**React Assignment**

**1. What is React Js?**

A. React is a JavaScript library for building user interfaces.

React is named React because of its ability to react to changes in data.

React is called React because it was designed to be a declarative, efficient, and flexible JavaScript library for building user interfaces.

The name "React" was chosen because the library was designed to allow developers to "react" to changes in state and data within an application, and to update the user interface in a declarative and efficient manner.

React is a JavaScript-based UI development library. Facebook and an open-source developer community run it.

**2.What is NPM in React Js?**

A. It is a tool used for package management and the default package manager for Node projects. NPM is installed when NodeJS is installed on a machine. It comes with a command-line interface (CLI) used to interact with the online database of NPM. This database is called the NPM Registry, and it hosts public and private 'packages.' To add or update packages, we use the NPM CLI to interact with this database.

- `npm` alternative is `yarn`

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

A.NodeJS is a framework of JavaScript which is mainly used for working with the backend of our application or building the backend using JavaScript,

It is used for server-side programming, and primarily deployed for non-blocking, event-driven servers, such as traditional web sites and back-end API services, but was originally designed with real-time, push-based architectures in mind.

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

A. React have its own CLI but currently they are only supporting creating an app (create-react-app). create-react-app used to generate the boilerplate version of a React application thru command line.

npx create-react-app my-app

create-react-app has taken care of setting up the main structure of the application as well as a couple of developer settings. Most of what you see will not be visible to the visitor of your web app. React uses a tool called webpack which transforms the directories and files here into static assets. Visitors to your site are served those static assets.

**5.What is Components in React Js?**

A.Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML.

Components come in two types, Class components and Function components, in this tutorial we will concentrate on Function components.

Class Component

A class component must include the extends React.Component statement. This statement creates an inheritance to React.Component, and gives your component access to React.Component's functions.

The component also requires a render() method, this method returns HTML.

Example

Create a Class component called Car

class Car extends React.Component {

render() {

return <h2>Hi, I am a Car!</h2>;

}

}

Function Component

Here is the same example as above, but created using a Function component instead.

A Function component also returns HTML, and behaves much the same way as a Class component, but Function components can be written using much less code, are easier to understand, and will be preferred

Example

Create a Function component called Car

function Car() {

return <h2>Hi, I am a Car!</h2>;

}

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

A.A header component defines a reusable custom header that can be sent in an API request or returned in an API response.

**7. How to install React Js on Windows, linux Operating System? How**

**to install NPM and How to check version of NPM?**

A. There are two ways to set up an environment for successful ReactJS application. They are given below.

Using the npm command

Using the create-react-app command

1. Using the npm command

Install NodeJS and NPM

NodeJS and NPM are the platforms need to develop any ReactJS application.

2.Using the create-react-app command

npx create-react-app my-app

cd my-app

npm start

To see if NPM is installed, type npm -v in Terminal. This should print the version number so you'll see something like this 1.4.28.

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

`package.json`:

\* this file is mandatory for every project

\* It contains basic information about the project

\* Application name/version/scripts

9.How to change in components of React Js?

A.