React Js Online Training

sahosoft
Online Learning Platform

01

By: Chandan Kumar

sahosoft
Online Learning Platform

About Sahosoft

Sahosoft is the best resource for learning Web Technologies Quickly & Easily. Sahosoft website is all about creativity and innovative work in the field of Technology.

We provide Online Classes, Online Live Project Training, Corporate Training, Membership Plan, web development course videos and articles. Sahosoft Online Classes are amazing and easy to learn from basic to advanced level.

Sahosoft provides tutorials of different programming languages and Computer subjects. The main purpose of this Course is to provide quality learning content for students and professionals. we understand your attachment with the content, so committed for delivering you the best possible material.

Sahosoft also provide free videos on our YouTube channel and source code and you are free to use it and make changes.

Here is my YouTube channel link:

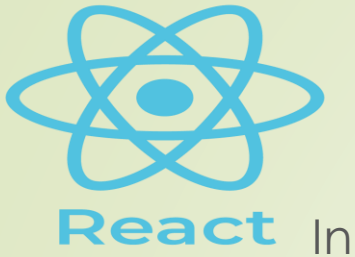
https://www.youtube.com/channel/UCcsUx7ZOL1Sa3oylC29VseA/videos

React

Where to find the Course Source Code

We will provide class materials through the Sahosoft class app

sahosoft
Online Learning Platform



Course Introduction

In this course, you will learn how simple it is to use React JS to create maintainable and testable single page applications. You will learn how to: **bootstrap your React application**, **turn your application into a SPA using routing.**

In this course, you will learn React JS and build enterprise-strength applications that run smoothly on web. You will also learn how to building **components**, **elements**, **modularizing applications**, and **building web Application**.

You will also learn **how to address the challenges** you encounter in developing single-page applications with the help of this React online class. It will not only make your work easier but be of great help in the advancement of your web development career. Before to taking this course, you need to have experience in **web development** as well as in **coding with JavaScript**.

Course Introduction

We will Cover…

JavaScript : Approx. 27 Classes (Recorded Session) – **Free of Cost** (**not a part of React JS course**)

React JS Concept With Example : 40-45 Classes (Live Session)

Project Training on e-commerce based Application : 20-25 Classes (Recorded Session)

Course Introduction

By the end of attending this online class, you'll be able to:

- Build real client applications with React JS on your own
- Troubleshoot common compile-time and run-time errors
- Write clean and maintainable code like a professional
- Apply best practices when building React apps

Course Introduction

Basic Concepts

Now first of all we have to know about these :

- What is React JS | React JS Introduction
- What is JavaScript and JavaScript library
- What is the difference between JavaScript library and framework
- Why React?
- Advantages of React JS | Features of React
- Disadvantages of React JS | Limitations of React
- Where to use react JS
- What is single page application
- React JS vs Angular
- You should have a basic understanding to learn React

React JS Introduction

sahosoft
Online Learning Platform

React JS Introduction

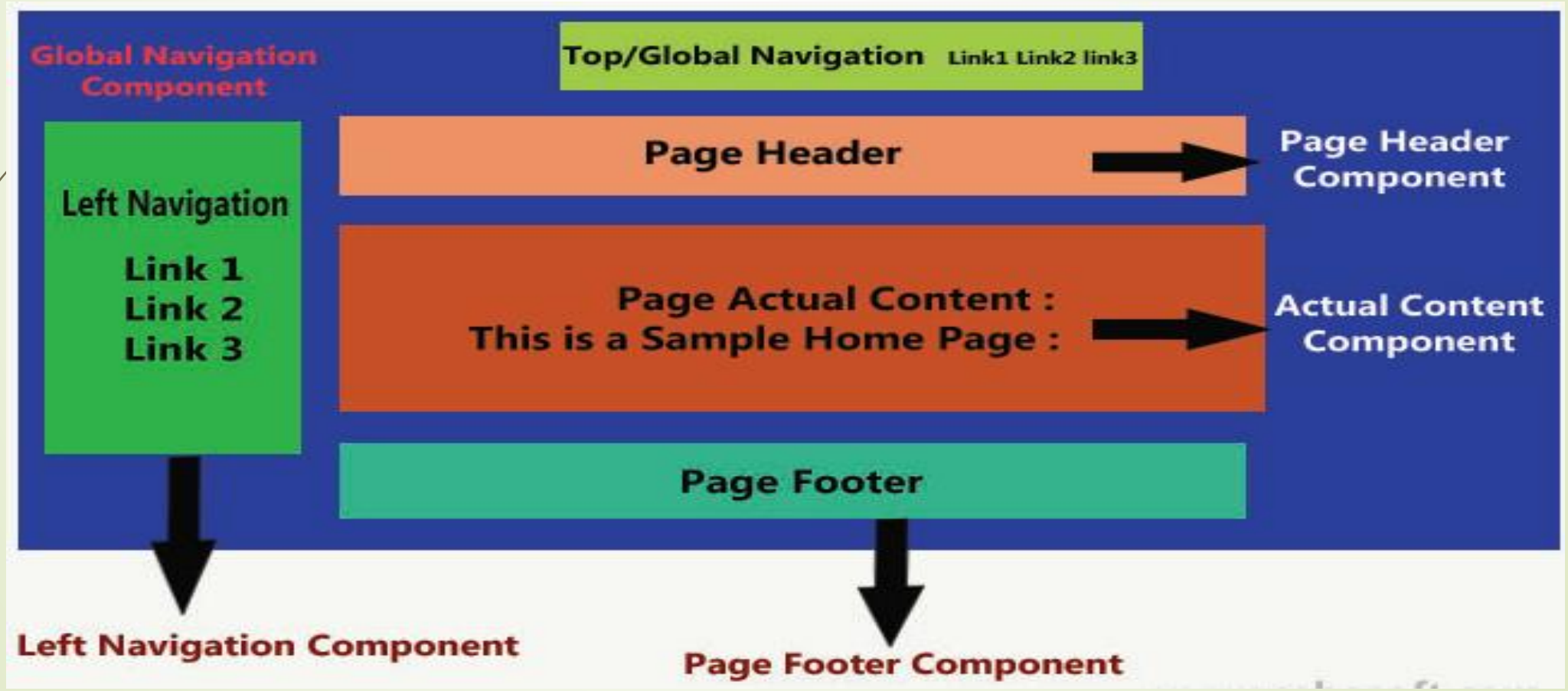
- React JS is the most popular front-end **JavaScript library** for websites or Web applications developed and maintained by Facebook to help the developers and designers to create interactive user interfaces very quickly. Currently, there is a great demand for React js in the industry. React JS is also called simply to React or React.js or Facebook React.js.
- React JS is a JavaScript library used in web development to build interactive elements on websites. But if you're not familiar with **JavaScript** or **JavaScript libraries**, that's not a helpful definition.
- This is not a framework like Angular, but just a library like jQuery. Many people get confused on this part and consider React as a framework instead of the library; this is wrong. You can use **React frameworks** like **Next.js, Remix and Gatsby and Expo (for native apps)**
- It is used to build **web** and **mobile applications** for creating rich and engaging web apps fast and efficiently with minimal coding. It powers the most popular social media sites such as **Facebook** and **Instagram**. Currently, it is the most popular developer's choice for creating Websites, Web Applications and Mobile Applications.
- React was first created by **Jordan Walke**, a software engineer working for **Facebook**. React first deployed on **Facebook's newsfeed** in **2011** and on **Instagram.com** in **2012**.

React JS Introduction

- React js is an open-source JavaScript library that is used for building user interfaces specifically for **single-page applications**. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. Means React handles the View layer of any application. Currently, **MVC** (**Model**, **View**, **Controller**) is the most popular pattern to create applications and React only deals with the View section of an application. React is mostly used in large applications where data is frequently changed on user-interactions.
- React allows developers to create large web applications that can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on **user interfaces** in the application.
- React encourages on creating reusable components. It offers a simple model and provides better performance. It has a strong client base and a large community. It has very proper documentation. It can also render the server-side code using **Node** or any **other platform API**.
- React used for development of single page applications or mobile applications. For complex applications, React uses additional libraries for **state management**, **routing**, and **interaction with an API**.

React JS Introduction

- **The core objective** of React JS is providing the best possible rendering performance. Its strength comes from the **focus on individual components**. Instead of working on the entire web app, React JS allows a developer to **break down the complex UI** into simpler components. Means React allows us to compose complex UIs by writing a small piece of code. An isolated piece of code is called **Component**.



Popular Sites Use React JS

01

sahosoft
Online Learning Platform

Popular Sites Use React JS

- Facebook:

The Facebook webpage is designed with React. React Native is a version of React. It is responsible for displaying the Android and iOS native components. The Facebook mobile app uses React native. Thus, partially, Facebook uses ReactJS.

- Instagram:

React JS is extensively used within Instagram. There are numerous features such as the Google Maps APIs, geo locations, hashtags. The Instagram API is really impressive.

Popular Sites Use React JS

- WhatsApp:

WhatsApp uses ReactJS for building web user interfaces from Facebook. The newly launched WhatsApp web uses ReactJS and other frameworks.

- Yahoo! Mail:

Undoubtedly, Yahoo! Mail also uses to React. The products owned by Facebook wholly or partially use ReactJS.

Popular Sites Use React JS

- Dropbox:

Dropbox has started using ReactJS for a year now. It effectively uses the components and resources. The effective cloud storage services and backup solutions have been designed with the help of ReactJS.

- Mostly every application you use in your daily life uses ReactJS. Also, other popular sites such as the **New York Times**, **Codecademy** also use ReactJS. That means you'll be using a new innovative technology that is being **used by some of the biggest brands on internet**.

React

JavaScript

01

sahosoft
Online Learning Platform

JavaScript

JavaScript (or JS) is a **scripting language** used to create and control dynamic web content.

Dynamic web content includes things like animated graphics, photo slideshows, and interactive forms.

JavaScript is the **Scripting Language** for the Web. JavaScript can update and change both HTML and CSS. JavaScript can calculate, manipulate and validate data.

It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages.

What is a scripting language?

01

sahosoft
Online Learning Platform

What is a scripting language?

All **scripting languages** are programming languages. They do not require the compilation step and are rather interpreted.

A **scripting language** is a programming language designed for integrating and communicating with other programming languages.

There are many scripting languages some of them are below

Javascript, jquery,php ... etc

Advantages of scripting languages

01

sahosoft
Online Learning Platform

Advantages of scripting languages

- **Easy learning:** The user can learn to code in scripting languages quickly, not much knowledge of web technology is required.
- **Fast editing:** It is highly efficient with the limited number of data structures and variables to use.
- **Interactivity:** It helps in adding visualization interfaces and combinations in web pages. Modern web pages demand the use of scripting languages. To create enhanced web pages, fascinated visual description which includes background and foreground colors and so on.

Application of Scripting Languages

01

sahosoft
Online Learning Platform

Application of Scripting Languages

Scripting languages are used in many areas it is used in server side as well as client side.

It is used to create plugins and extensions for existing applications. It is also used in Games application and Multimedia.

Server side scripting languages are: PHP, Node js etc. and **Client side scripting languages** are: JavaScript, AJAX, jQuery etc.

Divided into two categories

- Server Side Scripting Languages
- Client Side Scripting Languages

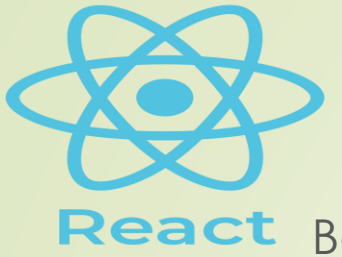
Server-side scripting languages create the scripts that run on the server and hence minimize the workload of a browser. The functionality of your website is written in those scripting languages. The most commonly used server-side scripting languages are **Node js, Ruby, Python, PHP**, etc.

Client-side scripting languages create the scripts that run on the client side (i.e. your browser). These are sent from the server by server-side scripts. Some good examples are **JavaScript, jQuery, CSS** etc.

Scripting Vs Programming

01

sahosoft
Online Learning Platform



Scripting Vs Programming

Basically, all **scripting languages** are **programming languages**. The theoretical difference between the two is that **scripting languages** do not require the compilation step (it is use Interpreter).

Means **Programming languages** are those which use compiler and **Scripting languages** are those which use Interpreter (scripting languages interpreted by the browser).

For example, normally, a C program needs to be compiled before running whereas normally, a scripting language like JavaScript need not be compiled.

Generally, compiled programs run faster than interpreted programs because they are first converted native machine code. Also, compilers read and analyze the code only once, and report the errors collectively that the code might have, but the interpreter will read and analyze the code statements each time.

Scripting Vs Programming

Factor	Scripting Language	Programming Language
Type of language	Interpreter based	Compiler based
Usage	To combine existing components	To develop from scratch
Running	Inside other program (dependent)	Independent of a parent program
Compilation	No need to compile	Needs to compile first
Coding type	It is a small piece of code	It is a full code of a program
Time to develop	Less time as required less code	More time as you need to write the full code
Complexity	Easy to write and use	Difficult
Cost	Low maintenance	High maintenance
Example	JavaScript, PHP, Ruby, Perl, VB Script, etc.	C, C++, Java, Pascal, C#, VB, Basic, COBOL, etc.

What is JavaScript used for?

01

sahosoft
Online Learning Platform

What is JavaScript used for?

JavaScript is mainly used for web-based applications and web browsers. Here are some basic things JavaScript is used for:

- Adding interactive behaviour to web pages
- JavaScript allows users to interact with web pages.
- There are almost no limits to the things you can do with JavaScript on a web page – these are just a few examples:
  - Show or hide more information with the click of a button
  - Change the color of a button when the mouse hovers over it
  - Slide through a carousel of images on the homepage
  - Zooming in or zooming out on an image
  - Displaying a timer or count-down on a website
  - Playing audio and video in a web page
  - Displaying animations
  - Using a drop-down menu

What is JavaScript used for?

- Creating web apps

Developers can use various JavaScript frameworks for developing and building web apps.

- Building web servers and developing server applications

Beyond websites and apps, developers can also use JavaScript to build simple web servers and develop the back-end infrastructure using Node.js.

- Game development

Of course, you can also use JavaScript to create browser games. These are a great way for beginning developers to practice their JavaScript skills.