

Best way to learn React fast?



Write code! Work on projects!

*We are going to build an entire
language translation app in this video*

Page 1

←

→

↺

Translate App

Enter English

Hi, how are you?

Select Language

Afrikaans

Arabic

French

Hindi

Japanese

Portuguese

Russian

Spanish

Output

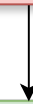
Hola, como estas?

codesandbox.io/s/react-pibc94

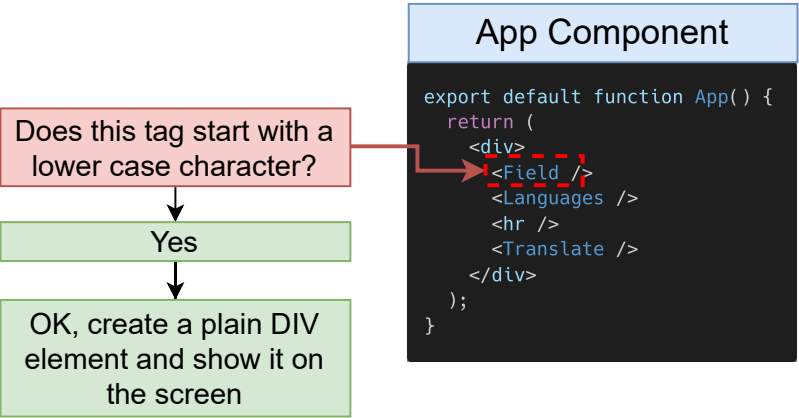
*Online editor with a few files
already created for you*

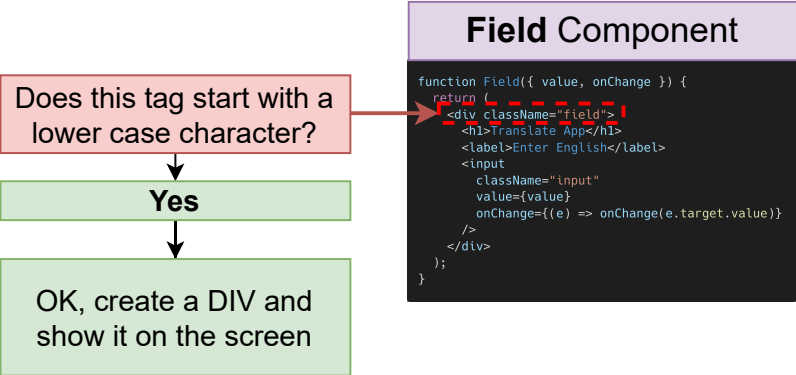
ALL other projects will be created on
your computer from scratch

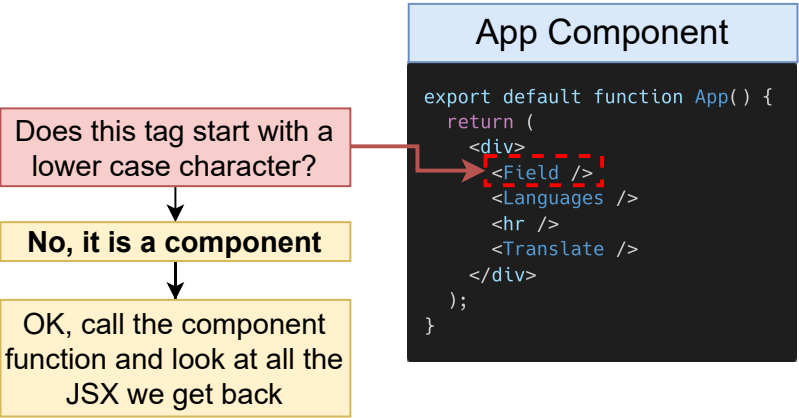
Get stuck? That's OK!



Completed code:
codesandbox.io/s/react-forked-m5bz37







1	So what's React all about?
---	----------------------------

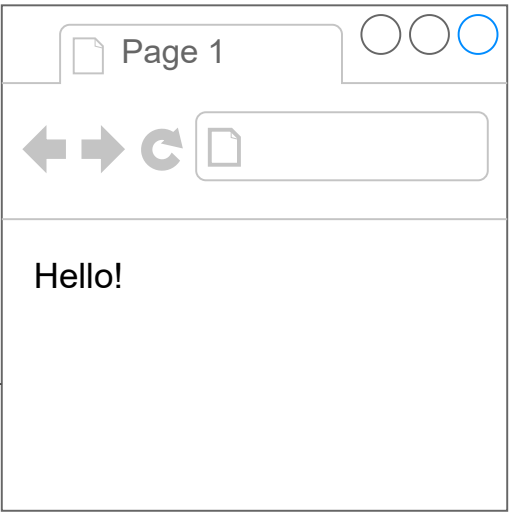
React (1) displays HTML and (2) changes that HTML when the user does something.

How do we tell React to show HTML?

```
function App() {  
  return (  
    <div>  
      <h3>Hello!</h3>  
    </div>  
  );  
}
```

JSX

React



React Component

```
function App() {  
  return (  
    <div>  
      <h3>Hello!</h3>  
    </div>  
  );  
}
```

React Components

Functions that return JSX (stuff that looks like HTML)

Tells React what to show on the screen

A project can have many components that work together

App.js

```
function App() {
  const [language, setLanguage] = useState('es');
  const [text, setText] = useState('');

  return (
    <div>
      <field onChange={setText} />
      <languages language={language} onLanguageChange={setLanguage} />
    </div>
  );
}
```

languages.js

```
function languages({ language, onLanguageChange }) {
  return (
    <div>
      <label className="label">
        Select Language
      </label>
      <div className="opts" />
    </div>
  );
}
```

flower.js

```
function flower({ fill, className }) {
  return (
    <svg
      className={className}
      style={{ fill: 'rgb(0, 0, 0)', display: 'none' }}
    />
  );
}
```

translate.js

```
function Translate({ language, text }) {
  const [translated] = useTranslation(text, language);

  return (
    <div className="translate">
      <label className="label">Output</label>
      <h1 className="title">{translated}</h1>
    </div>
  );
}
```

field.js

```
function Field({ value, onChange }) {
  return (
    <div className="field">
      <h1>Translate App</h1>
      <label>Enter english</label>
      <input
        className="input"
        value={value}
        onChange={e => onChange(e.target.value)}
      />
    </div>
  );
}
```

App Component

```
export default function App() {  
  return (  
    <div>  
      <Field />  
      <Languages />  
      <hr />  
      <Translate />  
    </div>  
  );  
}
```



JSX

The stuff that
looks like HTML

Tells React to...



Tell React to create a
normal HTML element

<div></div>

<button>Click</button>

<input type="text" />

Tell React to show
another component

<Field />

<Languages />

<Translate />

App Component

```
function App() {  
  return (  
    <div>  
      <h1>Your Friends</h1>  
      <ContactList />  
    </div>  
  );  
}
```

ContactList Component

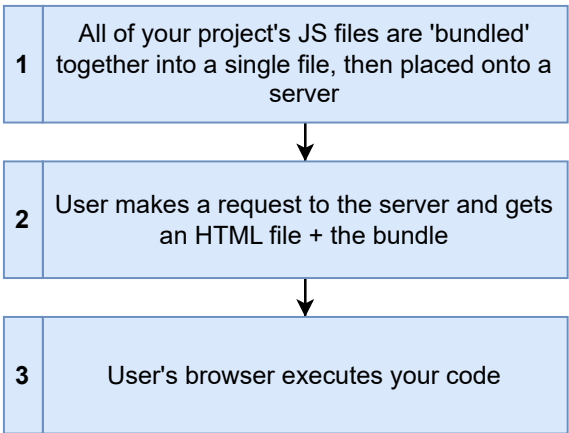
```
function ContactList() {  
  return (  
    <ul>  
      <li>Samantha</li>  
      <li>Alex</li>  
    </ul>  
  );  
}
```

Final HTML Output

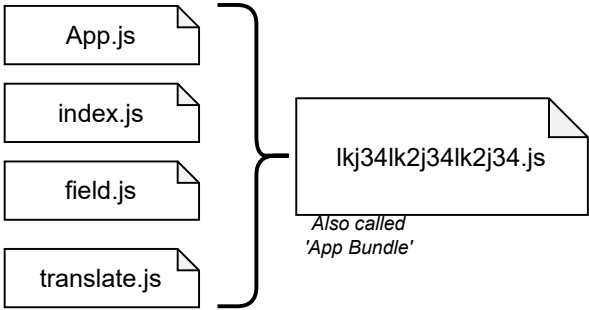
This is what gets shown on the screen

```
<div>  
  <h1>Your Friends</h1>  
  <ul>  
    <li>Samantha</li>  
    <li>Alex</li>  
  </ul>  
</div>
```

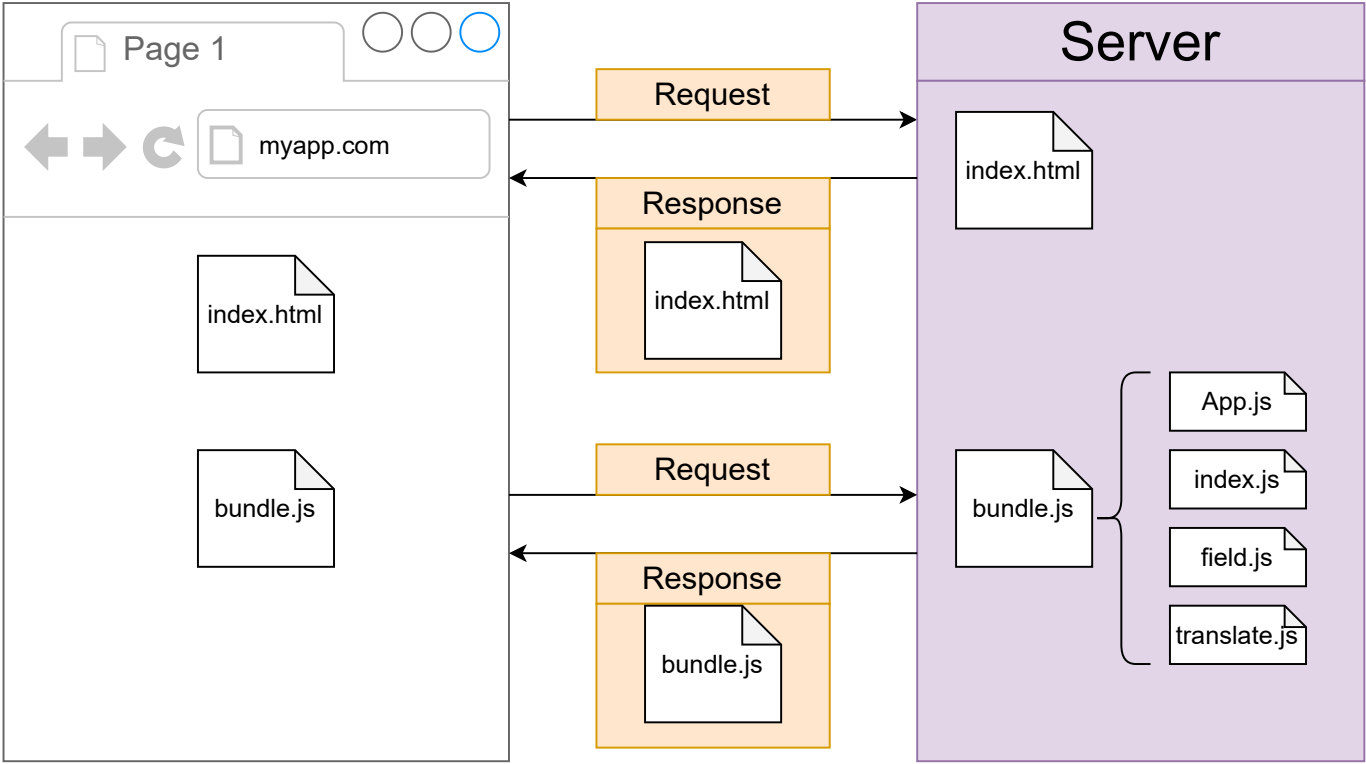
2	How does a React app start up?
---	--------------------------------



1	All of your project's JS files are 'bundled' together into a single file, then placed onto a server
---	---



2 User makes a request to the server and gets an HTML file + the bundle



User's browser executes your code

- React Startup Process

All inside the index.js file

1

Find the div with id of 'root' in the DOM

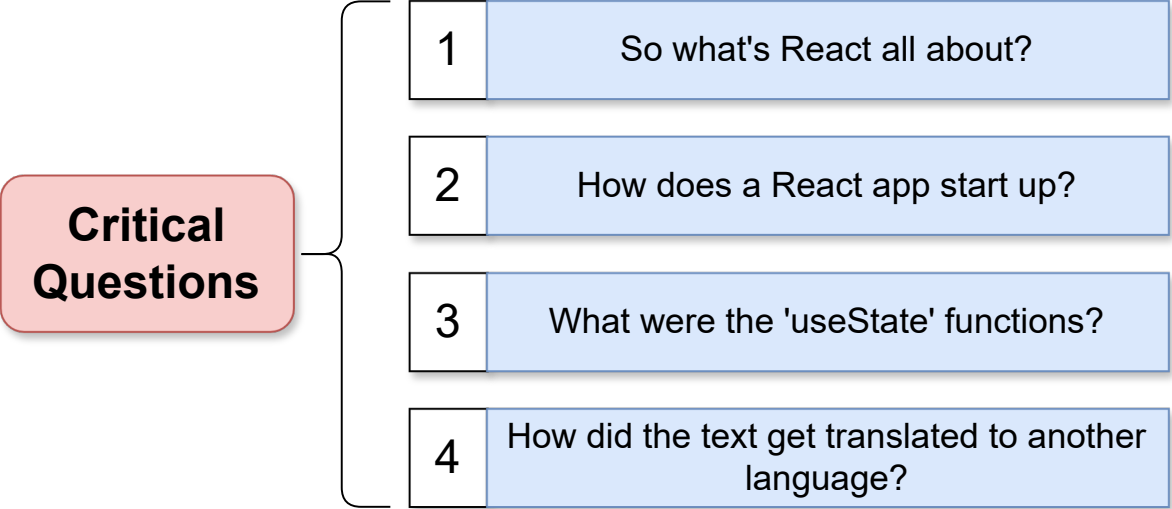
2

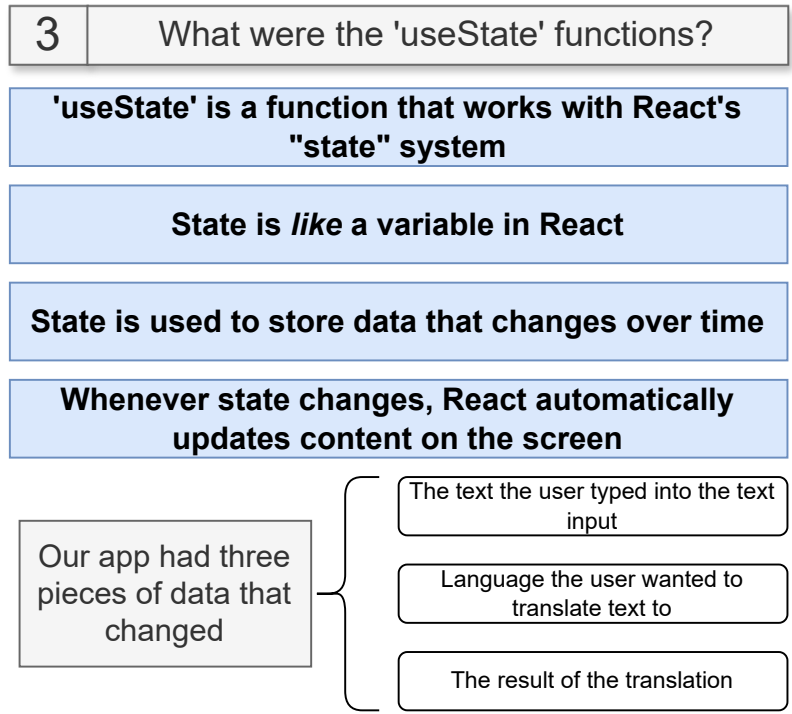
Tell React to take control of that element

3

Tell React to get JSX from the App component, turn it into HTML, and show it in the root







4

How did the text get translated to another language?

