

# 1.ReactJS-HOL

## Objectives

- Define SPA and its benefits
- Define React and identify its working
- Identify the differences between SPA and MPA
- Explain Pros & Cons of Single-Page Application
- Explain about React
- Define virtual DOM
- Explain Features of React

## In this hands-on lab, you will learn how to:

- Set up a react environment
- Use create-react-app

## Prerequisites

The following is required to complete this hands-on lab:

- Node.js
- NPM
- Visual Studio Code

**Create a new React Application with the name “myfirstreact”, Run the application to print “welcome to the first session of React” as heading of that page.**

## Code of App.js File

```
import logo from './logo.svg';
import './App.css';

function App() {
  return (
    <h1>Welcome to the first session of React</h1>
  );
}

export default App;
```

## Terminal Output:

```
PS E:\Cognizant-Java FSE\Week 6\Code\1.ReactJS-HOL> npm install -g create-react-app
npm warn deprecated inflight@1.0.6: This module is not supported, and leaks memory. Do not use it. Check out lru-cache if you want a good and tested way to coalesce async requests by a key value, which is much more comprehensive and powerful.
npm warn deprecated glob@7.2.3: Glob versions prior to v9 are no longer supported
npm warn deprecated fstream-ignore@1.0.5: This package is no longer supported.
npm warn deprecated uid-number@0.0.6: This package is no longer supported.
npm warn deprecated rimraf@2.7.1: Rimraf versions prior to v4 are no longer supported
npm warn deprecated fstream@1.0.12: This package is no longer supported.
npm warn deprecated tar@2.2.2: This version of tar is no longer supported, and will not receive security updates. Please upgrade asap.

added 64 packages in 4s

4 packages are looking for funding
  run `npm fund` for details
```

```
PS E:\Cognizant-Java FSE\Week 6\Code\1.ReactJS-HOL> npx create-react-app myfirstreact
create-react-app is deprecated.
```

You can find a list of up-to-date React frameworks on [react.dev](https://react.dev)  
For more info see: <https://react.dev/link/cra>

This error message will only be shown once per install.

Creating a new React app in **E:\Cognizant-Java FSE\Week 6\Code\1.ReactJS-HOL\myfirstreact**.

Installing packages. This might take a couple of minutes.  
Installing **react**, **react-dom**, and **react-scripts** with **cra-template**...

added 1323 packages in 53s

269 packages are looking for funding  
 run `npm fund` for details

Installing template dependencies using npm...

added 18 packages, and changed 1 package in 6s

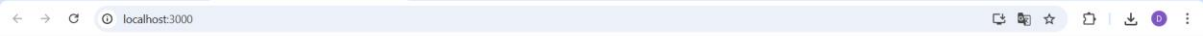
269 packages are looking for funding  
 run `npm fund` for details  
Removing template package using npm...

```
PS E:\Cognizant-Java FSE\Week 6\Code\1.ReactJS-HOL> cd myfirstreact
PS E:\Cognizant-Java FSE\Week 6\Code\1.ReactJS-HOL\myfirstreact> npm start

> myfirstreact@0.1.0 start
> react-scripts start

(node:5780) [DEP_WEBPACK_DEV_SERVER_ON_AFTER_SETUP_MIDDLEWARE] DeprecationWarning: 'onAfterSetupMiddleware' option is deprecated. Please use the 'setupMiddlewares' option.
Compiled with warnings.
```

Browser Output:



Welcome to the first session of React