



STATE

MONTAGE

- Exemple : constructor()

```
import React from "react";

export default class App extends
React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "Iano"};
  }
  render() {
    return (
      <h1>Coucou {this.state.nom}</h1>
    );
  }
}
```

1. constructor()
2. getDerivedStateFromProps()
3. render()
4. componentDidMount()

MONTAGE

- Exemple : `getDerivedStateFromProps()`

1. `constructor()`
2. `getDerivedStateFromProps()`
3. `render()`
4. `componentDidMount()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "Iano"};
  }
  static getDerivedStateFromProps(props, state) {
    return {nom: props.nommod };
  }
  render() {
    return (
      <h1>Coucou {this.state.nom}</h1>
    );
  }
}
```

```
/* index.js
ReactDOM.render(
  <App nommod="Iano modifie" />,
  document.getElementById('root')
);
```

MONTAGE

- Exemple : render()

1. `constructor()`
2. `getDerivedStateFromProps()`
3. `render()`
4. `componentDidMount()`

```
import React from "react";

export default class App extends React.Component {
  render() {
    return (
      <h1>Coucou Iano dans render</h1>
    );
  }
}
```

MONTAGE

- Exemple : componentDidMount()

1. `constructor()`
2. `getDerivedStateFromProps()`
3. `render()`
4. `componentDidMount()`

```
export default class App extends React.Component {  
  constructor(props) {  
    super(props);  
    this.state = {nom: "Iano"};  
  }  
  componentDidMount() {  
    setTimeout(() => {  
      this.setState({nom: "Iano avec componentDidMount"})  
    }, 1000)  
  }  
  render() {  
    return (  
      <h1>Coucou {this.state.nom}</h1>  
    );  
  }  
}
```

UPDATE

- Exemple : `getDerivedStateFromProps()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "Iano"};
  }
  static getDerivedStateFromProps(props, state) {
    return {nom: props.nommod };
  }
  changeNom = () => {
    this.setState({nom: "Iano change"});
  }
  render() {
    return (
      <div>
        <h1>Coucou {this.state.nom}</h1>
        <button type="button" onClick={this.changeNom}>Changer nom</button>
      </div>
    );
  }
}
```

1. `getDerivedStateFromProps()`
2. `shouldComponentUpdate()`
3. `render()`
4. `getSnapshotBeforeUpdate()`
5. `componentDidUpdate()`

```
/* index.js
ReactDOM.render(
  <App nommod="Iano modifie" />,
  document.getElementById('root')
);
```

UPDATE

- Exemple : `shouldComponentUpdate()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "Iano"};
  }
  shouldComponentUpdate() {
    // return false;
    return true;
  }
  changeNom = () => {
    this.setState({nom: "Iano change"});
  }
  render() {
    return (
      <div>
        <h1>Coucou {this.state.nom}</h1>
        <button type="button" onClick={this.changeNom}>Changer nom</button>
      </div>
    );
  }
}
```

1. `getDerivedStateFromProps()`
2. `shouldComponentUpdate()`
3. `render()`
4. `getSnapshotBeforeUpdate()`
5. `componentDidUpdate()`

UPDATE

- Exemple : render()

1. `getDerivedStateFromProps()`
2. `shouldComponentUpdate()`
3. `render()`
4. `getSnapshotBeforeUpdate()`
5. `componentDidUpdate()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "Iano"};
  }
  changeNom = () => {
    this.setState({nom: "Iano change"});
  }
  render() {
    return (
      <div>
        <h1>Coucou {this.state.nom}</h1>
        <button type="button" onClick={this.changeNom}>Changer nom</button>
      </div>
    );
  }
}
```


UPDATE

- Exemple : `getSnapshotBeforeUpdate()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "iano"};
  }
  componentDidMount() {
    setTimeout(() => {
      this.setState({nom: "iano modifie avec componentDidMount"})
    }, 1000)
  }
  getSnapshotBeforeUpdate(prevProps, prevState) {
    document.getElementById("div1").innerHTML =
      "Avant update, Coucou " + prevState.nom;
  }
  componentDidUpdate() {
    document.getElementById("div2").innerHTML =
      "Avec update, Coucou " + this.state.nom;
  }
}
```

1. `getDerivedStateFromProps()`
2. `shouldComponentUpdate()`
3. `render()`
4. `getSnapshotBeforeUpdate()`
5. `componentDidUpdate()`

```
render() {
  return (
    <div>
      <h1>Coucou {this.state.nom}</h1>
      <div id="div1"></div>
      <div id="div2"></div>
    </div>
  );
}
```

UPDATE

- Exemple : `componentDidUpdate()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {nom: "iano"};
  }
  componentDidMount() {
    setTimeout(() => {
      this.setState({nom: "iano modifie avec componentDidMount"})
    }, 1000)
  }
  componentDidUpdate() {
    document.getElementById("div2").innerHTML =
      "Avec update, Coucou " + this.state.nom;
  }
  render() {
    return (
      <div>
        <h1>Coucou {this.state.nom}</h1>
      </div>
    )
  }
}
```

1. `getDerivedStateFromProps()`
2. `shouldComponentUpdate()`
3. `render()`
4. `getSnapshotBeforeUpdate()`
5. `componentDidUpdate()`

DEMONTAGE

- Exemple : `componentWillUnmount()`

```
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {show: true};
  }
  delHeader = () => {
    this.setState({show: false});
  }
  render() {
    let myheader;
    if (this.state.show) {
      myheader = <Child />;
    }
    return (
      <div>
        {myheader}
        <button type="button" onClick={this.delHeader}>Supprimer Header</button>
      </div>
    );
  }
}
```

```
class Child extends React.Component {
  componentWillUnmount() {
    alert("Ce component va detruire.");
  }
  render() {
    return (
      <h1>Coucou!!</h1>
    );
  }
}
```

MÉTHODES DE CYCLE DE VIE

```
componentDidMount() {  
  //exécutée après que la sortie du composant a été injectée dans le DOM.  
  //ici on va mettre en place le minuteur  
}  
  
componentWillUnmount() {  
  //ici on va détruire le minuteur dans la méthode de cycle de vie  
}
```

MÉTHODES DE CYCLE DE VIE

```
class Horloge extends React.Component {  
  constructor(props) { ...  
  }  
  
  componentDidMount() {  
    this.minuteur = setInterval(  
      () => this.tic(),  
      1000  
    );  
  }  
  
  componentWillUnmount() {  
    clearInterval(this.minuteur);  
  }  
  
  tic() {  
    this.setState({  
      date: new Date()  
    });  
  }  
}
```

MISE A JOUR DE L'ETAT

Exemple avec plusieurs variables

```
constructor(props) {  
  super(props);  
  this.state = {  
    posts: [],  
    comments: []  
  };  
}
```

Mise a jour indépendamment

```
componentDidMount() {  
  fetchPosts().then(response => {  
    this.setState({  
      posts: response.posts  
    });  
  });  
  
  fetchComments().then(response => {  
    this.setState({  
      comments: response.comments  
    });  
  });  
}
```