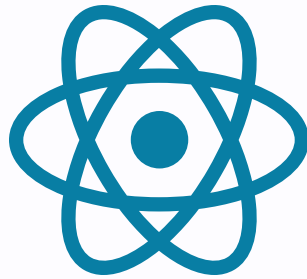


Black & White Series

React & JSX

Thinking in React

React



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

Examples at



<https://codepen.io/santanche/collections/>

First React Program

Available at: [frameworks/react/1-basic-raw](#)

First React Program

HTML Root Element

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

First React Program

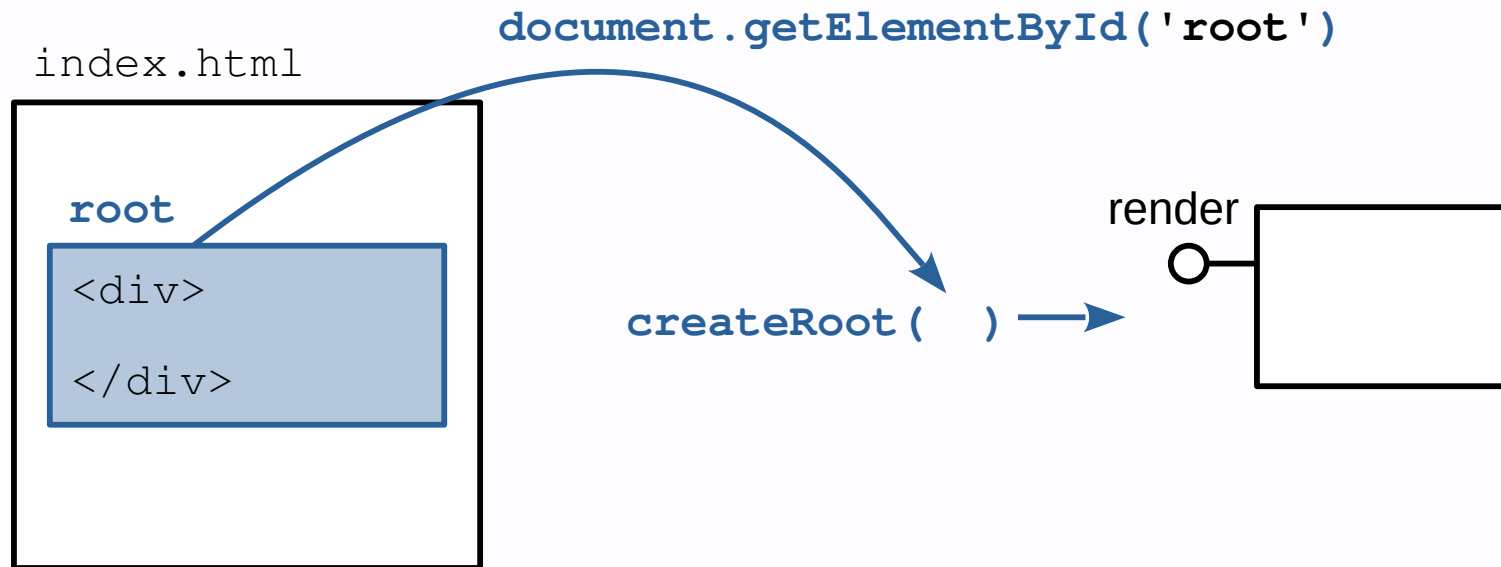
Importing Libraries from CDN

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>
```

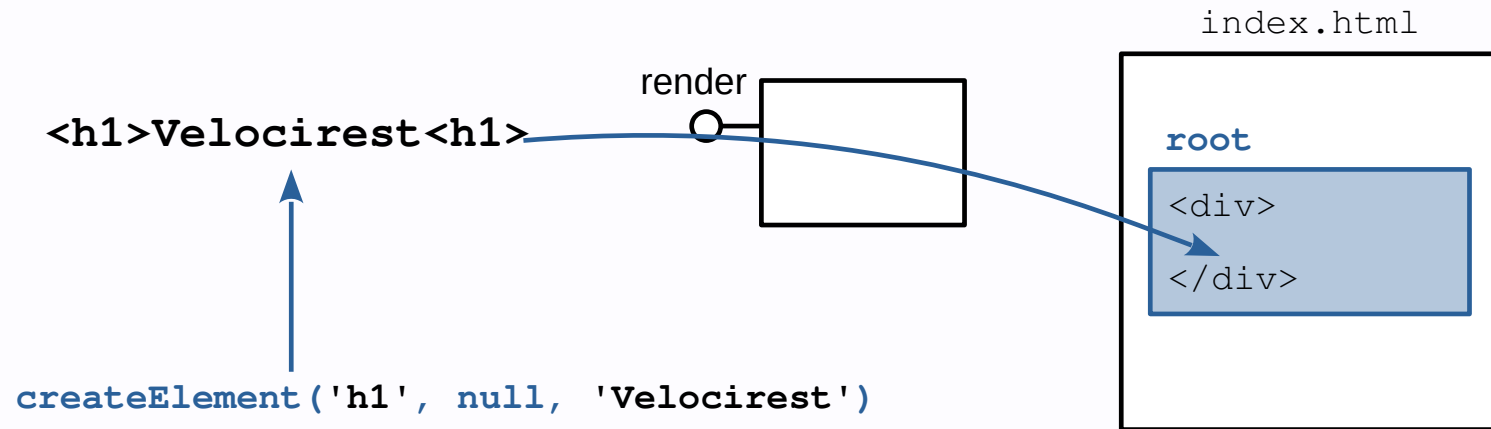
First React Program - Script

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



First React Program - Script

```
root.render(  
  React.createElement('h1', null, 'Velocirest')  
)
```



JSX

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

JSP

`<% %>`

```
<jsp:useBean id="umaBarra" scope="page"
             class="pt.c01jsp.s05bean.Barra" />
```

```
<%= umaBarra.monta() %>
```

PHP

`<? ?>`

```
<?php echo '<p>Hello World</p>'; ?>
```

JSF

`#{ }`

```
<h2>Welcome #{helloBean.name}</h2>
```

AngularJS

{{ }}

```
<div ng-app>  
  <h2>1 + 2 = {{1 + 2}}</h2>  
</div>
```

```
<div ng-app="app">  
  <sentenca></sentenca>  
</div>
```

JSP

<% %>

PHP

<? ?>

JSF

#{ }

JSX

{ }

```
<h1>  
  0 dinossauro {this.props.nome} pulou na lama.  
</h1>
```

```
<Sentenca nome="Horácio" />
```

AngularJS

{{ }}

JSP

<% %>

PHP

<? ?>

JSF

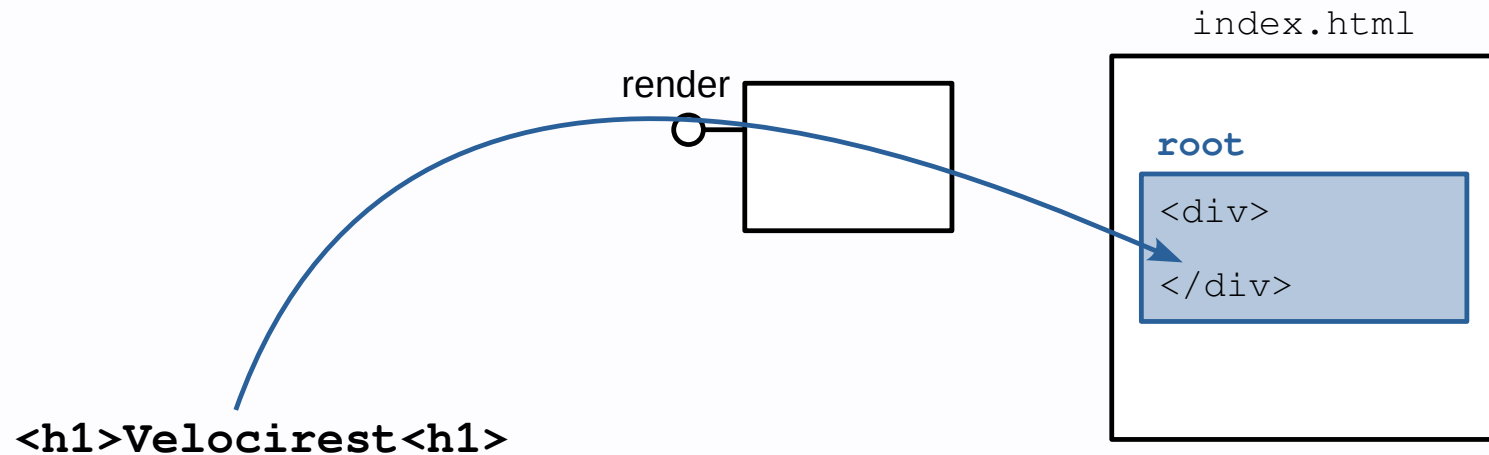
#{ }

React with JSX

Available at: [frameworks/react/2-basic-jsx](https://facebook.github.io/react/docs/frameworks/react/2-basic-jsx.html)

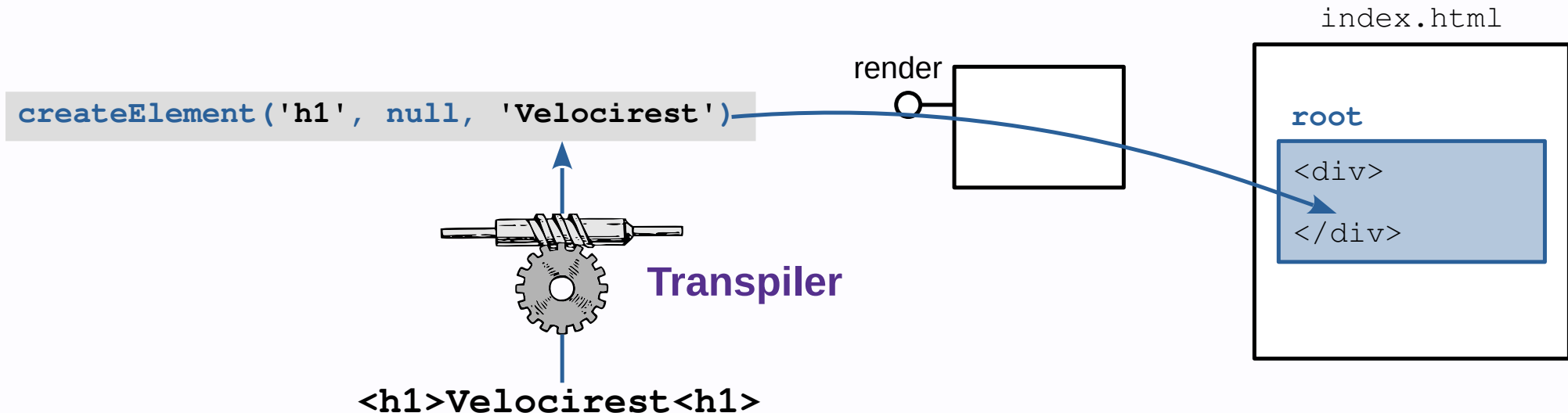
React with JSX

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



JSX and Babel Transpiler

```
<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>  
<script type="text/babel">  
  ...  
</script>
```



Babel Transpiler

BABEL

References

- [Writing Markup with JSX](#)
- [React createRoot](#)
- [React createElement](#)
- [Eloquent JavaScript](#)

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www.ic.unicamp.br/~santanch/

Web2Learn

santanche.github.io/web2learn/