

# REACT ROUTER 201

*Declarative routing for React*

# TRAJECTORY

- **Route props**
  - match
  - history
  - location
- **How to pass our own props to the components given to `<Route/>`**

```
<Route path='/puppies' component={Puppies} />
```

# WHAT PROPS DOES THAT COMPONENT RECEIVE?

# THE ROUTE PROPS

- ◉ **match**
- ◉ **history**
- ◉ **location**

# match

- **Contains info about how a Route's *path* matched the current url**
- **Contains an especially useful *params* key that parses url parameters**
  - Like req.params on the front-end!

```
<Route path='                ' component={                } />
```

• • • • • • • • • • • •

```
const Puppy = (props) => {  
  return <div>{                }</div>  
}
```

• • • • • • • • • • • •

```
<Route path='/puppies/:puppyId' component={
```

• • • • • • • • • • • •

```
const Puppy = (props) => {  
  return <div>{                                }</div>  
}
```

• • • • • • • • • • • •



```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • • • • • • • • •

```
const Puppy = (props) => {  
  return <div>{                                }</div>  
}
```

• • • • • • • • • • • •

```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • •

```
const Puppy = (props) => {  
  return <div>{props.match.params.puppyId}</div>  
}
```

• • • • •

```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • •

```
const Puppy = (props) => {  
  return <div>{props.match.params.puppyId}</div>  
}
```

• • • • •

http://localhost:3000/#/puppies/1 🔍

```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • •

```
const Puppy = (props) => {  
  return <div>{props.match.params.puppyId}</div>  
}
```

• • • • •

http://localhost:3000/#/puppies/1 🔍

```
props.match.params.puppyId  
1
```

```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • • • • • • • • •

```
const Puppy = (props) => {  
  return <div>{props.match.params.puppyId}</div>  
}
```

• • • • • • • • • • • •

http://localhost:3000/#/puppies/2 🔍

```
<Route path='/puppies/:puppyId' component={Puppy} />
```

• • • • •

```
const Puppy = (props) => {  
  return <div>{props.match.params.puppyId}</div>  
}
```

• • • • •

http://localhost:3000/#/puppies/2 🔍

```
props.match.params.puppyId  
2
```

# history

- **Used to manipulate browser's history programmatically**
  - **You can programmatically navigate using `history.push`**
- **Other methods for dealing with history (`goBack`, `goForward`)**



```
class Puppy extends React.Component {
```

```
  render () {  
    return (  
      <button onClick={      }>  
        Go Elsewhere  
      </button>  
    )  
  }  
}
```



```
class Puppy extends React.Component {  
  handleClick = () => {  
  
  }  
  
  render () {  
    return (  
      <button onClick={this.handleClick}>  
        Go Elsewhere  
      </button>  
    )  
  }  
}
```

```
class Puppy extends React.Component {  
  handleClick = () => {  
    console.log('You clicked!')  
    this.props.history.push('/elsewhere')  
  }  
  
  render () {  
    return (  
      <button onClick={this.handleClick}>  
        Go Elsewhere  
      </button>  
    )  
  }  
}
```

# location

- **Contains information about where the url is now**
- **Useful in combination with some lifecycle hooks for telling whether or not navigation happened or not (we'll see examples of this later)**

```
<Route path='/puppies' component={Puppies} />
```

# HOW DO WE PASS PROPS TO THAT COMPONENT?

```
<Route path='/puppies' component={Puppies} />
```

```
<Route path='/puppies' render={() => <Puppies />} />
```

```
<Route path='/puppies' render={() => <Puppies />} />
```



```
class MainPage extends React.Component {
```

```
  render () {  
    return (  
      <Router>  
        <div>  
          <Route  
            path='/puppies'  
          />  
        </div>  
      </Router>  
    )  
  }  
}
```

```
class MainPage extends React.Component {  
  constructor () {  
    super()  
    this.state = {  
      user: {}  
    }  
  }  
  
  render () {  
    return (  
      <Router>  
        <div>  
          <Route  
            path='/puppies'  
          />  
        </div>  
      </Router>  
    )  
  }  
}
```

```
class MainPage extends React.Component {  
  constructor () {  
    super()  
    this.state = {  
      user: {}  
    }  
  }  
  
  render () {  
    return (  
      <Router>  
        <div>  
          <Route  
            path='/puppies'  
            render={() => <Puppies />}  
          />  
        </div>  
      </Router>  
    )  
  }  
}
```

```
class MainPage extends React.Component {
  constructor () {
    super()
    this.state = {
      user: {}
    }
  }

  render () {
    return (
      <Router>
        <div>
          <Route
            path='/puppies'
            render={() => <Puppies user={this.state.user} />}
          />
        </div>
      </Router>
    )
  }
}
```

```
<Route path='/puppies' render={() => <Puppies />} />
```

```
<Route  
  path='/puppies'  
  render={routeParams => <Puppies {...routeParams} />}  
/>
```

```
<Route  
  path='/puppies'  
  render={routeProps => <Puppies {...routeProps} />}  
/>
```

# SUMMARY

- **React Router passes three props to your components**
  - match
  - history
  - location
- **You can pass your own props using `render` instead of `component` in a `<Route/>`**



