

```
    header="Languages"
    languages={languages} />,
    document.getElementById('app')
  )
```

[Here](#) you can find working example of it.

## Section 2.7: setState pitfalls

You should use caution when using `setState` in an asynchronous context. For example, you might try to call `setState` in the callback of a get request:

```
class MyClass extends React.Component {
  constructor() {
    super();

    this.state = {
      user: {}
    };
  }

  componentDidMount() {
    this.fetchUser();
  }

  fetchUser() {
    $.get('/api/users/self')
      .then((user) => {
        this.setState({user: user});
      });
  }

  render() {
    return <h1>{this.state.user}</h1>;
  }
}
```

This could call problems - if the callback is called after the Component is dismantled, then `this.setState` won't be a function. Whenever this is the case, you should be careful to ensure your usage of `setState` is cancellable.

In this example, you might wish to cancel the XHR request when the component dismants:

```
class MyClass extends React.Component {
  constructor() {
    super();

    this.state = {
      user: {},
      xhr: null
    };
  }

  componentWillUnmount() {
    let xhr = this.state.xhr;

    // Cancel the xhr request, so the callback is never called
    if (xhr && xhr.readyState !== 4) {
      xhr.abort();
    }
  }
}
```

```

componentDidMount() {
  this.fetchUser();
}

fetchUser() {
  let xhr = $.get('/api/users/self')
    .then((user) => {
      this.setState({user: user});
    });

  this.setState({xhr: xhr});
}
}

```

The async method is saved as a state. In the `componentWillUnmount` you perform all your cleanup - including canceling the XHR request.

You could also do something more complex. In this example, I'm creating a 'stateSetter' function that accepts the this object as an argument and prevents `this.setState` when the function `cancel` has been called:

```

function stateSetter(context) {
  var cancelled = false;
  return {
    cancel: function () {
      cancelled = true;
    },
    setState(newState) {
      if (!cancelled) {
        context.setState(newState);
      }
    }
  }
}

class Component extends React.Component {
  constructor(props) {
    super(props);
    this.setter = stateSetter(this);
    this.state = {
      user: 'loading'
    };
  }
  componentWillUnmount() {
    this.setter.cancel();
  }
  componentDidMount() {
    this.fetchUser();
  }
  fetchUser() {
    $.get('/api/users/self')
      .then((user) => {
        this.setter.setState({user: user});
      });
  }
  render() {
    return <h1>{this.state.user}</h1>
  }
}

```

This works because the `cancelled` variable is visible in the `setState` closure we created.