

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_intro.asp)
- [https://www.w3schools.com/REACT/react\\_getstarted.asp](https://www.w3schools.com/REACT/react_getstarted.asp)

# ES6 essentials

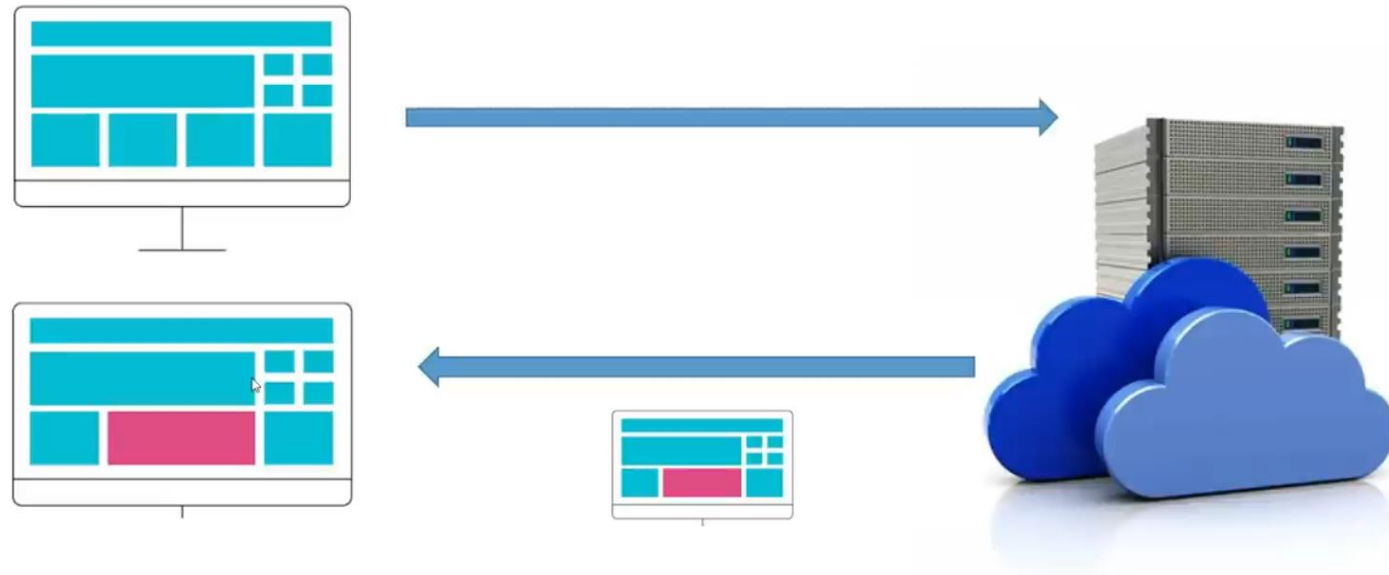
- [https://www.w3schools.com/REACT/react\\_es6.asp](https://www.w3schools.com/REACT/react_es6.asp)



- React Render HTML
- [https://www.w3schools.com/REACT/react\\_render.asp](https://www.w3schools.com/REACT/react_render.asp)
- React JSX
- [https://www.w3schools.com/REACT/react\\_jsx.asp](https://www.w3schools.com/REACT/react_jsx.asp)
- React Components
- [https://www.w3schools.com/REACT/react\\_components.asp](https://www.w3schools.com/REACT/react_components.asp)

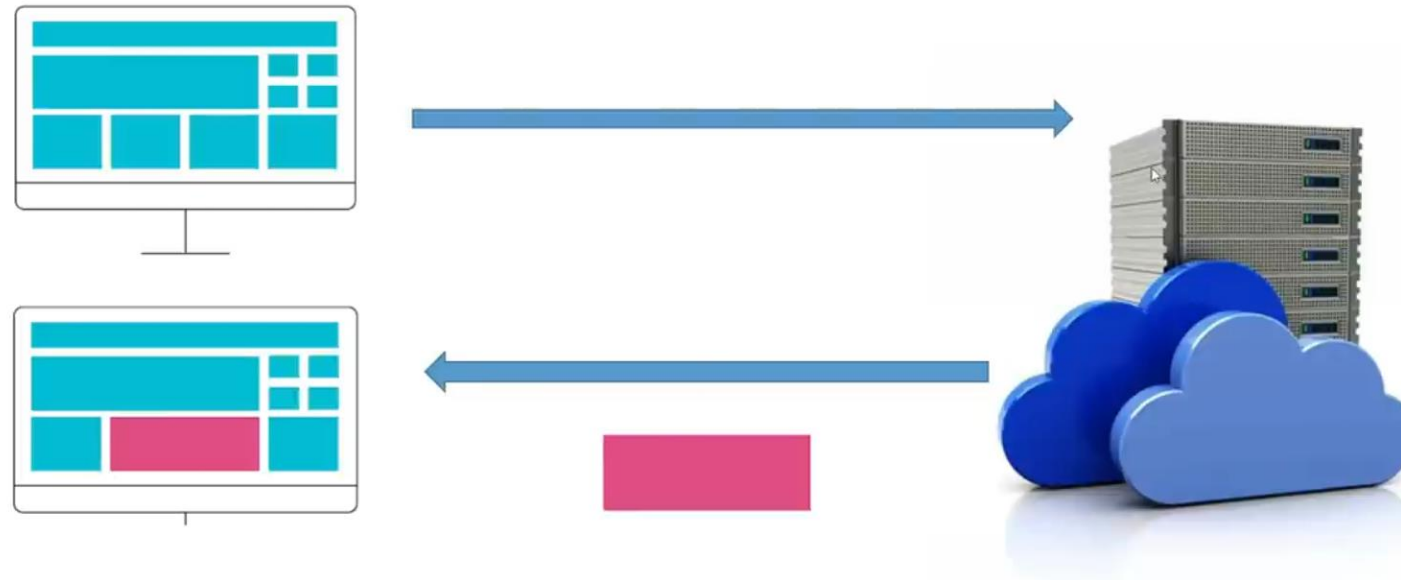
# MPA

## Multi Page Application (Normal Website)



# SPA

## Single Page Application (SPA)



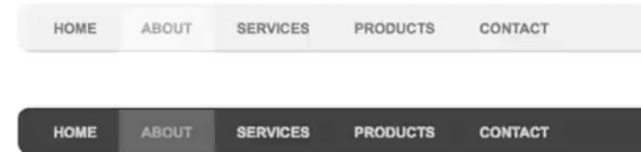
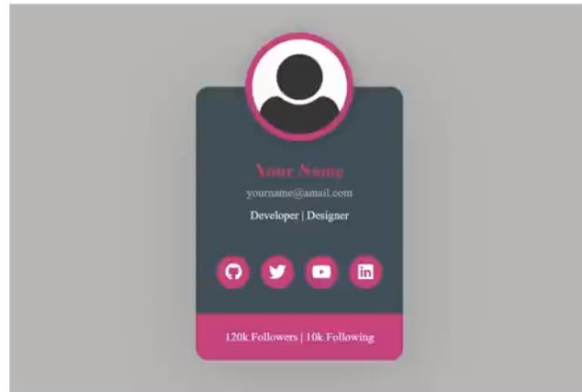
# MPA SAP samples

- 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/>

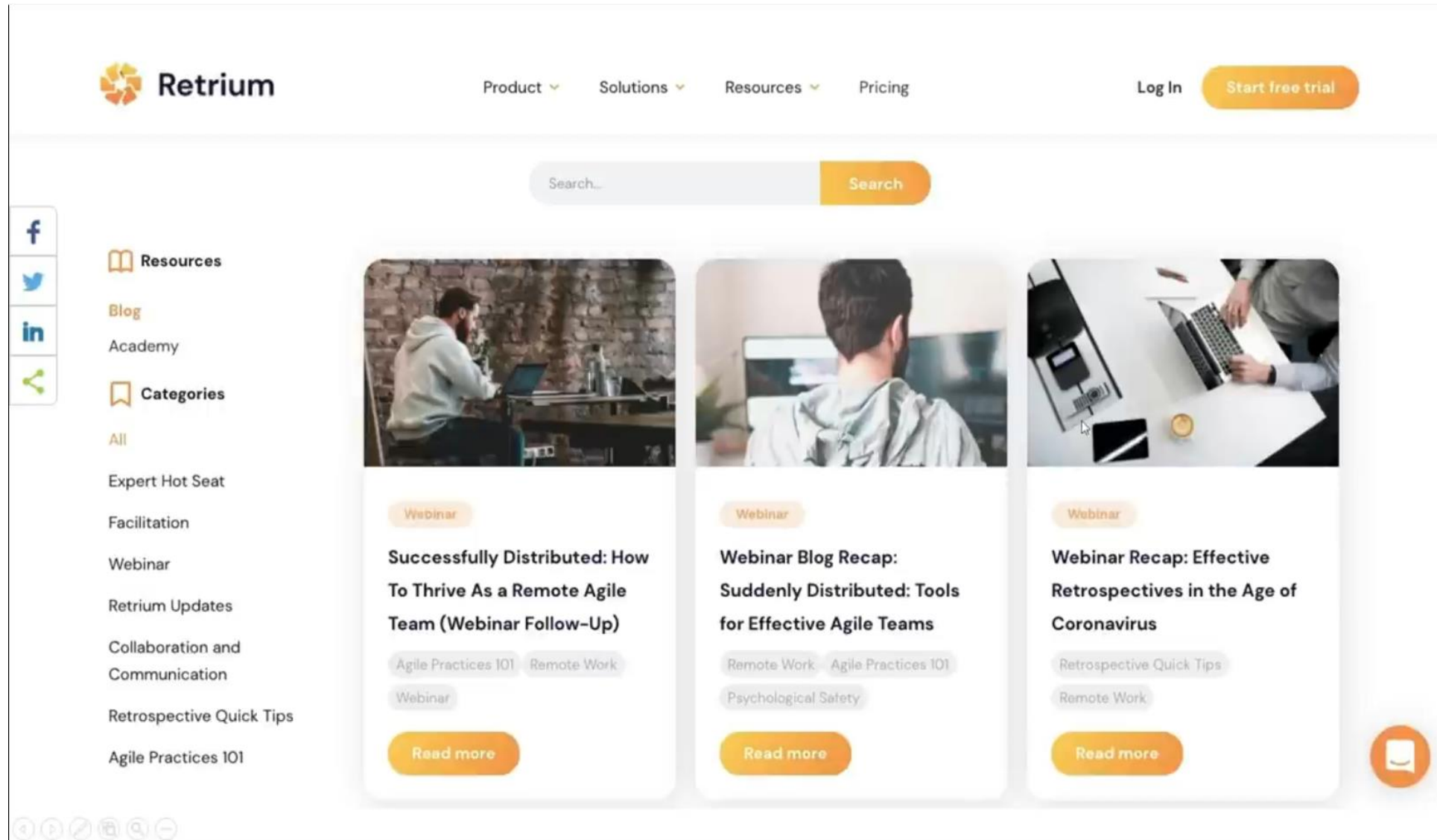
# React Components

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

The screenshot shows the Retrium website homepage. The navigation bar at the top includes the Retrium logo, links for Product, Solutions, Resources, and Pricing, a Log In link, and a Start free trial button (highlighted with a red box). Below the navigation bar is a search bar with a Search button. On the left side, there is a vertical menu with social media icons (Facebook, Twitter, LinkedIn, and a share icon) and a list of categories: Resources, Blog, Academy, Categories, All, Expert Hot Seat, Facilitation, Webinar, Retrium Updates, Collaboration and Communication, Retrospective Quick Tips, and Agile Practices 101. The main content area features three featured articles, each with a video thumbnail, a title, tags, and a Read more button. The third article, 'Webinar Recap: Effective Retrospectives in the Age of Coronavirus', is highlighted with a red box. Within this article, the 'Webinar' tag is highlighted with a red box, and the 'Read more' button is highlighted with a blue box. The 'Retrospective Quick Tips' and 'Remote Work' tags are also highlighted with a blue box. A chat icon is visible in the bottom right corner.

Retrium

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Resources

Blog

Academy

Categories

All

Expert Hot Seat

Facilitation

Webinar

Retrium Updates

Collaboration and Communication

Retrospective Quick Tips

Agile Practices 101

Webinar

Successfully Distributed: How To Thrive As a Remote Agile Team (Webinar Follow-Up)

Agile Practices 101 Remote Work Webinar

Read more

Webinar

Webinar Blog Recap: Suddenly Distributed: Tools for Effective Agile Teams

Remote Work Agile Practices 101 Psychological Safety

Read more

Webinar

Webinar Recap: Effective Retrospectives in the Age of Coronavirus

Retrospective Quick Tips Remote Work

Read more

Chat

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**



