Controlled Components- components which are controlled by react.

Means without event handling you won't be able to make any changes to

this. They are used to modify the state

Uncontrolled Components - These are used only to represent the data

or to access the data , they will not be used for modification in state

**component communication**

<https://www.javascriptstuff.com/component-communication/>

**component communication using functional component**

<https://www.pluralsight.com/guides/react-communicating-between-components>

**SPA - Single Page Application**

page do not load again n again - reloading of page

can be avoided.

Routing will happend on client side.

SPA are application that work on browser and do not

need reloading on server side. Router works on client

side. Fast in response and caching. Imp resources

like html,css are downloaded on client side, only for

data via asynchronous call we have to connect to server.

React Router - to choose appropriate routers.

React router is divided into 3 packages

react-router - which has core library.

react-router-dom - browser specific

react-native - is used on mobile applications

as we going to implement web application we have to use react-router-dom

package.

to install run below command

npm install react-router-dom

<a href=""/> - it reloads the page and it renders on server side

we want client side rendering and we dont want to reload the page in

SPA,so instead of using <a href=""/> use <Link> from react to render

page

to access data from url - use params

if you want to render or design dynamic pages then render it using

BrowserRouter.

if you want to render static files then do it using HashRouter

Routers need to configured in Switch case so that depending on the

matching path respective component will get rendered.

So Link,Params,Switch,BrowserRouter/HashRouter, Route need to be imported

from react-router-dom package.

Route are used configure route path with respective components

Composition Vs Inheritance

* Benefits of Composition

<https://reactjs.org/docs/composition-vs-inheritance.html>

Videos :

<https://www.youtube.com/watch?v=MSn0UOOGBWU>

**Module 4 : Component Communication & Lifecycle**

Forms

Controlled Components

Uncontrolled Components

<https://www.sitepoint.com/work-with-forms-in-react/>

<https://reactjs.org/docs/forms.html>

<https://reactjs.org/docs/uncontrolled-components.html>

Videos :

https://www.youtube.com/watch?v=g2FjAHwNq-I&t=144s

Component Communication

* 8 strategies of Component Communication
* Parent To Child
* Using props
* Using Instance Method
* Child To Parent
* Using Callback Method
* Event Bubbling
* Any To Any
* Observer Pattern
* Global Variables
* Context

<https://blog.bitsrc.io/react-communication-between-components-c0cfccfa996a>

<https://www.javascriptstuff.com/component-communication/>

Videos :

<https://www.youtube.com/watch?v=dyL99ACQfsM>

React Hooks

<https://reactjs.org/docs/hooks-intro.html>

* Videos :

<https://www.youtube.com/watch?v=cF2lQ_gZeA8&list=PLC3y8rFHvwisvxhZ135pogtX7_Oe3Q3A>

* useState

<https://reactjs.org/docs/hooks-state.html>

Videos :

<https://www.youtube.com/watch?v=lAW1Jmmr9hc&list=PLC3y8-rFHvwisvxhZ135pogtX7_Oe3Q3A&index=2>

<https://www.youtube.com/watch?v=d0plTCQgsXs&list=PLC3y8-rFHvwisvxhZ135pogtX7_Oe3Q3A&index=3>

* useEffect

<https://reactjs.org/docs/hooks-effect.html>

Videos :

<https://www.youtube.com/watch?v=0ZJgIjIuY7U>

**React Router**

React Router Introduction

<https://blog.pshrmn.com/simple-react-router-v4-tutorial/>

Difference in <BrowserRouter> and <HashRouter>

<https://medium.com/@daniel.hramkov/browserrouter-vs-hashrouter-e8bf1c3824ce>

Params and <Link>

<https://reactrouter.com/web/example/url-params>

<https://reactrouter.com/web/example/basic>

Nested Views – Nested Routes

<https://reactrouter.com/web/example/nesting>

Videos :

<https://www.youtube.com/watch?v=Law7wfdg_ls&t=593s>