**Muhammad Usama Latif**

**cms 214634**

**Lab 08**

**TASK 1**

**Code:**

index.js

import React from 'react';

import ReactDOM from 'react-dom';

class Car extends React.Component {

  constructor(props) {

    super(props);

    this.state = {

      brand: "Ford",

      model: "Mustang",

      color: "red",

      year: 1964

    };

  }

  changeColor = () => {

    this.setState({color: "blue"});

  }

  render() {

    return (

      <div>

        <h1>My {this.state.brand}</h1>

        <p>

          It is a {this.state.color}

          {this.state.model}

          from {this.state.year}.

        </p>

        <button

          type="button"

          onClick={this.changeColor}

        >Change color</button>

      </div>

    );

  }

}

ReactDOM.render(<Car />, document.getElementById('root'));

index.html

<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="utf-8" />

    <meta name="viewport"

      content="width=device-width, initial-scale=1" />

    <title>React App</title>

  </head>

  <body>

    <div id="root"></div>

  </body>

</html>

**Output:**





**TASK 2**

**Code:**

**import React from "react";**

**import ReactDOM from "react-dom";**

**import "./styles.css";**

**class TimerInput extends React.Component {**

**render() {**

**return (**

**<div style={{marginLeft:100}}>**

**<h3>Input your desired time</h3>**

**<input type="number" value={this.props.value} onChange={this.props.handleChange} required />**

**</div>**

**);**

**}**

**}**

**class Timer extends React.Component {**

**render() {**

**return (**

**<div>**

**<h1 style={{ fontSize: 100, marginLeft:100 }}>{this.props.value}:{this.props.seconds}</h1>**

**</div>**

**);**

**}**

**}**

**class StartButton extends React.Component {**

**render() {**

**return (**

**<div style={{ marginLeft: 130 }}>**

**<button className="btn btn-lg btn-success" disabled={!this.props.value} onClick={this.props.startCountDown}>Start</button>**

**</div>**

**);**

**}**

**}**

**class App extends React.Component {**

**constructor(props) {**

**super(props);**

**this.state = {**

**seconds: '00',**

**value: '',**

**isClicked : false**

**}**

**this.secondsRemaining;**

**this.intervalHandle;**

**this.handleChange = this.handleChange.bind(this);**

**this.startCountDown = this.startCountDown.bind(this);**

**this.tick = this.tick.bind(this);**

**}**

**handleChange(event) {**

**this.setState({**

**value: event.target.value**

**})**

**}**

**tick() {**

**var min = Math.floor(this.secondsRemaining / 60);**

**var sec = this.secondsRemaining - (min \* 60);**

**this.setState({**

**value: min,**

**seconds: sec,**

**})**

**if (sec < 10) {**

**this.setState({**

**seconds: "0" + this.state.seconds,**

**})**

**}**

**if (min < 10) {**

**this.setState({**

**value: "0" + min,**

**})**

**}**

**if (min === 0 & sec === 0) {**

**clearInterval(this.intervalHandle);**

**}**

**this.secondsRemaining--**

**}**

**startCountDown() {**

**this.intervalHandle = setInterval(this.tick, 1000);**

**let time = this.state.value;**

**this.secondsRemaining = time \* 60;**

**this.setState({**

**isClicked : true**

**})**

**}**

**render() {**

**const clicked = this.state.isClicked;**

**if(clicked){**

**return (**

**<div>**

**<div className="row">**

**<div className="col-md-4"></div>**

**<div className="col-md-4">**

**<Timer value={this.state.value} seconds={this.state.seconds} />**

**</div>**

**</div>**

**</div>**

**);**

**}else{**

**return (**

**<div>**

**<div className="row">**

**<div className="col-md-4"></div>**

**<div className="col-md-4">**

**<TimerInput value={this.state.value} handleChange={this.handleChange} />**

**<Timer value={this.state.value} seconds={this.state.seconds} />**

**<StartButton startCountDown={this.startCountDown} value={this.state.value} />**

**</div>**

**</div>**

**</div>**

**);**

**}**

**}**

**}**

**const rootElement = document.getElementById("root");**

**ReactDOM.render(<App />, rootElement);**

**Output:**



