# 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/Q

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/22

props match params puppyId

# 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 {

```
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 />} />

```
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={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/>

