

# Implementing Uncontrolled Forms Using Vanilla React

---



**Nitin Singh**

Full-stack Developer



# Overview



**Understand how uncontrolled forms work**

**Key difference between a controlled and uncontrolled form**

**How to create uncontrolled forms**

**How to set default values for uncontrolled forms**

**When to use uncontrolled forms**



# Uncontrolled Forms



**DOM maintains the state of the form**



**The component does not set the values of the form elements**



**User input needs to be manually pulled out on events like onSubmit**



**Very similar to how forms are handled in non-React JS code**



Setting the value or checked prop on a field makes the element a controlled element.

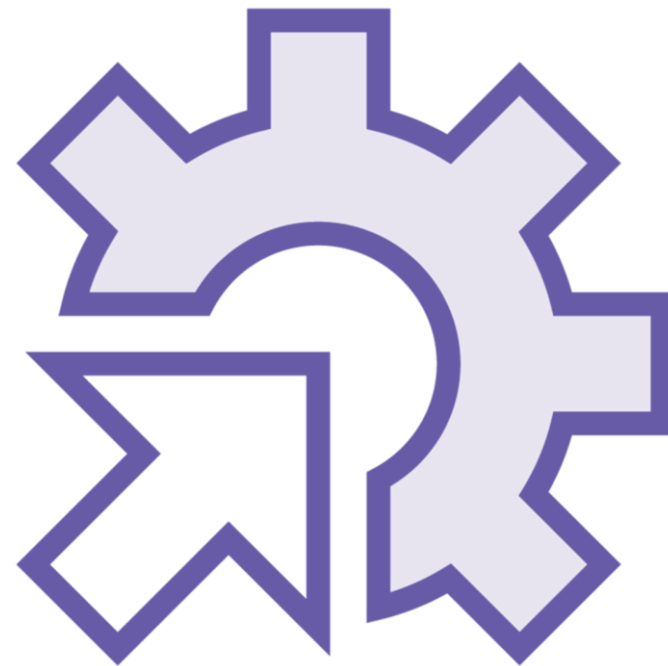


# Steps for Creating an Uncontrolled Form



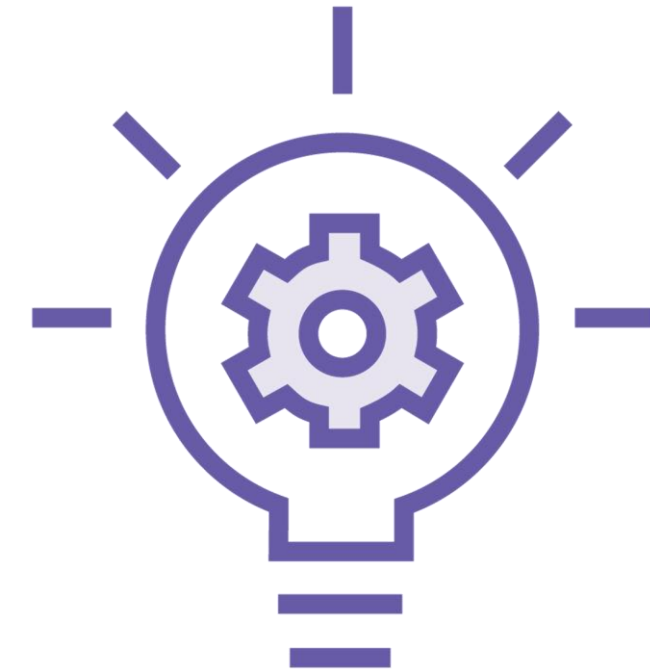
**Create reference**

**Using  
React.createRef()  
in constructor**



**Assign reference**

**Using ref prop on form  
element**



**Extract value**

**Using the reference  
created in constructor**



```

class NameForm extends React.Component {

  constructor(props) {
    super(props);
    this.submit = this.submit.bind(this);

    this.input = React.createRef();
  }

  submit(event) {
    alert(Value: ' + this.input.current.value);
    event.preventDefault();
  }

  render() {
    return (
      <form onSubmit={this.submit}>
        <input type="text" ref={this.input} />

        <input type="submit" value="Submit" />
      </form>
    );
  }
}

```

◀ Create reference variable to hold reference to

◀ Access value using reference variable

◀ Use ref prop to assign reference to input tag

# Setting Initial Values



**An uncontrolled form can not set the value prop of a form element**



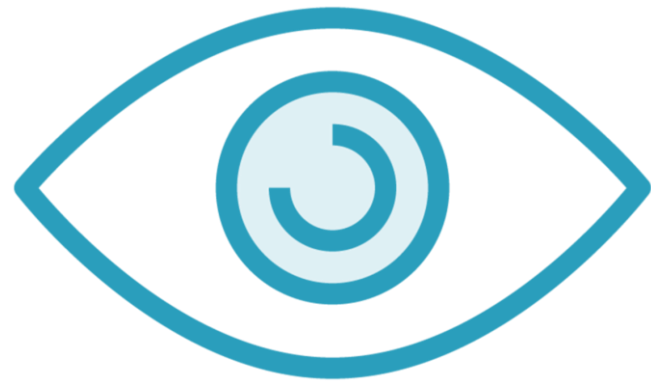
**Use the defaultValue, defaultChecked prop on form elements**



**Changing default values after component mount has no effect**



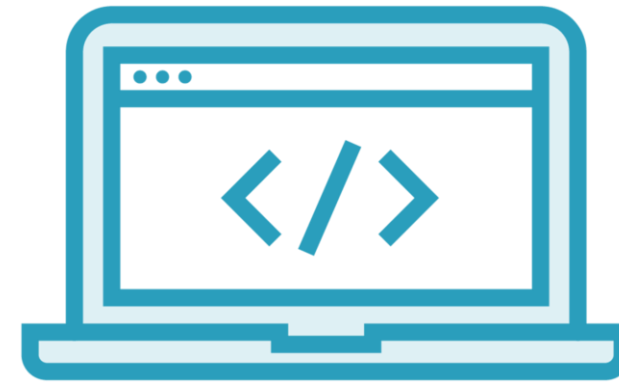
# When to Use Uncontrolled Forms



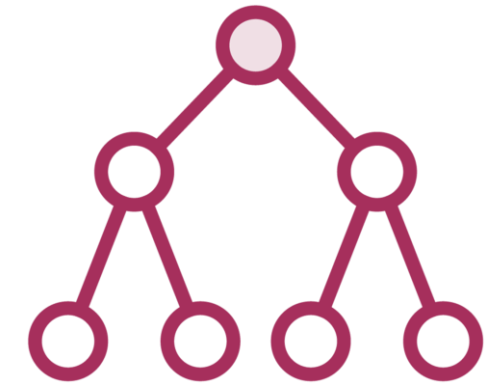
**For read-only  
elements like file  
input**



**When using a  
non-react library  
for form  
elements in a  
React app**



**When  
converting a  
preexisting  
codebase to  
React**



**To reduce re-  
rendering the  
form in a  
complex DOM**





# Adding File Upload Functionality to a Form

---



# Demo



## Invoice tracker application

**Add file upload functionality using file input tag to Invoice creation form**



## Summary



**Salient features of Uncontrolled forms**

**Key difference between a Controlled and an Uncontrolled form**

**How to create Uncontrolled forms**

**How to set default values for an Uncontrolled form**

**Scenarios where Uncontrolled forms should be used**



Up Next:

Using React Hook Form to Create  
Uncontrolled Forms

---

