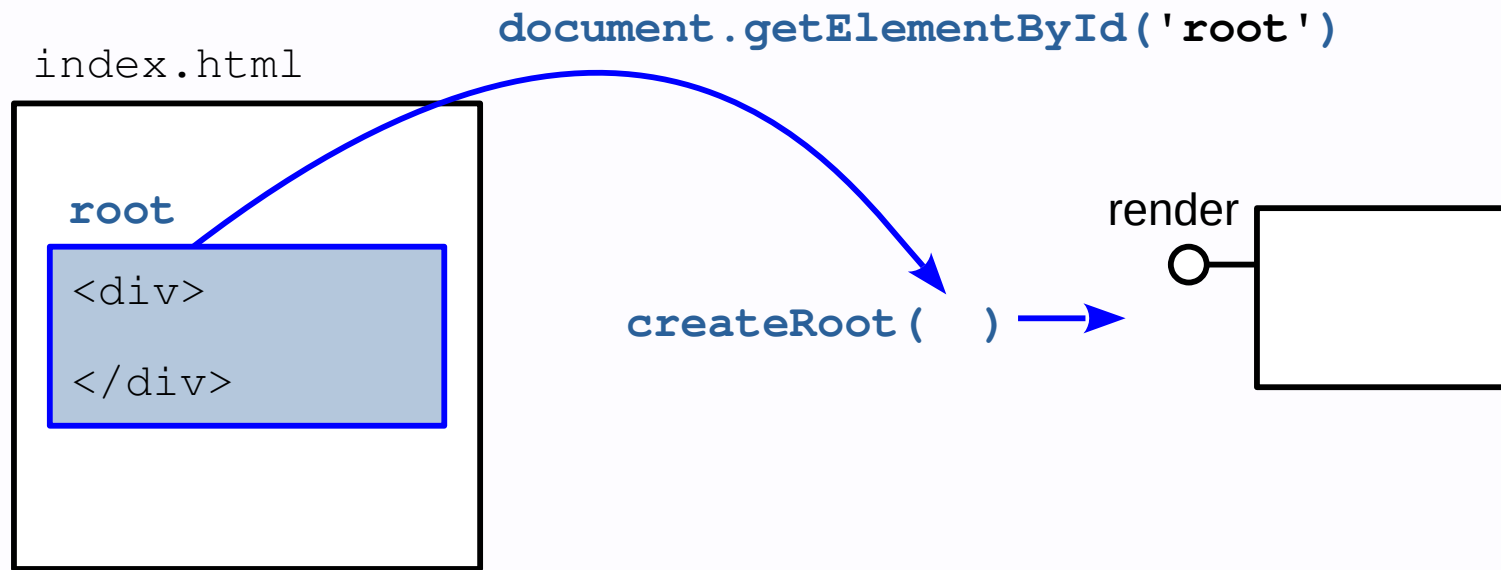# Importing Libraries from CDN

CDN - Content Delivery Network

```
<script src="https://unpkg.com/react/umd/react.development.js">
</script>
<script src="https://unpkg.com/react-dom/umd/react-dom.development.js">
</script>
```
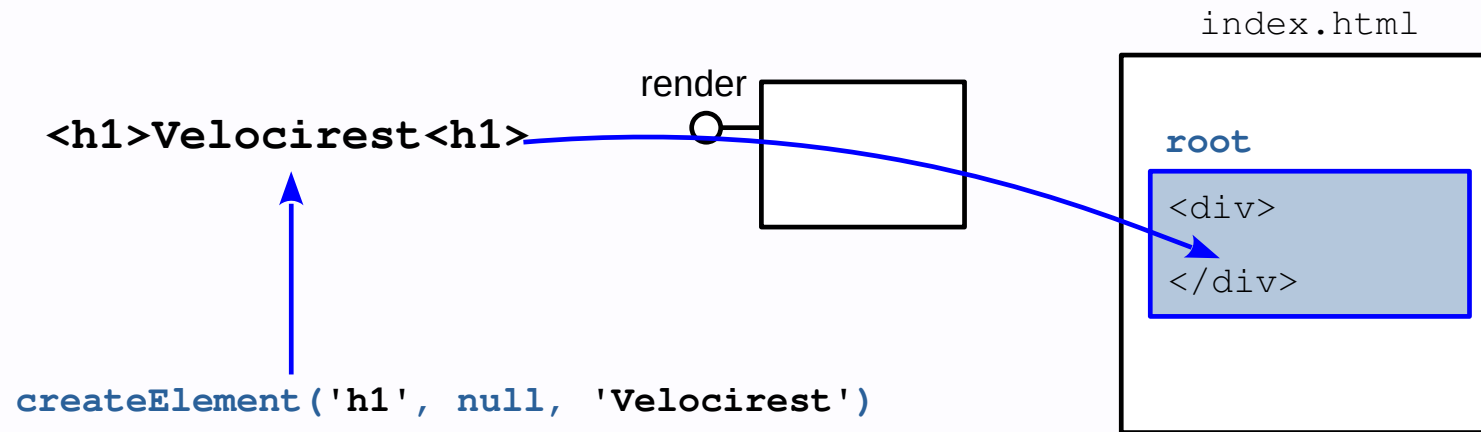
First React Program - Script

```
const { createRoot } = ReactDOM
const root = createRoot(document.getElementById('root'))
```

document.getElementById('root')

index.html

root

```
<div>

</div>
```

createRoot(   )

render

First React Program - Script

```
const { createElement } = React
root.render(
  createElement('h1', null, 'Velocirest')
)
```

index.html

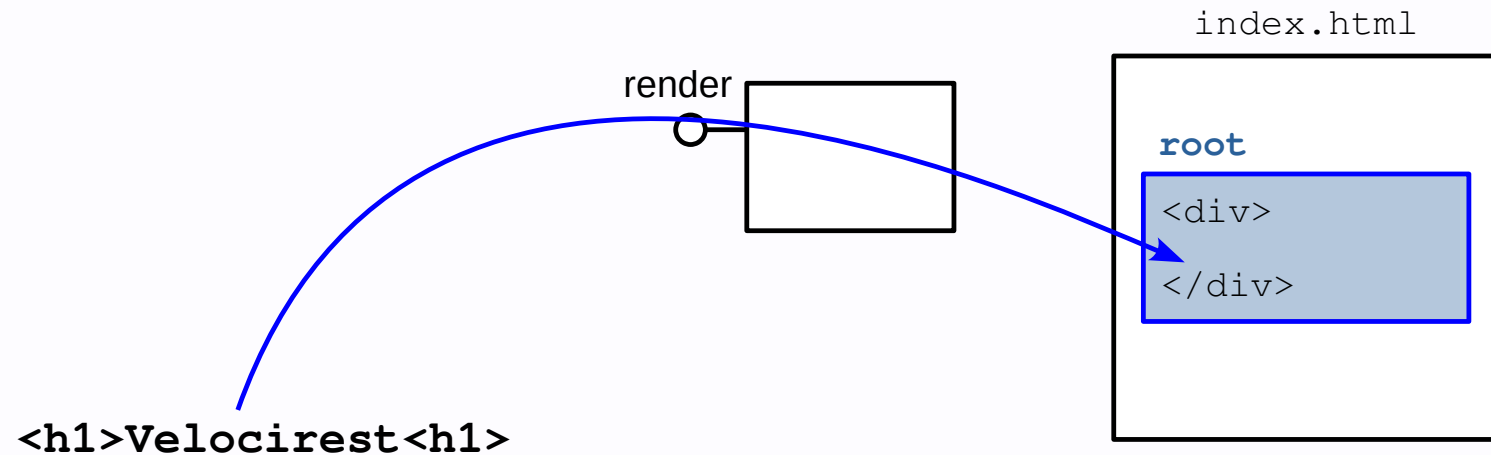**<h1>Velocirest<h1>**

render

root

```
<div>
</div>
```

createElement('h1', null, 'Velocirest')

JSX

- Proposed by Facebook
  - https://facebook.github.io/jsx/
- XML constructs within JavaScript
- Requires the use of a Transpiler (preprocessor)

React with JSX

```
root.render(
    <h1>Velocirest</h1>
)
```

render

index.html

root

```
<div>

</div>
```

<h1>Velocirest<h1>

JSX and Babel Transpiler
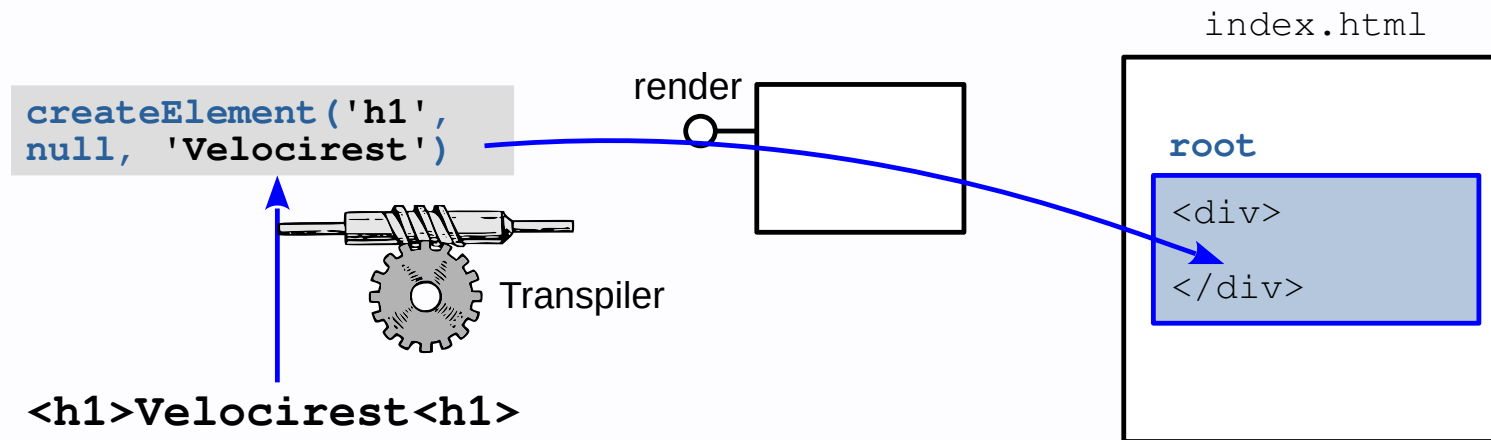
```html
<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>

<script  type="text/babel">
   ...
</script>
```
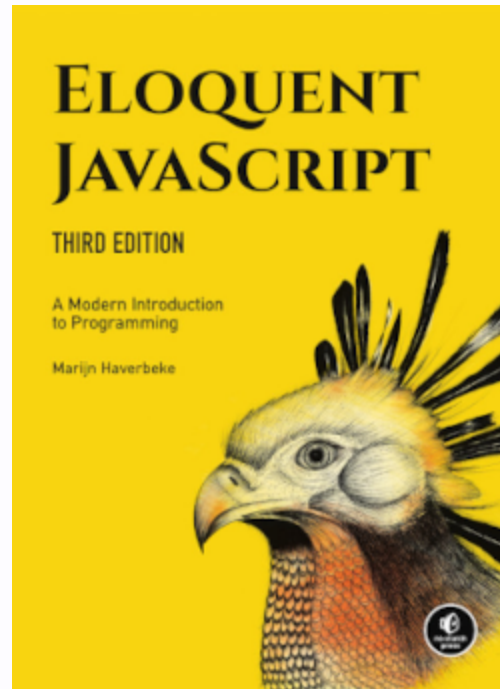
Babel Transpiler

References

- Writing Markup with JSX

- Eloquent JavaScript - https://eloquentjavascript.net/

André Santanchè

www.ic.unicamp.br/~santanch/

Web2Learn

santanche.github.io/web2learn/