## ADVANCED LIFECYCLE METHODS

It's the advanced CI-IIIIRRCLE

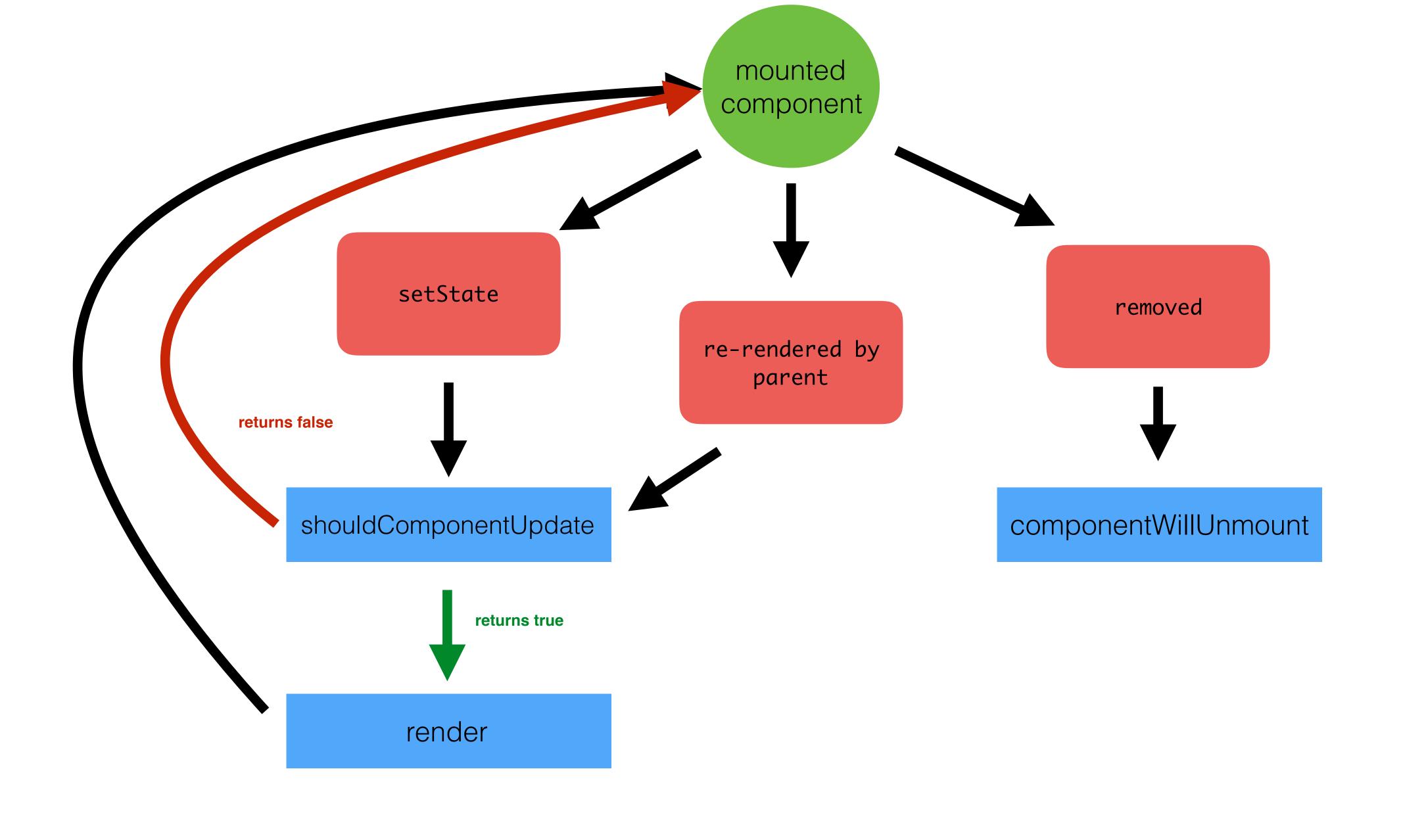
## ADVANCED LIFECYCLE

- So far:
  - componentDidMount
  - componentWillUnmount
- New:
  - shouldComponentUpdate
  - componentDidUpdate

ReactDOM.render render mounted component



componentDidMount



## SHOULD COMPONENT UPDATE

- Fired only after the initial render
- Fired when a component sets state or is re-rendered by another component

Must return true or false

 Compare previous props/state with new props/state, and prevent re-rendering if it's unnecessary to do so class FavoritePuppy extends Component {

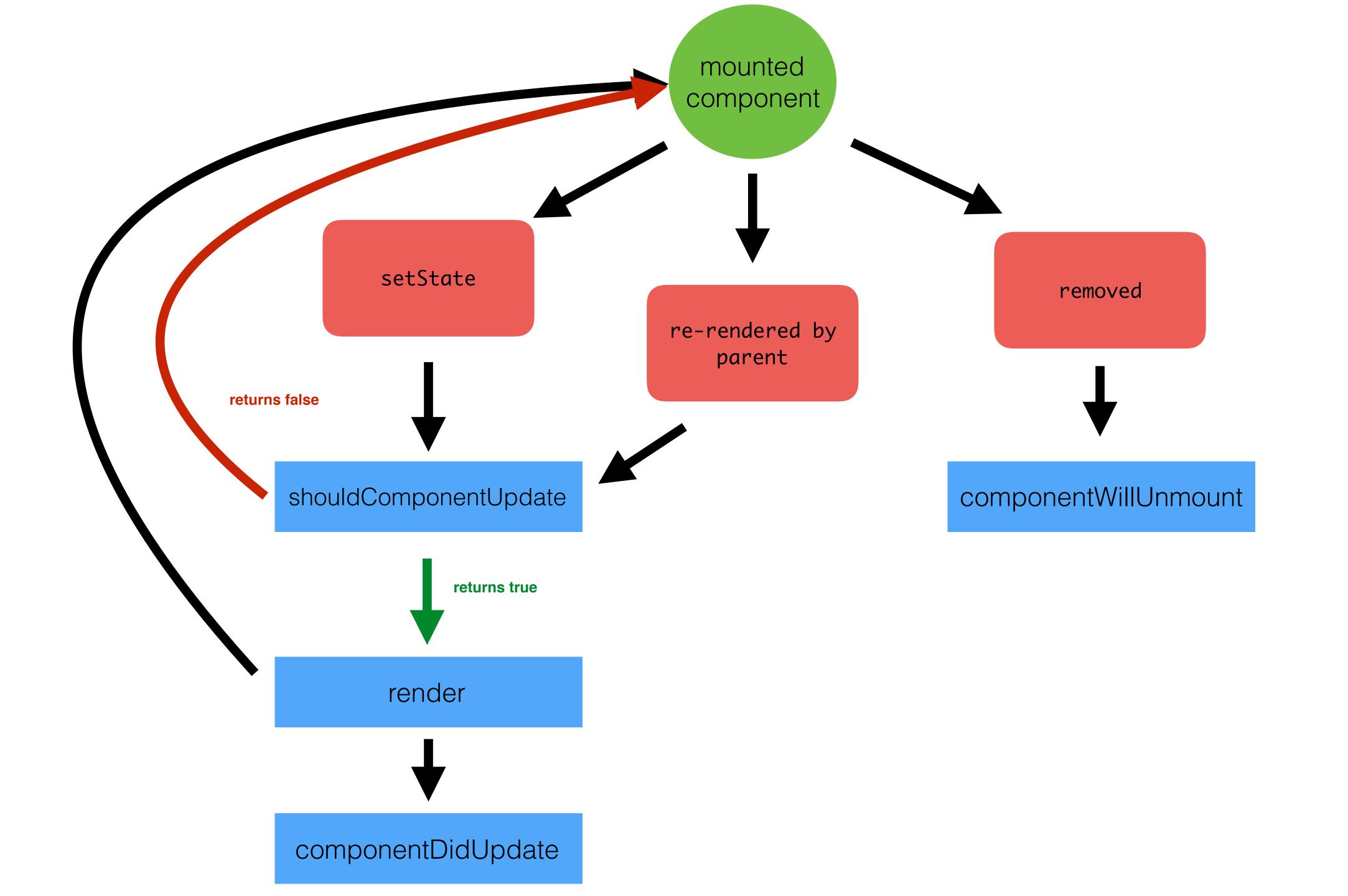
```
class FavoritePuppy extends Component {
    shouldComponentUpdate (nextProps, nextState) {
```

```
}
```

```
class FavoritePuppy extends Component {
  shouldComponentUpdate (nextProps, nextState) {
    if (nextProps favorite === this props favorite) {
    } else {
```

```
class FavoritePuppy extends Component {
  shouldComponentUpdate (nextProps, nextState) {
    if (nextProps favorite === this props favorite) {
      // don't bother to re-render
      return false
    } else {
```

```
class FavoritePuppy extends Component {
  shouldComponentUpdate (nextProps, nextState) {
    if (nextProps favorite === this props favorite) {
      // don't bother to re-render
      return false
   } else {
     // there's a new favorite in town! Re-render!
      return true
```



## COMPONENT DID UPDATE

Does not occur after the initial render

- Fired whenever a component is updated (either via setState or from being rendered by its parent)
- Chance to compare incoming props with previous props and do something based on that info (like make network requests)

class SinglePuppy extends Component {

```
class SinglePuppy extends Component {
  async fetchPuppy (puppyId) {
  }
}
```

```
class SinglePuppy extends Component {
   async fetchPuppy (puppyId) {
     const res = await axios.get(`/api/puppies/${puppyId}`)
     this.setState({puppy: res.data})
}
```

```
class SinglePuppy extends Component {
   async fetchPuppy (puppyId) {
     const res = await axios.get(`/api/puppies/${puppyId}`)
     this.setState({puppy: res.data})
   }
   componentDidMount () {
```

```
class SinglePuppy extends Component {
   async fetchPuppy (puppyId) {
     const res = await axios.get(`/api/puppies/${puppyId}`)
     this.setState({puppy: res.data})
   }
   componentDidMount () {
     const puppyId = this.props.match.params.puppyId
     this.fetchPuppy(puppyId)
   }
```

```
class SinglePuppy extends Component {
 async fetchPuppy (puppyId) {
    const res = await axios.get(`/api/puppies/${puppyId}`)
    this.setState({puppy: res.data})
  componentDidMount () {
    const puppyId = this.props.match.params.puppyId
    this fetchPuppy(puppyId)
  componentDidUpdate (
```

} }

```
class SinglePuppy extends Component {
 async fetchPuppy (puppyId) {
    const res = await axios.get(`/api/puppies/${puppyId}`)
    this.setState({puppy: res.data})
  componentDidMount () {
    const puppyId = this.props.match.params.puppyId
    this fetchPuppy(puppyId)
  componentDidUpdate (prevProps, prevState) {
```

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} }

```
class SinglePuppy extends Component {
 async fetchPuppy (puppyId) {
    const res = await axios.get(`/api/puppies/${puppyId}`)
    this.setState({puppy: res.data})
  componentDidMount () {
    const puppyId = this.props.match.params.puppyId
    this fetchPuppy(puppyId)
  componentDidUpdate (prevProps, prevState) {
    const newPuppyId = this.props.match.params.puppyId
```

```
class SinglePuppy extends Component {
 async fetchPuppy (puppyId) {
    const res = await axios.get(`/api/puppies/${puppyId}`)
    this.setState({puppy: res.data})
  componentDidMount () {
    const puppyId = this.props.match.params.puppyId
    this fetchPuppy(puppyId)
  componentDidUpdate (prevProps, prevState) {
    const newPuppyId = this.props.match.params.puppyId
    const oldPuppyId = prevProps match params puppyId
```

```
class SinglePuppy extends Component {
 async fetchPuppy (puppyId) {
    const res = await axios get(`/api/puppies/${puppyId}`)
    this.setState({puppy: res.data})
  componentDidMount () {
    const puppyId = this.props.match.params.puppyId
    this fetchPuppy(puppyId)
  componentDidUpdate (prevProps, prevState) {
    const newPuppyId = this.props.match.params.puppyId
    const oldPuppyId = prevProps.match.params.puppyId
    if (newPuppyId !== oldPuppyId) {
      this fetchPuppy (newPuppyId)
```

