

# Chapter 11: Communicate Between Components

## Section 11.1: Communication between Stateless Functional Components

In this example we will make use of Redux and React Redux modules to handle our application state and for auto re-render of our functional components., And ofcourse React and React Dom

You can checkout the [completed demo](#) here

In the example below we have three different components and one connected component

- **UserInputForm:** This component display an input field And when the field value changes, it calls `inputChange` method on props (which is provided by the parent component) and if the data is provided as well, it displays that in the input field.
- **UserDashboard:** This component displays a simple message and also nests `UserInputForm` component, It also passes `inputChange` method to `UserInputForm` component, `UserInputForm` component inturn makes use of this method to communicate with the parent component.
  - **UserDashboardConnected:** This component just wraps the `UserDashboard` component using `ReactRedux connect` method., This makes it easier for us to manage the component state and update the component when the state changes.
- **App:** This component just renders the `UserDashboardConnected` component.

```
const UserInputForm = (props) => {

  let handleSubmit = (e) => {
    e.preventDefault();
  }

  return(
    <form action="" onSubmit={handleSubmit}>
      <label htmlFor="name">Please enter your name</label>
      <br />
      <input type="text" id="name" defaultValue={props.data.name || ''} onChange={
props.inputChange } />
    </form>
  )
}
```

```
const UserDashboard = (props) => {

  let inputChangeHandler = (event) => {
    props.updateName(event.target.value);
  }

  return(
    <div>
      <h1>Hi { props.user.name || 'User' }</h1>
      <UserInputForm data={props.user} inputChange={inputChangeHandler} />
    </div>
  )
}
```

```

    )
  }

  const mapStateToProps = (state) => {
    return {
      user: state
    };
  }
  const mapDispatchToProps = (dispatch) => {
    return {
      updateName: (data) => dispatch( Action.updateName(data) ),
    };
  };

  const { connect, Provider } = ReactRedux;
  const UserDashboardConnected = connect(
    mapStateToProps,
    mapDispatchToProps
  )(UserDashboard);

  const App = (props) => {
    return(
      <div>
        <h1>Communication between Stateless Functional Components</h1>
        <UserDashboardConnected />
      </div>
    )
  }

  const user = (state={name: 'John'}, action) => {
    switch (action.type) {
      case 'UPDATE_NAME':
        return Object.assign( {}, state, {name: action.payload} );

      default:
        return state;
    }
  };

  const { createStore } = Redux;
  const store = createStore(user);
  const Action = {
    updateName: (data) => {
      return { type: 'UPDATE_NAME', payload: data }
    },
  }

  ReactDOM.render(
    <Provider store={ store }>
      <App />
    </Provider>,
    document.getElementById('application')
  );

```