React Js

Firstly, select the folder where you are creating the project. Then open the Node JS command Prompt and type the following commands.

* Path like as C:\Users\ahmad\Documents\GitHub\IB-1st-React-JWT>
* npx create-react-app my-app
* and npm install --save react-router for history
* cd my-app
* Code .
* npm start
* its start in this port <http://localhost:3000/>

[https://www.youtube.com/watch?v=GBu1XPGJeu0 HYPERLINK "https://www.youtube.com/watch?v=GBu1XPGJeu0&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=19"& HYPERLINK "https://www.youtube.com/watch?v=GBu1XPGJeu0&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=19"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=GBu1XPGJeu0&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=19"& HYPERLINK "https://www.youtube.com/watch?v=GBu1XPGJeu0&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=19"index=19](https://www.youtube.com/watch?v=GBu1XPGJeu0&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=19)

Install Bootstrap for react JS

Open current project folder and use the following commands to install the bootstrap in the react project while using the node JS command Prompt window

* npm install react-bootstrap bootstrap
* and add the following link in index.html file before closing the head tag

<link

rel="stylesheet"

href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"

integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"

crossorigin="anonymous"

/>

* and after open the app.js file and import the following link for bootstrap compatibility

import 'bootstrap/dist/css/bootstrap.min.css';

* after that open app.js file and import the following link for button

import ‘ import Button from 'react-bootstrap/Button';

[https://www.youtube.com/watch?v=oYspSD04HJE HYPERLINK "https://www.youtube.com/watch?v=oYspSD04HJE&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=20"& HYPERLINK "https://www.youtube.com/watch?v=oYspSD04HJE&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=20"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=oYspSD04HJE&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=20"& HYPERLINK "https://www.youtube.com/watch?v=oYspSD04HJE&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=20"index=20](https://www.youtube.com/watch?v=oYspSD04HJE&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=20)

**Components Use in React**

We let pages as a component so firstly

* Create new folder in SRC folder
* Then create new file Home.js
* Adding some code inside this file
* One thing we use className for Bootstrap class not use simple class its conflict with the Class
* After that going to app.js file for adding the components
* as three files added be like as home.js

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**Installing React Router DOM**

* npm install react-router-dom
* after that open app.js file and add

import {BrowserRouter, Route, Switch} from 'react-router-dom';

* after that adding some following code like as in render

<BrowserRouter>

    <div className="container ">

      <switch>

        <Route path='/' component={Home} exact/>

        <Route path='/Crud' component={Crud} exact/>

        <Route path='/Tablese' component={Tablese} exact/>

      </switch>

    </div>

    </BrowserRouter>

[https://www.youtube.com/watch?v=-Fb552R6mVg HYPERLINK "https://www.youtube.com/watch?v=-Fb552R6mVg&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=22"& HYPERLINK "https://www.youtube.com/watch?v=-Fb552R6mVg&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=22"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=-Fb552R6mVg&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=22"& HYPERLINK "https://www.youtube.com/watch?v=-Fb552R6mVg&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=22"index=22](https://www.youtube.com/watch?v=-Fb552R6mVg&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=22)

**Add Navigation Menu (Bootstrap)**

Add new component that name is Navigation and write a code inside like as the following

import React, {Component} from 'react';

import {NavLink} from 'react-router-dom';

import {Navbar, Nav} from 'react-bootstrap';

export class Navigation extends Component{

    render(){

        return(

            <Navbar bg="dark" expand="lg">

            <Navbar.Toggle area-controls="basoc-navbar-nav"/>

                <Navbar.Collapse id="basoc-navbar-nav">

                    <Nav>

                        <NavLink className="d-inline p-2 bg-dark text-white"

                        to="/" >Home</NavLink>

                          <NavLink className="d-inline p-2 bg-dark text-white"

                        to="/Crud" >Crud</NavLink>

                         <NavLink className="d-inline p-2 bg-dark text-white"

                        to="/Tablese" >Tablese</NavLink>

                    </Nav>

                </Navbar.Collapse>

            </Navbar>

        );

    }

}

After that call this navigation component in the main App.JS file

[https://www.youtube.com/watch?v=sb37Kut7sfA HYPERLINK "https://www.youtube.com/watch?v=sb37Kut7sfA&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=23"& HYPERLINK "https://www.youtube.com/watch?v=sb37Kut7sfA&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=23"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=sb37Kut7sfA&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=23"& HYPERLINK "https://www.youtube.com/watch?v=sb37Kut7sfA&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=23"index=23](https://www.youtube.com/watch?v=sb37Kut7sfA&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=23)

**React Bootstrap Grid**

In this video tutorial learn about how to create table in react using dummy data the code is follows

export class Crud extends Component {

    constructor(props){

        super(props);

        this.state={deps:[]}

    }

    componentDidMount(){

        this.refershList();

    }

    refershList(){

        this.setState({

            deps:[

                    {"Id":1,"Name":"Cup"},

                    {"Id":2,"Name":"Glass"}

                 ]

        })

    }

    render(){

        const{deps}=this.state;

        return (

            <Table className="mt-4" striped bordered hover size="sm" >

                <thead>

                    <tr>

                        <th>Id</th>

                        <th>Name</th>

                        {/\* <th>Details</th>

                        <th>Price</th>

                        <th>Type</th> \*/}

                    </tr>

                </thead>

                <tbody>

                       {deps.map(dep=>

                         <tr key={dep.Id}>

                         <td>{dep.Id}</td>

                         <td>{dep.Name}</td>

                         </tr>

                        )}

                </tbody>

            </Table>

            // <div className="mt-5 d-flex justify-content-left">

            //     <h3>This is Crud Page</h3>

            // </div>

        );

    }

}

This all operations done in the Crud/Departemt component

[https://www.youtube.com/watch?v=tqsRPVORaMw HYPERLINK "https://www.youtube.com/watch?v=tqsRPVORaMw&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=24"& HYPERLINK "https://www.youtube.com/watch?v=tqsRPVORaMw&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=24"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=tqsRPVORaMw&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=24"& HYPERLINK "https://www.youtube.com/watch?v=tqsRPVORaMw&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=24"index=24](https://www.youtube.com/watch?v=tqsRPVORaMw&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=24)

**Consume GET API method from react App**

In this just getting api and showing data inside the table and write to fetch code as below

import React,{ Component } from "react";

import {Table} from 'react-bootstrap';

export class Crud extends Component {

    constructor(props){

        super(props);

        this.state={deps:[]}

    }

    componentDidMount(){

        this.refershList();

    }

    refershList(){

        fetch('http://localhost:62932/Product')

        .then(response=>response.json())

        .then(data =>

            {

                this.setState({deps:data})

            }

        );

    }

    render(){

        const{deps}=this.state;

        return (

            <Table className="mt-4" striped bordered hover size="sm" >

                <thead>

                    <tr>

                        <th>Id</th>

                        <th>Name</th>

                        <th>Details</th>

                        <th>Price</th>

                        <th>Type</th>

                    </tr>

                </thead>

                <tbody>

                       {deps.map(dep=>

                         <tr key={dep.id}>

                         <td>{dep.id}</td>

                         <td>{dep.name}</td>

                         <td>{dep.details}</td>

                         <td>{dep.price}</td>

                         <td>{dep.type}</td>

                         </tr>

                        )}

                </tbody>

            </Table>

  ); }}

[https://www.youtube.com/watch?v=6QvNCZQWDZk HYPERLINK "https://www.youtube.com/watch?v=6QvNCZQWDZk&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=26"& HYPERLINK "https://www.youtube.com/watch?v=6QvNCZQWDZk&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=26"list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q HYPERLINK "https://www.youtube.com/watch?v=6QvNCZQWDZk&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=26"& HYPERLINK "https://www.youtube.com/watch?v=6QvNCZQWDZk&list=PLN1yQDPWR2SMcMsO7QzMCC\_g\_sYr4K76Q&index=26"index=26](https://www.youtube.com/watch?v=6QvNCZQWDZk&list=PLN1yQDPWR2SMcMsO7QzMCC_g_sYr4K76Q&index=26)

**Bootstrap Modal pop up Window**

Add new component that name wat addprodmodel.js and adding the data are the following

import React, {Component} from 'react';

import {Modal,Button,Row,Col,Form} from 'react-bootstrap';

export class AddProdModel extends Component{

    constructor(props)

    {

        super(props);

    }

    render(){

        return(

        <Modal

            {...this.props}

            size="lg"

            aria-labelledby="contained-modal-title-vcenter"

            centered

            >

            <Modal.Header closeButton>

                <Modal.Title id="contained-modal-title-vcenter">

                Add Product

                </Modal.Title>

            </Modal.Header>

            <Modal.Body>

                <div className="container">

                    To Add Form Fiels For Product

                </div>

            </Modal.Body>

            <Modal.Footer>

                <Button variant="danger" onClick={this.props.onHide}>Close</Button>

            </Modal.Footer>

            </Modal>

        );

    }

}

As well as some code write in the Crud.Js file

 constructor(props){

        super(props);

        this.state={deps:[], addModalShow : false}

    }

And

 render(){

let addModalClose= () => this.setState({addModalShow:false});

<ButtonToolbar>

 <Button  variant="primary" onClick={()=>this.setState({addModalShow:true})}>

                Add Product </Button>

 <AddProdModel show={this.state.addModalShow} onHide={addModalClose}/>

</ButtonToolbar>

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**Add Form Fields**

Changing in the addprodModel.Js file

   handleSubmit(event){

        event.preventDefault();

        alert(event.target.name.value);

    }

<div className="container">

   <Row>

     <Col sm={6}>

        <Form onSubmit={this.handleSubmit}>

         <Form.Group controlId="Name"></Form.Group>

          <Form.Label>Name</Form.Label>

           <Form.Control

type="text" name="name" required placeholder="Enter Product Name/>

<Form.Group>

<Button variant="primary" type="submit">

Add Product

</Button>

</Form.Group>

</Form>

</Col>

</Row>

</div>

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**Consume POST API method in React App**

  handleSubmit(event){

        event.preventDefault();

        fetch('http://localhost:62932/Product',{

            method:'POST',

            headers: {

                'Content-Type': 'application/json;charset=UTF-8'

            },

            body:JSON.stringify({

                id:event.target.id.value,

                name:event.target.name.value,

                price:event.target.price.value,

                details:event.target.details.value,

                type:event.target.type.value

            })

        })

        //  .then(res=>res.json())

        .then((result)=>

         {

            alert(result);

        }

        ,(error)=>{

            alert('faild');

        }

        )

        // alert(event.target.name.value);

    }

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**Refresh Bootstrap GRID on changes**

Open crud.JS file and add the following code inside the file

   componentDidUpdate(){

        this.refershList();

    }

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**Material UI Snack Bar**

Search material UI for react js for adding snackbar for installation

* npm install @material-ui/core

after that import the following files in project

import SnackBar from '@material-ui/core/Snackbar'

import IconButton from '@material-ui/core/IconButton'

 constructor(props)

    {

        super(props);

        this.state={snackbaropen: false , snackbarmsg:''};

        this.handleSubmit=this.handleSubmit.bind(this);

    }

    snackbarClose=(event) => {

        this.setState({snackbaropen:false});

    };

For write code inside the html

  <SnackBar

            anchorOrigin={{vertical:'center',horizontal:'center'}}

            open={this.state.snackbaropen}

            autoHideDuration={3000}

            onClose={this.snackbarClose}

            message={<span id="message-id">{this.state.snackbarmsg}</span>}

            action = {[

                <IconButton key="close" area-label="Close" color="inherit"

                onClick={this.snackbarClose}

                >

                    X

                </IconButton>

            ]}

            />

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**Consume PUT API method in React App**