**Module – 2 Advance JavaScript**

**What is JavaScript Output method?**

* **innerHTML**

Property: This property is used to access an element and write the content to it.

* **document.write()**

Method: This method writes directly into the HTML output.

* **window.alert()**

Method: This method displays an alert box, suitable for displaying error messages and the like.

* **console.log()**

Method: This method writes to the browser console, making it ideal for displaying debugging information.

**How to used JavaScript Output method?**

* Writing into an HTML element, using innerHTML.
* Writing into the HTML output using document.write().
* Writing into an alert box, using window.alert().
* Writing into the browser console, using console.log().

**How to used JavaScript Events to do all examples?**

1. Onload: When your page loads, it performs accordingly.
2. Onclick: When a user clicks on a button or inputs it occurs.
3. Onmouseover: When a user mouses over on the button.
4. Onfocus: Certain scenarios when a user keeps the cursor in a form field.
5. Onblur: If a particular form field leaves within it.

**Module – 3 ReactJs**

**What is React Js?**

* React is a JavaScript library for building user interfaces.
* React is used to build single-page applications.
* React allows us to create reusable UI components.

**What is NPM in React Js?**

* **NPM** is the world's largest **Software Registry**.
* The registry contains over 800,000 **code packages**.
* **Open-source** developers use **NPM** to **share** software.
* Many organizations also use NPM to manage private development.

**What is Role of Node Js in react Js?**

Node is the most popular platform for hosting and running web servers for React apps. After all, using NPM (Node Package Manager), you can install any package with NPM command-line interface CLI. Moreover, Node utilizes Webpack and other modules to turn a React application into an easily compilable single file.

**What is CLI command In React Js?**

A CLI command is a text-based input that is used to execute a function or command in a React application. CLIs are often used to perform tasks such as creating new components, starting and stopping the development server, and building the application for production.

**What is Components in React Js?**

Components are the building blocks of React applications. They are isolated, reusable pieces of code that can be combined to create complex UIs. Components can be written as functions or classes, but functional components are the preferred way to write components

**What is Header and Content Components in React Js?**

Header and Content Components in React Js are two different components that are used to create the header and content of a web page. The header component is used to display the name of the website, the logo, and the navigation links. The content component is used to display the main content of the web page.

**How to install React Js on Windows, linux Operating System? How to install NPM and How to check version of NPM?**

* **Install React Js on Windows**
  + - Install Node.js and npm.: Node.js is a platform that allows you to run JavaScript outside of a browser. npm is a package manager for Node.js that allows you to easily install and manage React and its dependencies.
    - Create a new folder for your React project.: You can do this using the mkdir command in the command prompt.
    - Navigate to the new folder.: You can do this using the cd command in the command prompt.
    - Install React using create-react-app.: Create React App is a tool that allows you to easily create a new React project with all of the necessary dependencies. To install it, run the following command:
* **Install React Js on Windows**

### Step 1: Install npm

### Step 2: Install create-react-app Utility

### Step 3: Create and Launch Your First React Application

### install NPM

### Step 1: Download Node.js Installer

### Step 2: Installing Node JS from the installer window

### Step 3: Verify Installation

* **check the version of NPM**
  1. Type the command npm -v or npm –version in your command prompt.
  2. The new version of Node.js and NPM will replace the older versions.

**How to check version of React Js?**

**1. Check the package.json file**

The package.json file is a JSON file that contains information about the dependencies of your React project. You can open this file in a text editor and look for the "react" dependency. The version number will be listed next to the "react" dependency.

**2.** **Check the node\_modules/react/package.json file**

The node\_modules/react/package.json file is a JSON file that contains information about the React library itself. You can open this file in a text editor and look for the "version" property. The version number will be listed next to the "version" property.

**3. Check the React website**

The React website has a page that lists the current version of React. You can visit this page to see the current version number and to learn more about new features in each version.

**4. Use the react-version command**

If you have the React CLI installed, you can use the react-version command to check the version of React that you are using. To do this, open a terminal and run the following command:

**How to change in components of React Js?**

To change the state of a component in React, you can use the setState() method. The setState() method takes two arguments: a callback function and a time interval in milliseconds. In this example, the useEffect() hook is used to set up an interval that will call the setTime() function every 1000 milliseconds (or 1 second).