# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY DHARWAD

#### Morden React

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#### CERTIFICATE:



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## React - The Complete Guide (incl Hooks, React Router, Redux)

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#### INTRODUCTION

- ReactJS is a JavaScript library used to create reusable user interface components.
- According to the official React documentation, follows the definition -React is a library for creating modular user interfaces.
- It encourages the creation of reusable user interface components, which present data that changes over time.
- Many people use the React as the V in the MVC.

#### REACT COMPONENTS

- A Component is one of the core building blocks of React. In other words, we can say that every application you will develop in React will be made up of pieces called components.
- Components make the task of building UIs much easier. You can see a UI broken down into multiple individual pieces called components and work on them independently and merge them all in a parent component which will be your final UI.

#### REACT-HOOKS

- UseState is a Hook.
- The React useState Hook allows us to track state in a function component
- UseState returns a pair: the current state value and a function that lets us update it.
- You can call this function from an event handler or somewhere else. It's similar to this.setState
  in a class, except it doesn't merge the old and new state together
- The Effect Hook, useEffect, adds the ability to perform side effects from a function component.
- It serves the same purpose as componentDidMount, componentDidUpdate, and componentWillUnmount in React classes, but unified into a single API

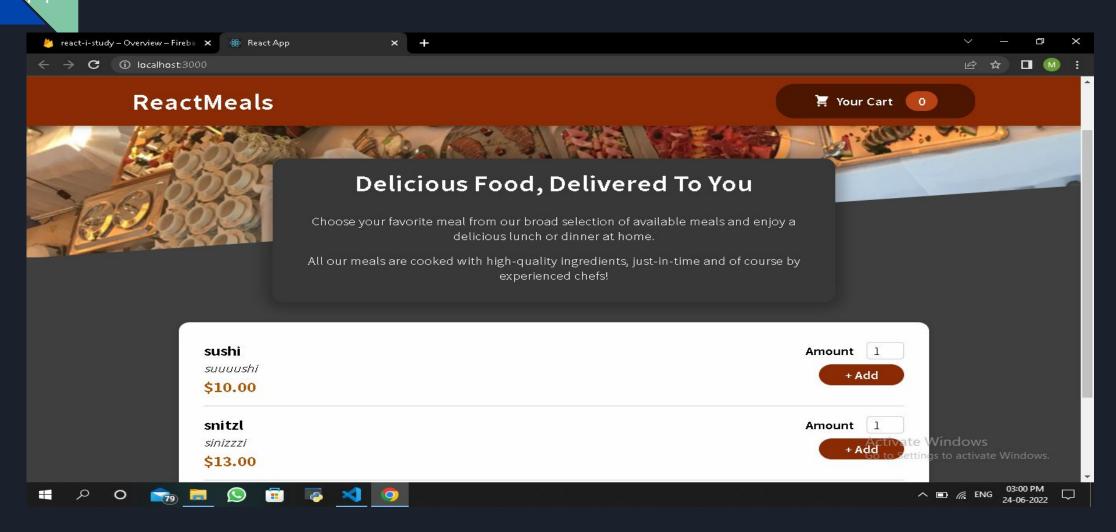
### React Props & React State:

- We learnt about props which are used for configuring our component, Props are immutable.
- State is designed to constantly change in response to events. It tracks UI and business logic. It is mutable. We learnt how to initialise state and use them in components, we also learnt how to change the state using this.setState() method.

#### React Router & React NextJS

- React router: Client-side routing handles mapping between URL bar and the content a user sees via browser rather than via server. Which is achieved by react router that we learned in this course.
- React NextJS: enables React-based web applications to have functionalities such as server-side rendering and generating static websites. Server-side rendering makes the webpage more readable for crawlers, ex google crawlers

I have a implemented a simple to-do list app mostly using Hooks and functional components and material UI. The screenshot of the working app is below:



THANK YOU