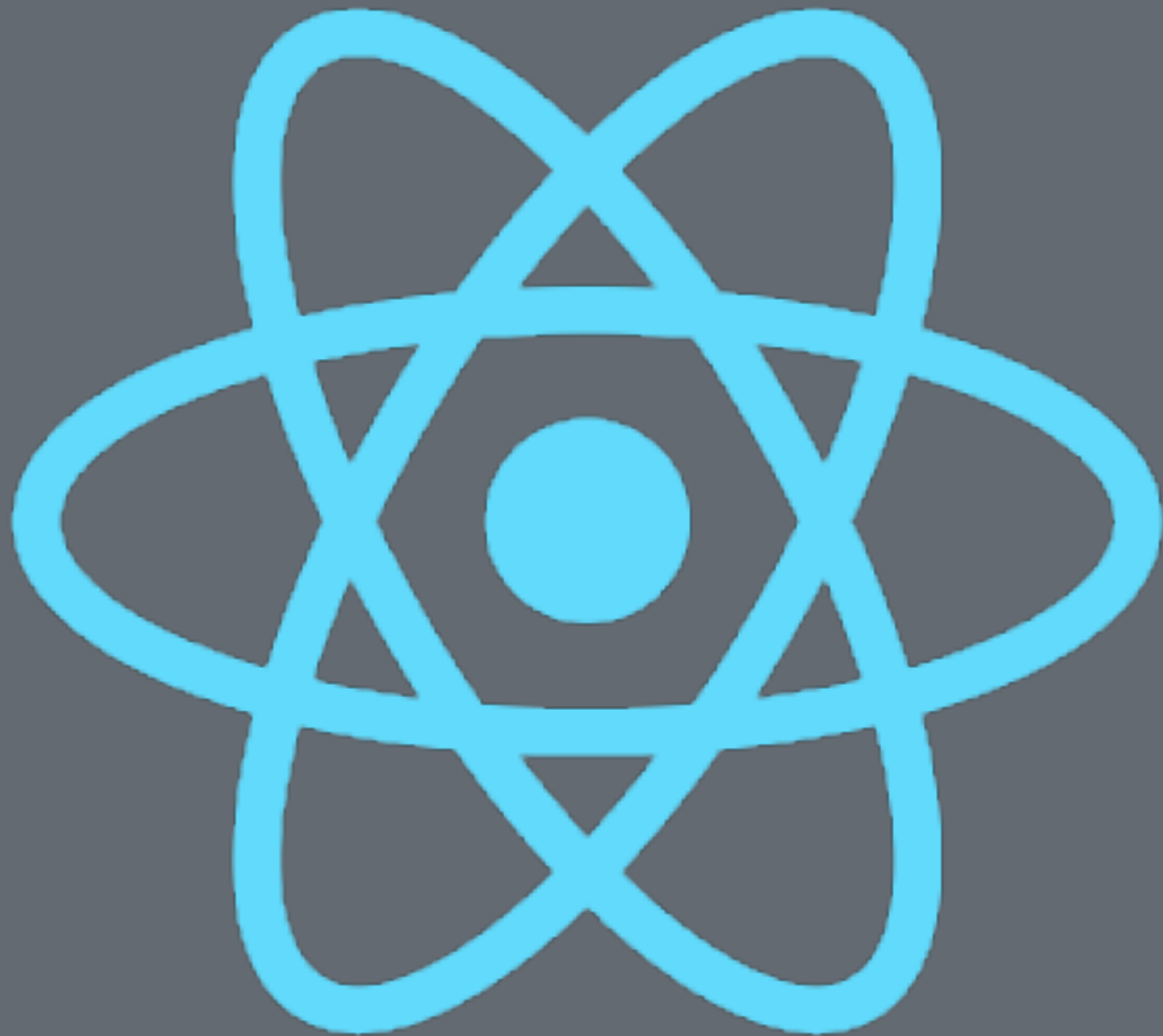


Integrating React with APIs



React

Objectives

- Connect a React App with an API
- Name the steps to make a GET request and update state in a `React.Component`
- Name the steps to make a POST request and update state in a `React.Component`

Steps to populate state based on an API

1. define initial state in a class property `this.state = { people: [] }`

2. define an async `componentDidMount` method

3. fetch the data and await the response (inside `componentDidMount`)

4. turn it into json and await the response

5. `this.setState`

6. render the state info in the component

Fetch Data Example

- set an initial state
- define an async componentDidMount method
- fetch the data and await the response
- turn it into json and await the response
- call setState()

```
class App extends React.Component {  
  
  state = {  
    people: []  
  }  
  
  async componentDidMount() {  
    const response = await fetch('http://localhost:8181/api/people')  
    const json = await response.json()  
    this.setState({people: json})  
  }  
  
  render() {  
    return <div>...</div>  
  }  
}
```

Questions: (4 min)

1. Why do we need to await `response.json()` ?
2. In this example, what would actually be in `<div>...</div>` to render the people?

Steps for handling a POST request in a React.Component

1. Define an async method that takes the data as a parameter. Note an event handler needs to use this method after it gets information out of the DOM (such as a form)
2. use fetch to do the POST request
3. get the added data from the json response
4. use `this.setState()` to update state with the new item

Post

```
class App extends React.Component {  
  
  async createItem(item) {  
    const response = await fetch('http://localhost:8181/api/people', {  
      method: 'POST',  
      body: JSON.stringify(item),  
      headers: {  
        'Content-Type': 'application/json',  
        'Accept': 'application/json',  
      }  
    })  
    const person = await response.json()  
    this.setState({people: [...this.state.people, person]})  
  }  
  
  render() {  
    return <div>...</div>  
  }  
}
```

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