React JS

Introduction

- React is an open source, JavaScript library for developing user interface (UI) in web application.

- React is developed and released by **Facebook**.

- This tutorial starts with the architecture of React, how-to guide to setup projects, creating components, JSX and then walks through advanced concepts like state management, form programming, routing and finally conclude with step by step working example.

- Prerequisites: Basic knowledge in HTML, CSS and OOPS concepts.

Introduction

- ReactJS is a simple, feature rich, component based JavaScript UI library. It can be used to develop small applications as well as big, complex applications.

- React community compliments React library by providing large set of ready-made components to develop web application in a record time.

Features

- Solid base architecture

- Extensible architecture

- Component based library

- JSX based design architecture

- Declarative UI library

Benefits

- Easy to learn
- Easy to adept in modern as well as legacy application
- Faster way to code a functionality
- Availability of large number of ready-made component
- Large and active community

Applications

- *Facebook*, popular social media application
- *Instagram*, popular photo sharing application
- *Netflix*, popular media streaming application
- *Code Academy*, popular online training application
- *Reddit*, popular content sharing application

React JS installation

- Refer to Class Demonstrations

- Approx. 30 minutes procedure.

- https://www.w3schools.com/REACT/default.asp
- https://www.w3schools.com/REACT/react_intro.asp
- https://www.w3schools.com/REACT/react_getstarted.asp

ES6 essentials

- https://www.w3schools.com/REACT/react_es6.asp

- React Render HTML
- https://www.w3schools.com/REACT/react_render.asp
- React JSX
- https://www.w3schools.com/REACT/react_jsx.asp
- React Components
- https://www.w3schools.com/REACT/react_components.asp

MPA

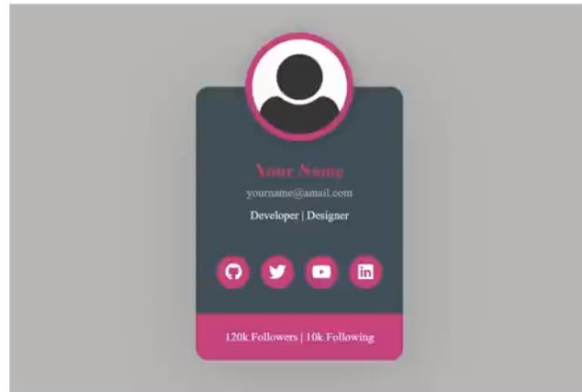Multi Page Application (Normal Website)
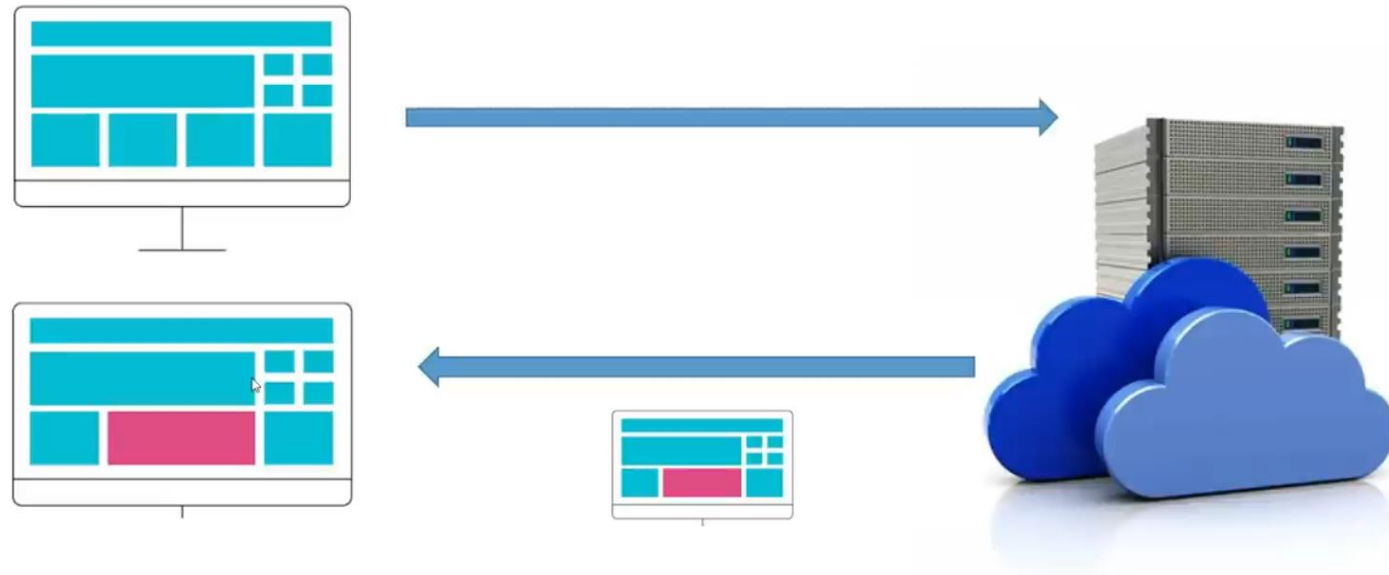
SPA

Single Page Application (SAP)
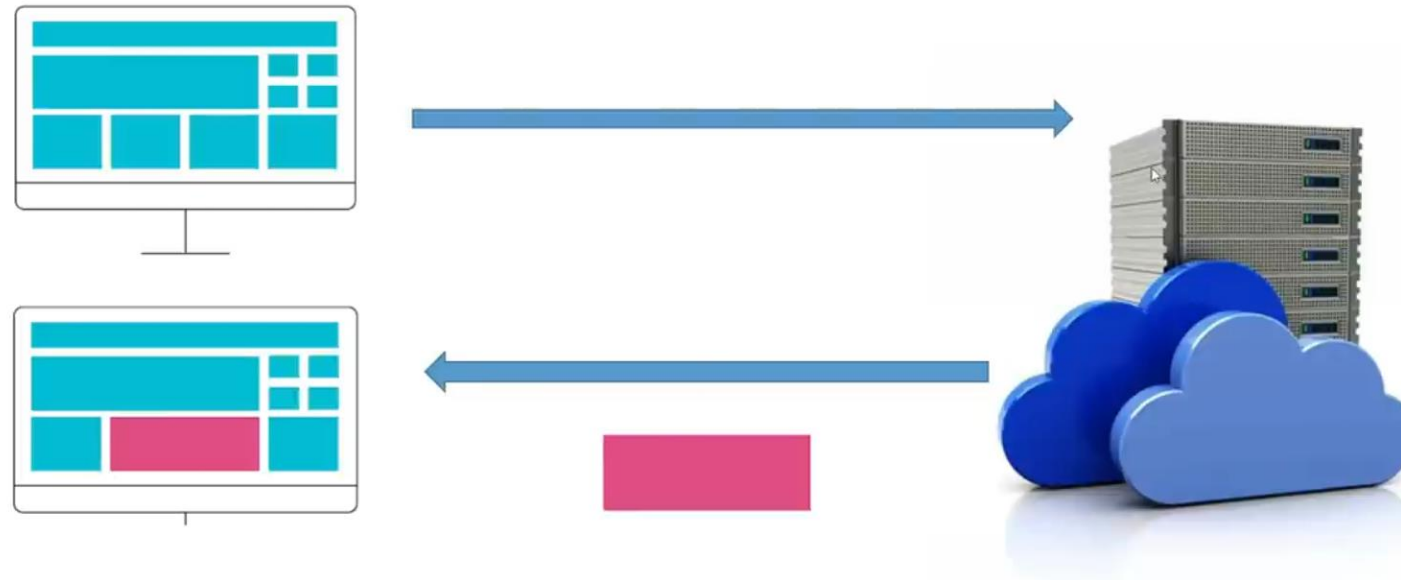
MPA SAP samples

- MPA sample experience: https://edition.cnn.com, SPA samples: https://reactjs.org/, https://purpleorange.agency/ https://trionndesign.com/ , more spa samples: https://www.intechnic.com/blog/60-beautiful-examples-of-one-page-website-design-inspirations/

React Components

React is all about components.

READ MORE
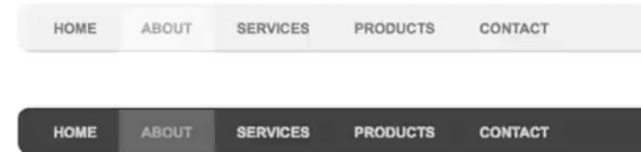
Sample web page composed of components
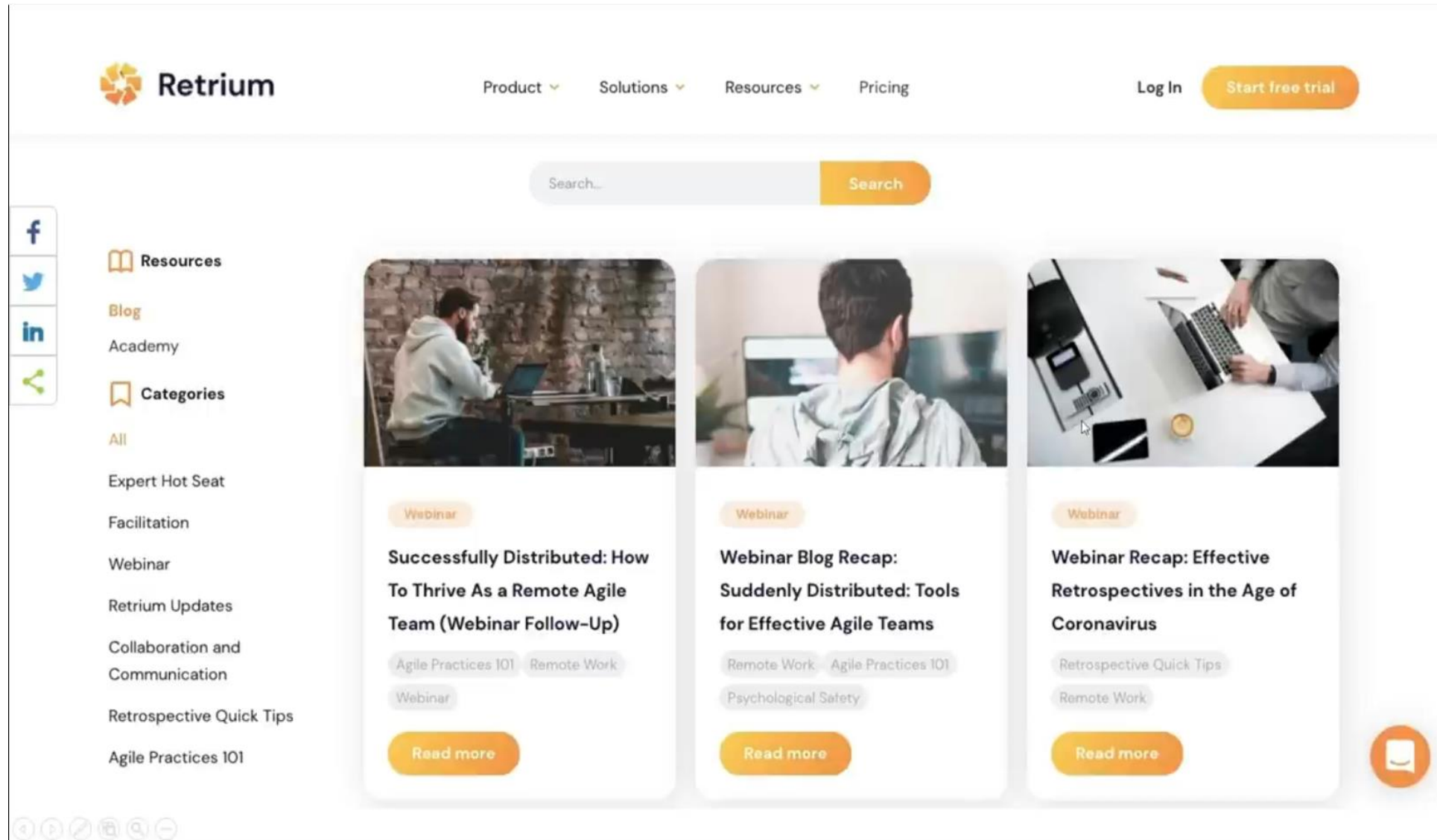
So, Components are reusable building block in user interface (html and css with js make a component)

Benefit of using components

1. Reusability
2. Help in maintaining code

Components within components

So, in React we build component with html css and js.

And then by combining these component s we built a page.

Browser   Index.html

Browser   Index.html   index.js

Browser   Index.html   index.js   App.js (Component)

Browser   Index.html   index.js   App.js (Parent Component)   All Component Folder