



React

Bc. Júlia Kázmérová

React

- ▶ Javascript knižnica
- ▶ Tvorba užívateľských rozhraní
- ▶ SPA (single-page application), server-side rendering, React Native
- ▶ Vytvára virtuálny DOM

```
<!DOCTYPE html>
<html>
  <script src="https://unpkg.com/react@16/umd/react.production.min.js"></script>
  <script src="https://unpkg.com/react-dom@16/umd/react-dom.production.min.js"></script>
  <script src="https://unpkg.com/babel-standalone@6.15.0/babel.min.js"></script>
  <body>

    <div id="mydiv"></div>

    <script type="text/babel">
      class Hello extends React.Component {
        render() {
          return <h1>Hello World!</h1>
        }
      }
    </script>

    .. .
```

Inštalovanie a vytvorenie projektu

- ▶ Je potrebné mať nainštalované npm, node.js
- ▶ `npm install -g create-react-app`
- ▶ `npx create-react-app myfirstreact`
- ▶ `cd myfirstreact`
- ▶ `npm start`

ES6

- ▶ ECMAScript6
- ▶ Normalizácia JS
- ▶ Triedy, extends, lambdy, premenné
- ▶ Var - dostupná vo funkcii
- ▶ Let - dostupná v bloku
- ▶ Const

JSX - JavaScript XML

JSX:

```
const myelement = <h1>I Love JSX!</h1>;

ReactDOM.render(myelement, document.getElementById('root'));
```

Without JSX:

```
const myelement = React.createElement('h1', {}, 'I do not use JSX!');

ReactDOM.render(myelement, document.getElementById('root'));
```

```
const myelement = <h1>React is {5 + 5} times better with JSX</h1>;
```

```
const myelement = (
  <ul>
    <li>Apples</li>
    <li>Bananas</li>
    <li>Cherries</li>
  </ul>
);
```

```
const myelement = <input type="text" />;
```

Hlavné myšlienky

- ▶ Komponenty - samostatné celky rozdelené podľa funkcionality
- ▶ State a props
- ▶ Lifecycle metódy
 - ▶ Mounting : `constructor()`, `getDerivedStateFromProps()`, `render()`, `componentDidMount()`
 - ▶ Update : `getDerivedStateFromProps()`, `shouldComponentUpdate()`, `render()`, `getSnapshotBeforeUpdate()`, `componentDidUpdate()`
 - ▶ Unmounting : `componentWillUnmount ()`
- ▶ Events