Introduction to ReactJS

Course Code: CSC 4182 Course Title: Advanced Programming In Web Technologies

Dept. of Computer Science Faculty of Science and Technology

Lecture No:	2	Week No:	08	Semester:	
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Lecture Outline



- √ Full Stack Web Development
- ✓ Frontend Libraries & Frameworks
- ✓ Backend Frameworks
- ✓ What is Tech Stack
- ✓ 3NP Stack
- ✓ API(Application Programming Interface)
- ✓ REST API
- ✓ Course Logistics
- ✓ Node.js
- ✓ Postman

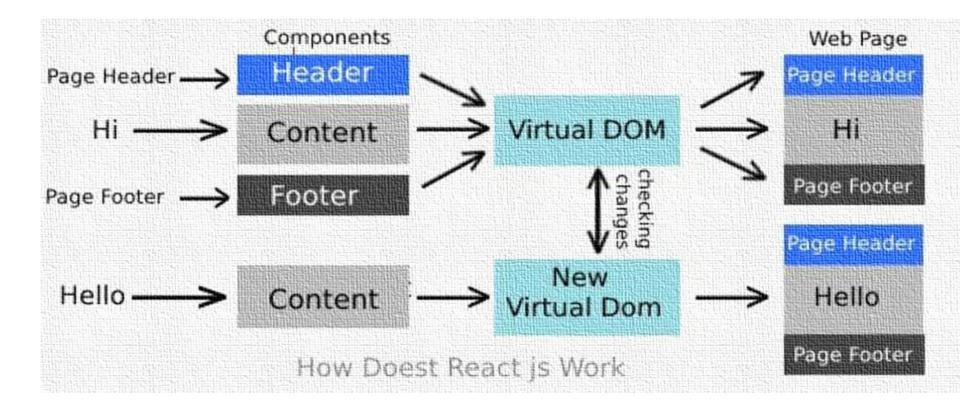
What is ReactJS?



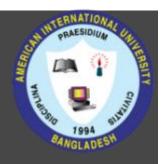
- ReactJS is a JavaScript library created by Facebook.
- React is a tool for building UI components.
- React creates a VIRTUAL DOM in memory.
- Instead of manipulating the browser's DOM directly, React creates a
 virtual DOM in memory, where it does all the necessary
 manipulating, before making the changes in the browser DOM.
- React only changes what needs to be changed!
- React finds out what changes have been made, and changes only what needs to be changed.

How does React Work?





React.JS History



- Current version of React.JS is V18.0.0 (April 2022).
- Initial Release to the Public (V0.3.0) was in July 2013.
- React.JS was first used in 2011 for Facebook's Newsfeed feature.
- Facebook Software Engineer, Jordan Walke, created it.

ES6 pre-requisite of ReactJS



What is ES6?

ES6 stands for ECMAScript 6.

ECMAScript was created to standardize JavaScript, and ES6 is the 6th version of ECMAScript, it was published in 2015, and is also known as ECMAScript 2015.

React uses ES6, and you should be familiar with some of the new features like:

- Arrow Functions
- Variables (let, const, var)
- Array Methods like .map()
- Destructuring
- Modules
- Ternary Operator

References



- 1. W3Schools Online Web Tutorials, URL: http://www.w3schools.com
- 2. Next.js, URL: https://nextjs.org/
- 3. Mozilla Developer Networks, URL: https://developer.mozilla.org/



Thank You!