



Școala
informală
de IT

React Basics



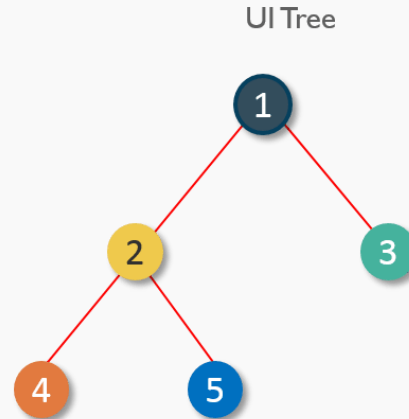
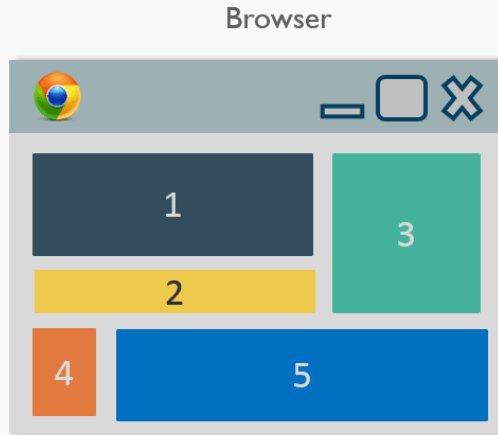
Agenda

- What is React?
- First react app
- First component
- Initial config
- Full stack app architecture



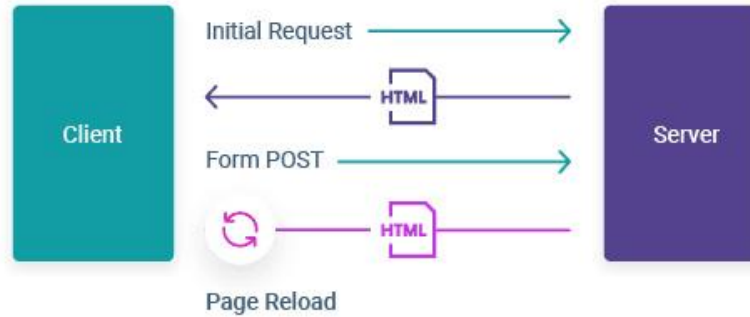
What is react?

- A JavaScript library for building user interfaces(Uis)
- Developed by facebook
- Building UI using independent, isolated components
- Every react application is a tree of components

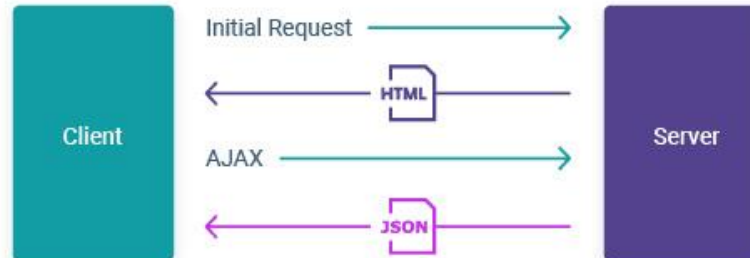


React Single Page Application

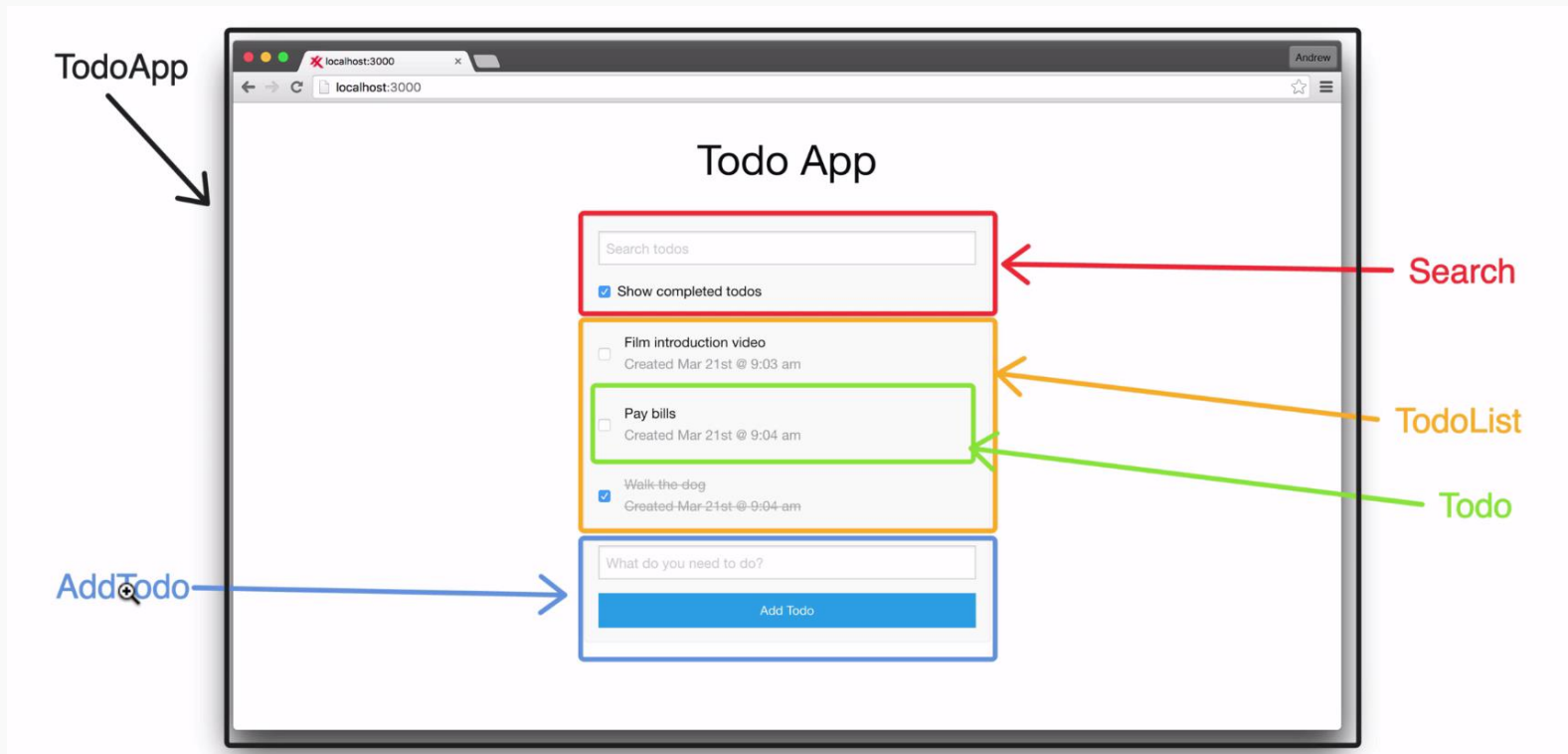
Multi-Page Lifecycle



SPA Lifecycle



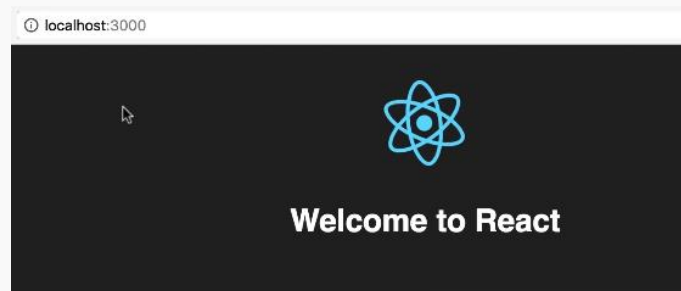
React Page - example



First react app

- Node-js installed
- Create React App – environment for building single-page react app from scratch
 - includes a development server
 - webpack - bundle the code
 - babel – the JSX syntax and convert to plain JavaScript

```
npx create-react-app my-app  
cd my-app  
npm start
```




React project structure

- node_modules – all the 3rd party libraries installed by create-react-app script (react, reactdom etc)
- public folder – index.html – where the “root” div is defined
- src – folder – the folder where all the components will be implemented
 - App component – the main component -> Babel DEMO

```
> node_modules
> public
> src
❖ .gitignore
{} package-lock.json
{} package.json
ⓘ README.md
```

Babel Demo

<https://babeljs.io/repl>



Search

[Docs](#)[Setup](#)[Try it out](#)[Videos](#)[Blog](#)[Donate](#)[Team](#)[GitHub](#)

```
1 const element = <h1>Hello world</h1>;
```

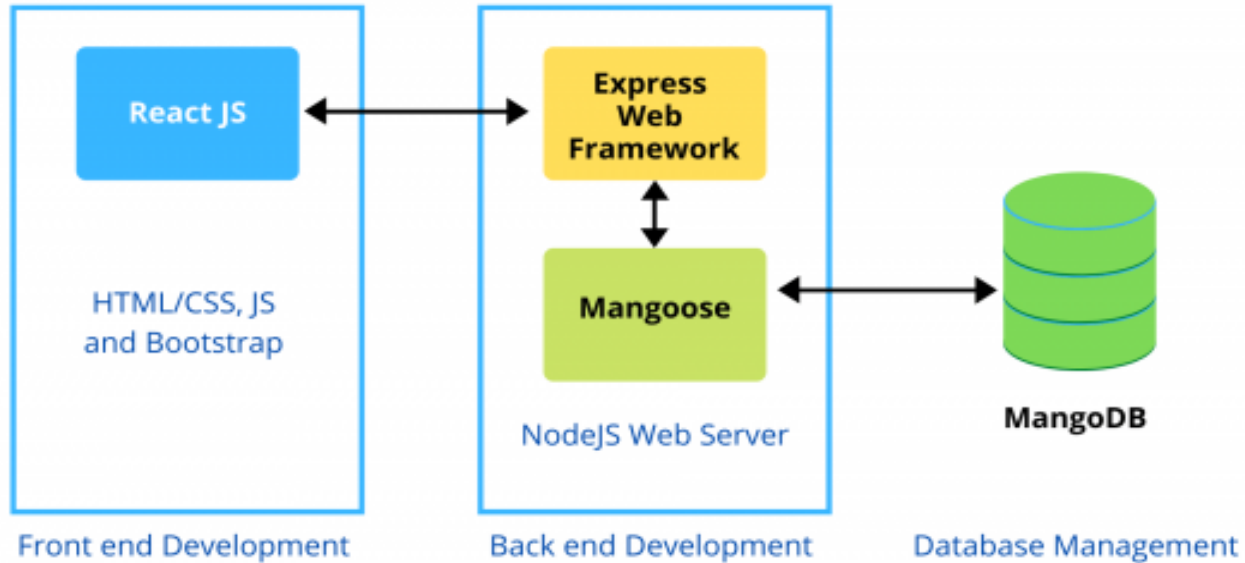
```
1 "use strict";
2
3 const element =
  /*#__PURE__*/React.createElement("h1", null,
    "Hello world");
```


First react component from scratch

- Delete all the “src” folder content
- Create a new file “index.js” (use Developer tools to check the DOM)

```
import React from 'react';  
import ReactDOM from 'react-dom';  
  
//const element = React.createElement('h1', null, 'Hello World');  
const element = <h1>Hello World!</h1>;  
  
ReactDOM.render(element, document.getElementById('root'));
```

Full stack architecture



MERN STACK DEVELOPMENT