**React Assignment:1**

1. Install NodeJs, Visual studio code
2. create a Welcome component to greet the user using a javascript function,

with a property called as name. Apply some css styling. Use the component in App component.

import logo from './logo.svg';

import './App.css';

import Welcome from './Welcome.js'

import Add from './Add.js'

import Card from './Card.js'

function App() {

const style = {

}

return (

<div className="App">

<Welcome style={style} name="Hello World!"/>

</div>

);

}

export default App;

1. Create a Component to add two numbers.

import React from 'react';

export default class Add extends React.Component{

constructor(props){

super(props);

this.state = {first: 0, second: 0, sum: 0};

}

changeFirst=(event)=>{

this.setState({first: Number(event.target.value)});

}

changeSecond=(event)=>{

this.setState({second: Number(event.target.value)});

}

getSum=(event)=>{

this.setState({sum: Number(this.state.first)+ Number(this.state.second)});

}

render(){

const style = {

width: "10%",

height: "30px",

borderRadius: "15px",

border: "0px"

}

const button ={

width: "10%",

height: "30px",

borderRadius: "15px",

border: "0px",

color: "white",

backgroundColor: "rgb(4, 128, 245)"

}

return(

<div style = {this.props.style}>

<h3>Add Two Numbers</h3>

<input type="text" id="first" style={style} onChange={this.changeFirst}></input>

&nbsp;+&nbsp;

<input type="text" id="second" style={style} onChange={this.changeSecond}></input>

<br></br>

<br></br>

<input type="text" id="sum" value={this.state.sum} style={style} ></input>

&nbsp; &nbsp;&nbsp;&nbsp;

<button type='button' onClick={this.getSum} style={button}> Add </button>

<br></br>

<br></br>

</div>

);

}

}

1. Modify the card component to add a props age and perform the validation,to check it’s a number.

import React from 'react';

export default class Card extends React.Component{

constructor(props){

super(props);

this.state={

value: "",

result: "no input"

}

}

setInput=(event)=>{

this.setState({value: event.target.value})

}

checkInput=(event)=>{

if(isNaN(this.state.value)){

this.setState({result: "this is not a number"})

}

else{

this.setState({result: "this is a number"})

}

}

render(){

const style = {

width: "10%",

height: "30px",

borderRadius: "15px",

border: "0px"

}

const button ={

width: "10%",

height: "30px",

borderRadius: "15px",

border: "0px",

color: "white",

backgroundColor: "rgb(4, 128, 245)"

}

return(

<div style={this.props.style}>

<h3>Age</h3>

<input type="text" style={style} onChange={this.setInput}></input>

&nbsp;&nbsp;&nbsp;&nbsp;

<button style={button} onClick={this.checkInput}>Check</button>

<p>{this.state.result}</p>

<br></br>

</div>

);

}

}

1. What is Virtual DOM in ReactJS

is a programming concept where an ideal, or “virtual”, representation of a UI is kept in memory and synced with the “real” DOM by a library such as ReactDOM. This process is called [reconciliation](https://reactjs.org/docs/reconciliation.html).