<https://www.youtube.com/watch?v=5PfvoAj-SMk>

(1)To create project:

**npx create-react-app** reactmaterialcrudapi

(2)To install router with in project:

**npm i react-router-dom**

(3)To install json server with in project:

**npm i json-server**

**or**

**npm install -g json-server [globally it is best]**

(4) with in project

**npm install @material-ui/core**

**npm install @material-ui/icons**

(5) To access api(with in project):

**npm install axios**

(6) To install bootstrap(with in project):

**npm install bootstrap**

and import below code in index.js file:

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

**OR**

**Use below link in index.html file inside public folder**

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC" crossorigin="anonymous">

(7) For swiper slider with in project

**npm i swiper**

(8)For using sass

**npm install sass**

(9) open visual studio code than click on extensions than search on by one and install below 3 things

babel javascript //for vs code syntax high lighting

javascript(ES6) code snippets //for autocomplete by short code (for ES6) //rafce + Enter

vscode-icons //for visual studio code icons

ES7 + React/Redux/React-Native snippets //for autocomplete by short code (for ES7) //rafce + Enter

Auto Renaming Tag // To rename closing tag automaticaly

(10) for image magnifier (ecommerce product image zooming effect)

**npm install react-image-magnify**

or

**npm install image-magnify [it is working]**

**==========================================================================================**

create **db.json** file with in **src** folder and put below code:

{

“students”:[

{ “id”:1, “stuname”:”sonam1”, “email”:”sonam1@gmail.com”} ,

{ “id”:2, “stuname”:”sonam2”, “email”:”sonam2@gmail.com”} ,

{ “id”:3, “stuname”:”sonam3”, “email”:”sonam3@gmail.com”} ,

]

}

To start json server (run db.json file) put below command on terminal

**json-server - - watch db.json - -port 3333**

**with in src folder:**

Remove:

App.css, App.test.js, index.css, logo.svg, repportWebVitals.js, setusTests.js,

**With in App.js file:**

Remove:

import logo from ‘./logo.svg’

import ‘./App.css’

Predefined tags

**With in index.js file:**

Remove:

import ‘./index.css’

import ‘repportWebVitals’ from ‘./repportWebVitals’;

<React.StrictMode> tag and keep <App/> tag

reportWebVitals();

In App.js file

Add

**import { BrowserRouter, Switch, Route } from ‘react-router-dom’;**

**import Home from ‘./components/pages/Home’;**

**import View from ‘./components/student/View;**

**import Edit from ‘./components/student/Edit;**

than put below code instead of App() function:

function App()

{

return(

<>

<BrowserRouter>

<Switch>

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

<Route exact path=”/view/:id” component={View} />

<Route exact path=”/edit/:id” component={Edit} />

</Switch>

</BrowserRouter>

</>

)

}

Create one folder name of **components** with in **src** folder, than again create one folder name of **pages** with in **components** folder,

Create a component name of **Home.js** with in pages folder. ( in Home.js file type **rafce** than press enter to get default code )

Open Home.js file and type below code:

import React from ‘react’

import { Typography, Box, makeStyles, Grid, TextField, Button} from “@material-ui/core”;

import {deepPurple, green } from “@material-ui/core/colors”;

import List from “../student/List”;

import axios from “axios”;

import { useState } from “react”;

const useStyles = makeStyles

({

headingColor: { backgroundColor:deepPurple[100], color:”white” },

addStuColor:{ backgroundColor:green[400], color:”white” }

})

const Home=()=>

{

const classes = useStyles();

const[ student, setStudent ] = useState({

stuname: “”,

email: “”

});

const[ status, setStatus ] = useState();

function onTextFieldChange(e)

{

setStudent({

…student, // so that old record will stable other wise old record will remove

[ e.target.name ] : e.target.value

})

}

async function onFormSubmit(e)

{

e.preventDefault()

try

{

await axios.post(`http://localhost:3333/students`, student)

setStatus(true);

}

catch(error)

{

Console.log(“something went wrong”)

}

}

if(status)

{

return <Home />

}

return

(

<>

<Box textAlign=”center” className = { classes.headingColor } p={2} mb={2}>

<Typography variant=”h2”>React CRUD with API Call</Typography>

</Box>

<Grid container justify=”center” spacing={4} >

<Grid item md={6} xs={12}>

<Box textAlign=”center” p={2} className={classes.addStuColor} mb={2}>

<Typography variant=”h4”> Add Student </Typography>

</Box>

<form noValidate>

<Grid container spacing={2}>

<Grid item xs={12}>

<TextField autoComplete=”stuname” name=”stuname” variant=”outlined” required fullwidth id=”stuname” Label=”Name” onChange={ e => onTextFieldChange(e) } />

</Grid>

<Grid item xs={12}>

<TextField autoComplete=”email” name=”email” variant=”outlined” required fullwidth id=”email” Label=”Email Address” onChange={ e => onTextFieldChange(e) } />

</Grid>

</Grid>

<Box m={3}>

<Button type=”submit” variant=”contained” color:”primary” fullwidth onClick={ e => onFormSubmit(e) } > Add </Button>

</Box>

</form>

</Grid>

<Grid item md={6} xs={12}>

</List>

</Grid>

</Grid>

</>

)

}

export default Home

Again create one folder name of **student** with in **components** folder,

Create a component name of **View.js** with in student folder. ( in View.js file type **rafce** than press enter to get default code )

Open View.js file and type below code:

import React from ’react’

import { Typography, Box, makeStyles, TableContainer, Table, TableBody, TableCell, TableHead, TableRow, Paper, Button } from “@material-ui/core”;

import {Orange} from “@material-ui/core/colors”;

import { useParams, useHistory } from “react-router-dom”;

import { useState, useEffect } from “react”;

import axios from “axios”;

const useStyles = makeStyles

({

stuListColor:{ backgroundColor:orange[400], color:”white” },

tableHeadCell:{ color:”white”, fontweight:”bold”, fontSize:16 },

})

const View = () =>

{

const classes = useStyles();

const { id } = useParams();

// console.log( id );

const[ student, setStudent ] = useState([]);

const history = useHistory();

useEffect(()=>{

async function getStudent()

{

try

{

const student = await axios.get(`http://localhost:3333/students/${id}`)

setStudent(student.data);

// console.log(student.data)

}

catch(error)

{

Console.log(“something went wrong”)

}

}

getStudent();

}, [ id ]) //it takes two parameter

function handleClick()

{

history.push(“/”)

}

return(

<>

<Box textAlign=”center” p={2} className={classes.stuListColor >

<Typography variant=”h4”> Student Details</Typography>

</Box>

<TableContainer component={Paper}>

<Table>

<TableHead>

<TableRow style={{ backgroundColor: “#616161” }}>

<TableCell align=”center” className={classes.tableHeadCell}> ID </TableCell>

<TableCell align=”center” className={classes.tableHeadCell}> Name </TableCell>

<TableCell align=”center” className={classes.tableHeadCell}> Email </TableCell>

</TableRow>

</TableHead>

<TableBody>

<TableRow>

<TableCell align=”center” > { student.id } </TableCell>

<TableCell align=”center” > { student.stuname } </TableCell>

<TableCell align=”center” > { student.email } </TableCell>

</TableRow>

</TableBody>

</Table>

</TableContainer>

<Box m={3} textAlign=”center”>

<Button variant=”contained” color=”primary” onClick={ handleClick }>Back to Home</Button>

</Box>

</>

)

}

export default View

Again create a component name of **Edit.js** with in student folder. ( in Edit.js file type **rafce** than press enter to get default code )

Open Edit.js file and type below code:

import React from ’react’

import { Typography, Box, makeStyles, Grid, TextField, Button } from “@material-ui/core”;

import {deepPurple, green} from “@material-ui/core/colors”;

import { useParams, useHistory } from “react-router-dom”;

import { useState, useEffect } from “react”;

import axios from “axios”

const useStyles = makeStyles

({

headingColor:{ backgroundColor:deepPurple[400], color:”white” },

addStuColor:{ color:”white”, backgroundColor:green[400] }

})

const Edit = () =>

{

const classes = useStyles();

const{ id } = useParams();

const history = useHistory();

const[ student, setStudent] = useState({

stuname: “”,

email: “”

});

useEffect(()=>{

async function getStudent()

{

try

{

const student = await axios.get(`http://localhost:3333/students/${id}`)

setStudent(student.data);

// console.log(student.data)

}

catch(error)

{

Console.log(“something went wrong”)

}

}

getStudent();

}, [ id ]) ; //it takes two parameter

function onTextFieldChange(e)

{

setStudent({

…student, // so that old record will stable other wise old record will remove

[ e.target.name ] : e.target.value

})

}

async function onFormSubmit(e)

{

e.preventDefault()

try

{

await axios.put(`http://localhost:3333/students/${id}`, student)

history.push(“/”);

}

catch(error)

{

Console.log(“something went wrong”)

}

}

function handleClick()

{

history.push(“/”)

}

return

(

<>

<Box textAlign=”center” className = { classes.headingColor } p={2} mb={2}>

<Typography variant=”h2”>React CRUD with API Call</Typography>

</Box>

<Grid container justify=”center” spacing={4} >

<Grid item md={6} xs={12}>

<Box textAlign=”center” p={2} className={classes.addStuColor} mb={2}>

<Typography variant=”h4”> Edit Student </Typography>

</Box>

<form noValidate>

<Grid container spacing={2}>

<Grid item xs={12} sm={6}>

<TextField autoComplete=”id” name=”id” variant=”outlined” required fullwidth id=”id” Label=”ID” autoFocus value={ id } disabled />

</Grid>

<Grid item xs={12} sm={6}>

<TextField autoComplete=”stuname” name=”stuname” variant=”outlined” required fullwidth id=”stuname” Label=”Name” value={ student.stuname } onChange={ e => onTextFieldChange(e) } />

</Grid>

<Grid item xs={12} sm={6}>

<TextField autoComplete=”email” name=”email” variant=”outlined” required fullwidth id=”email” Label=”Email Address” value={ student.email } onChange={ e => onTextFieldChange(e) } />

</Grid>

</Grid>

<Box m={3}>

<Button type=”button” variant=”contained” color:”primary” fullwidth onClick={ e =>onFormSubmit(e) }> Update </Button>

</Box>

</form>

<Box m={3} textAlign=”center”>

<Button variant=”contained” color=”primary” onClick={ handleClick }>Back to Home</Button>

</Box>

</Grid>

</Grid>

</>

)

)

}

export default Edit

Again create a component name of **List.js** with in student folder. ( in List.js file type **rafce** than press enter to get default code )

Open List.js file and type below code:

Import React from ‘react’

import { Typography, Box, makeStyles, TableContainer, Table, TableBody, TableCell, TableHead, TableRow, Paper, IconButton, Tooltip } from “@material-ui/core”;

import {Orange} from “@material-ui/core/colors”;

import VisibilityIcon from “@material-ui/icons/Visibility”;

import EditIcon from “@material-ui/icons/Edit”;

import DeleteIcon from “@material-ui/icons/Delete”;

import { Link } from “react-router-dom”;

import axios from “axios”;

import {useState, useEffect} from ‘react’;

const useStyles = makeStyles

({

stuListColor:{ backgroundColor:orange[400], color:”white” },

tableHeadCell:{ color:”white”, fontweight:”bold”, fontSize:16 },

})

const List = () =>

{

const classes = useStyles();

const[students, setStudents] = useState([]);

useEffect(()=>{

async function getAllStudent()

{

try

{

const students = await axios.get(“http://localhost:3333/students”)

setStudents(students.data);

// console.log(students.data)

}

catch(error)

{

Console.log(“something went wrong”)

}

}

getAllStudent();

}, [] ) // it takes two parameter

const handleDelete = async id =>

{

await axios.delete(`http://localhost:3333/students/${ id }`);

var newstudent = students.filter((item)=>{

console.log(item);

return item.id !== id;

})

setStudents(newstudent);

}

return(

<>

<Box textAlign=”center” p={2} className={classes.stuListColor >

<Typography variant=”h4”> Student List</Typography>

</Box>

<TableContainer component={Paper}>

<Table>

<TableHead>

<TableRow style={{ backgroundColor: “#616161” }}>

<TableCell align=”center” className={classes.tableHeadCell}> No </TableCell>

<TableCell align=”center” className={classes.tableHeadCell}> Name </TableCell>

<TableCell align=”center” className={classes.tableHeadCell}> Email </TableCell>

<TableCell align=”center” className={classes.tableHeadCell}> Action </TableCell> </TableRow>

</TableHead>

<TableBody>

{

students.map((student, i) => {

return(

<TableRow key={i}>

<TableCell align=”center” > { i +1 } </TableCell>

<TableCell align=”center” > { student.stuname } </TableCell>

<TableCell align=”center” > { student.email } </TableCell>

<TableCell align=”center” >

<Tooltip title=”View”>

<IconButton>

<Link to={ `/view/${student.id}` }> <VisibilityIcon color=”primary” /> </Link>

</IconButton>

</Tooltip>

<Tooltip title=”Edit”>

<IconButton>

<Link to={ `/edit/${student.id}` }> <EditIcon /> </Link>

</IconButton>

</Tooltip>

<Tooltip title=”Delete”>

<IconButton onClick={ ()=>handleDelete(student.id) }>

<DeleteIcon color=”secondary” />

</IconButton>

</Tooltip>

</TableCell>

</TableRow>

)

})

}

</TableBody>

</Table>

</TableContainer>

</>

)

}

export default List