

React Forms

- Form is a container with set of elements like
 - Button
 - Textbox
 - Checkbox
 - Radio
 - Listbox
 - Dropdown
 - Textarea etc..
- Form provides an UI from where user can interact with your application.
- User can input, view and edit data.
- React can use traditional HTML form technique, but it requires lot of DOM manipulations, Element References, Event Arguments etc.
- React developers prefer using various 3rd Party form components
 - Formik
 - KendoForms [Telerik]
 - React Final Form
 - React-Formal
 - React-Forms
 - ValueLink
 - Wingspan-forms
 - NewForms
 - Formjs etc..

Ex: Traditional HTML forms

FormComponent.js

```
import React, {useState} from 'react';

export default function FormComponent()
{
  const [getName, setName] = useState("");
  const [getPrice, setPrice] = useState(0);
  const [getStock, setStock] = useState(false);
  const [getCity, setCity] = useState("");

  const handleSubmit = () => {
    document.write(`Name=${getName}<br>Price=${getPrice}<br>Shipped
To=${getCity}<br>Stock=${(getStock===true)?"Available":"Out
of Stock"}`);
  }

  return(
    <div className="container-fluid w-50">
      <form onSubmit={handleSubmit} >
        <div className="mt-2">
```

```
        <label className="form-label">Product
Name</label>

        <div>

            <input type="text"
onChange={e=>setName(e.target.value)} name="Name"
value={getName} className="form-control" />

        </div>
    </div>

    <div className="mt-2">

        <label className="form-label">Price</label>

        <div>

            <input type="text"
onChange={e=>setPrice(e.target.value)} name="Price"
value={getPrice} className="form-control" />

        </div>
    </div>

    <div className="mt-2">

        <label className="form-label">Shipped
To</label>

        <div>

            <select className="form-select"
onChange={e=>setCity(e.target.value)} value={getCity} >

                <option>Delhi</option>

                <option>Hyd</option>
```

```

        <option>Chennai</option>
    </select>
</div>
</div>
<div className="mt-2">
    <label className="form-label">In Stock</label>
    <div className="form-check form-switch">
        <input className="form-check-input"
type="checkbox" onChange={e=>setStock(e.target.checked)}
checked={getStock} name="Stock"/> Yes
    </div>
</div>
<div className="mt-2 d-grid">
    <button className="btn btn-
primary">Register</button>
</div>
</form>
</div>
)
}

```

Formik Library

- Formik is 3rd party library used in React for building complex forms and validation.
- It provides a service that allows to handle form elements and their validations.
- You can inject the service by using “useFormik”

> npm install formik --save

Formik Attributes

- initialValues: refers to form body object [form collection]
- validate
- values : refers to initial values
- errors
- touched
- handleChange: It is a function that identifies the change in the value of element and updates.
- handleBlur : It is a function that identifies the change in the value on blur.
- handleSubmit : It is a function that specifies actions to perform on form submit. [form element]
- isSubmitting

Syntax:

useFormik({

 initialValues: { }, **// form body object [key and value] – POST – Form Body [key:elementName, value:Value]**

```
    onSubmit :  
    validate:  
    errors:  
  })
```

Ex:

FormikComponent.js

```
import React from 'react';  
import {useFormik} from 'formik';  
  
export default function FormikComponent(){  
  
  const formik = useFormik({  
    initialValues: {  
      Name: "",  
      Price: 0,  
      ShippedTo: "",  
      InStock: false  
    },  
    onSubmit: values => {  
      document.write(`  
        <h2>Product Details </h2>
```

```

<table border="1" width="400">
    <tr>
        <td>Name</td>
        <td>${values.Name}</td>
    </tr>
    <tr>
        <td>Price</td>
        <td>${values.Price}</td>
    </tr>
    <tr>
        <td>Shipped To</td>
        <td>${values.ShippedTo}</td>
    </tr>
    <tr>
        <td>Stock</td>
        <td>${(values.InStock)==true?"Available":"Out of
Stock"}</td>
    </tr>
</table>
`)
}
})

```

```
return(  
  <div className="container-fluid w-50">  
    <form onSubmit={formik.handleSubmit} >  
      <h3>Register Product</h3>  
      <div className="mt-2">  
        <label className="form-label">Product  
Name</label>  
        <div>  
          <input type="text" name="Name"  
onChange={formik.handleChange}  
value={formik.values.Name} className="form-control" />  
        </div>  
      </div>  
      <div className="mt-2">  
        <label className="form-label">Price</label>  
        <div>  
          <input type="text" name="Price"  
onChange={formik.handleChange}  
value={formik.values.Price} className="form-control" />  
        </div>  
      </div>  
      <div className="mt-2">
```



```
<label className="form-label">Shipped To</label>
<div>
  <select className="form-select"
name="ShippedTo" onChange={formik.handleChange}
value={formik.values.ShippedTo} >
    <option>Delhi</option>
    <option>Hyd</option>
    <option>Chennai</option>
  </select>
</div>
</div>
<div className="mt-2">
  <label className="form-label">In Stock</label>
  <div className="form-check form-switch">
    <input className="form-check-input"
name="InStock" onChange={formik.handleChange}
checked={formik.values.InStock} type="checkbox"/> Yes
  </div>
</div>
<div className="mt-2 d-grid">
  <button className="btn btn-
primary">Register</button>
</div>
```

</form>

</div>

)

}

