

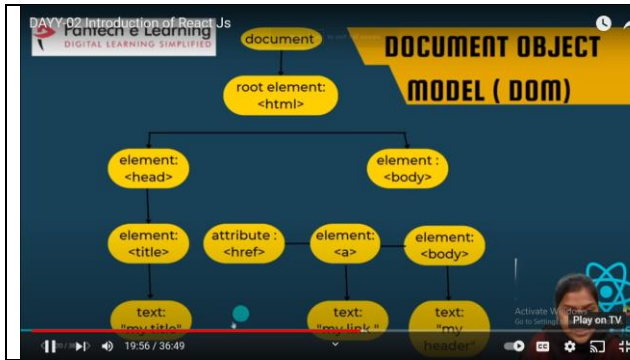
Training Program on React JS (10th Apr, 2023 to 10th May, 2023)

React.js, commonly known as React, is an open-source JavaScript library for building user interfaces (UIs), particularly for single-page applications where smooth and responsive user experiences are crucial. Developed and maintained by Facebook, React allows developers to create reusable UI components that update efficiently and automatically when the underlying data changes. A 30 Days React JS Masterclass was held for the students from 10th Apr, 2023 to 10th May, 2023. Dr. Souvik Ganguli from the Department of Electrical and Instrumentation Engineering, Thapar Institute of Engineering and Technology, Patiala was the coordinator of the program. The program link is shared for reference:

<https://www.youtube.com/watch?v=WJxPu45eSS4>

The collage consists of six screenshots from a YouTube video series:

- Top Left:** A slide titled "REACT JS" with the React logo and a list of bullet points: "ReactJS is a declarative, efficient, and flexible JavaScript library for building reusable UI components.", "It is an open-source, component-based front end library which is responsible only for the view layer of the application.", "It was initially developed and maintained by Facebook and later used in its products like WhatsApp & Instagram."
- Top Right:** A slide titled "WHY WE USE REACT JS?" with the React logo and a list of bullet points: "The main objective of ReactJS is to develop User Interfaces (UI) that improves the speed of the apps.", "It uses virtual DOM (JavaScript object), which improves the performance of the app.", "The JavaScript virtual DOM is faster than the regular DOM."
- Middle Left:** A slide titled "PRE - REQUISITES:" with the React logo and a list of bullet points: "JavaScript", "HTML5", "CSS".
- Middle Right:** A slide titled "REACT INTRODUCTION:" with the React logo and a list of bullet points: "Today, most of the websites are built using MVC (model view controller) architecture.", "In MVC architecture, React is the 'V' which stands for view, whereas the architecture is provided by the Redux or Flux.", "A ReactJS application is made up of multiple components, each component responsible for outputting a small, reusable piece of HTML code."
- Bottom Left:** A slide titled "Skill AP APSSDC REACT JS" with the React logo and text: "React is a javascript library for building fast and interactive user interface for the web as well as mobile applications", "It is an open-source, reusable component based front end library."
- Bottom Right:** A slide titled "JORDAN WALKER" with the React logo and a list of bullet points: "2010 – The first signs of React", "2011 – An early prototype of React", "2012 – Something new started at Facebook", "2013 – The year of the Big Launch", "2014 – The year of Expansion", "2015 – React is Stable", "2016 – React gets mainstream", "2017 – The year of further improvements", "2021 – What's up with React now?"



- DAY 02 Introduction of React Js
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- DOM treats an XML or HTML document as a tree structure in which each node is an object representing a part of the document.
 - react keeps a light weight representation of real DOM in the memory and that is known as the virtual DOM.
 - manipulating real DOM is much slower than manipulating virtual DOM, because nothing gets drawn on screen.
 - when the state of an object changes ,virtual DOM changes only that object in the real DOM instead of updating all the objects.
 - virtual DOM and REAL DOM are two types
 - the virtual DOM is compared to its previous state and then react gets to know which objects have changed.
- 21:50 / 36:49