Crypto carnzy React With Redux-toolkit

Used api : <https://newsapi.org/register/success> for news

Used api : <https://rapidapi.com/>

Coinranking

<https://rapidapi.com/Coinranking/api/coinranking1/>

Part : 1

1 - Get api from Rapid api , if u want be use rapid api subscribe apis

2 – get axios api from rapid api and copy in your code

3 – import axios from ‘axios’

4- change to axiso like this :

const getdata = await axios.request(options);

const data = await getdata.data.data.coins;

because we most be passed to initialstate ,

5 – craeate one global object set name initialstate

6 – pass the data at top from line 4 , to initial state

const initialstate = {

stateData: data,

};

7 – import createSlice from ‘@reduxjs-toolkit’

import { createSlice } from '@reduxjs/toolkit';

8 – create const for createSlice

const SliceCoins = createSlice({

});

9 – set peroperty to create slice

Pertoperty one :

name : ‘type your name’ //this most be string

name: 'dataCoins',

peroperty two :

initialstate // this name unic and most be object

initialState: {

},

InitialState get one peroperty this name value :

initialState: {

value: initialstate,

},

Value get global object you are create at line 5 ;

Peroperty three :

reducers : // unic name and this object like initialState

reducers: {

// functions

},

reducers get your functions

now see of complete createSlice

const initialstate = {

stateData: data,

Searchquery: '',

};

const SliceCoins = createSlice({

name: 'dataCoins',

initialState: {

value: initialstate,

},

reducers: {

// functions

SearchFun: (state, action) => {

state.value.Searchquery = action.payload;

console.log(action.payload, 'payload');

console.log(state.value.Searchquery, 'searchquery');

console.log('search fun is working');

},

},

});

Okey now most be export const createslice and if you have function export functions

Like that :

export default SliceCoins.reducer; //createSlice from @redux-toolkit

export const { SearchFun } = SliceCoins.actions; //functions

**see full file slince jsx or js**

import { createSlice } from '@reduxjs/toolkit';

import axios from 'axios';

const options = {

method: 'GET',

url: 'https://coinranking1.p.rapidapi.com/coins',

params: {

referenceCurrencyUuid: 'yhjMzLPhuIDl',

timePeriod: '24h',

tiers: '1',

orderBy: 'marketCap',

orderDirection: 'desc',

limit: '50',

offset: '0',

},

headers: {

'X-RapidAPI-Host': 'coinranking1.p.rapidapi.com',

'X-RapidAPI-Key': '09d096c14bmsh80bc65c9e2d4de0p1fa85ejsn02132f3b6bfd',

},

};

const getdata = await axios.request(options);

const data = await getdata.data.data.coins;

console.log(data);

const initialstate = {

stateData: data,

Searchquery: '',

};

//createSlice

const SliceCoins = createSlice({

name: 'dataCoins',

initialState: {

value: initialstate,

},

reducers: {

// functions

SearchFun: (state, action) => {

state.value.Searchquery = action.payload;

console.log(action.payload, 'payload');

console.log(state.value.Searchquery, 'searchquery');

console.log('search fun is working');

},

},

});

export default SliceCoins.reducer;

export const { SearchFun } = SliceCoins.actions;

export const create slince and function from actions

part 2 get data from store

we get data from create slince now most be pass to other functions.

we most be create provider component in the main.jsx if u are create with @vitejs/app

Or set your index.js if u are create with npm create-react-app

Go to the file index or main.jsx

Import provider from ‘react-redux’;

import { Provider } from 'react-redux';

wrapp <App/> component to the Provider Componet like blowe

ReactDOM.render(

<React.StrictMode>

<Provider store={store}>

<App />

</Provider>

</React.StrictMode>,

document.getElementById('root')

);

Now we see props store = {sotre }

We most be create store first and then import him to index.js or main.jsx

Lets go to create store :

1 – create one folder and set name if u want but I set name Store ,

2 – go to the folder and create indexStore.js

3 – import configreStore from ‘@reduxjs/toolkit’;

import { configureStore } from '@reduxjs/toolkit';

4 – import const createSlice from folder , my const name is SliceCoins;

import SliceCoins from '../app/Slice';

5 – create const store

export const store = configureStore({

reducer: {

dataCoins: SliceCoins,

},

});

We see reducer object this get name from createSlice

This file my name have dataCoins,

Now watch full file Store we are careate step by step :

import { configureStore } from '@reduxjs/toolkit';

import SliceCoins from '../app/Slice';

export const store = configureStore({

reducer: {

dataCoins: SliceCoins,

},

});

Okey now we have sotre , store the connect to createSlice,

createSlice have object initalstate and we have data there or other information and we can used they are,

now we most be back to main.jsx or index.js and import this store

go to the file

import {store} from '../src/store/indexStore';

okey see full index.js or main.jsx

import React from 'react';

import ReactDOM from 'react-dom';

import './index.css';

import App from './App';

import { Provider } from 'react-redux';

import {store} from '../src/store/indexStore';

ReactDOM.render(

<React.StrictMode>

<Provider store={store}>

<App />

</Provider>

</React.StrictMode>,

document.getElementById('root')

);

Now we can accese initialstate value to all the component into <App/>

**Part 3 Create Home Componet for Show Data**

1 – create component folder

2 – create Home.jsx

3- import the <App/> component

4 – test to rende this Home.jsx

5 – we need data for get dara from createslice

We most be import useSelector Hook from ‘react-redux’

import { useSelector } from 'react-redux';

6 – go to into function create const state = useSelector();

7 – get value createSlice

const state = useSelector((state) => state.dataCoins.value);

state this state into createSlice , dataCoins is my name ,

and value = insitalstate into createSlice

8 – now most be finde object peropety into createSlice get data

const data = state.stateData;

9 – now use map() function for show data

const [size, SetSize] = useState('10');

{data.slice(0, size).map((Coins) => {

const { name, uuid } = Coins;

return (

<section key={uuid}>

<h4>{name}</h4>

<Link to={`/detail/${uuid}`}>Detail</Link>

</section>

);

})}

We have 50 object for show but I need show just 10 ,

And I use slice() for get out just first 10 object

Size this one state I set to him string ‘10’ fro show just first 10,

Then I set one button to change this state for ‘50’

const [size, SetSize] = useState('10');

<button

onClick={() => {

size === '10' ? SetSize('50') : SetSize('10');

}}

>

{size === '10' ? 'Show More' : 'Less More'}

</button>

**Part 4 : Create Search for Searching name crypto**

For create search create Search.jsx

1 – this component return <form> and <input>

2 – input get one function to get e.target.value

3 – we need to pass to createSlice set to insitalstate peroperty

import React from 'react';

import { SearchFun } from '../app/Slice';

import { useDispatch, useSelector } from 'react-redux';

export const Search = () => {

const state = useSelector((state) => state.dataCoins.value);

const dispatch = useDispatch();

return (

<div>

<form action="">

<input

type="text"

placeholder="Search ..."

onChange={(e) => {

dispatch(SearchFun(e.target.value));

}}

/>

</form>

<p>{state.Searchquery}</p>

</div>

);

};

SearchFun coming from CreateSlice reducers function

And if want be use create slice function we most be useDispatch() Hook this hook coming from ‘react-redux’

4 – get this peroperty from createSlice and import to

<Home/> Componet

Because we are maping data in <Home/> Component

5 - we have already useSelector for get data

6 – and now get state.Searchquery , Searchquery I set this peroperty into initialstate object

const state = useSelector((state) => state.dataCoins.value);

console.log(state.Searchquery

)

const SearchFun = () => {

let searcData = data;

searcData = searcData.filter((items) =>

items.name.toLowerCase().includes(state.Searchquery)

);

return searcData;

};

**No most be call function before map()**

{SearchFun()

.slice(0, size)

.map((Coins) => {

const { name, uuid } = Coins;

return (

<section key={uuid}>

<h4>{name}</h4>

<Link to={`/detail/${uuid}`}>Detail</Link>

</section>

);

})}

**And I we are searching name , Home be filtering crypto name and show us results**

**Part 5 : Create Detail page for show detail crypto carency**

1 – install react-router-dom

2 - create Detail component ,

3 - import {Route , Routes , BroweserRouter} from ‘react-router-dom’

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

4 – wrapped component to react-router-dom ,

<BrowserRouter>

<Routes>

<Route path="/" element={<Home />}></Route>

<Route path="/detail/:id" element={<Detail/>}>

</Route>

</Routes>

</BrowserRouter>

5 – set path and element props;

6 – path in address ‘/detail’ , elements ={<set your component />}

7 - if you need show detail we most be set id or other name if u want but be set this like blow

<Route path="/detail/:id" element={<Detail/>}>

***Don’t be forget /:id if forget your component for detail not working***

8 – now going to <Home/> component cuz this component Maping data , then we are set Button , and link to Detail component .

And passed data maping id to <Detail/> component .

{SearchFun()

.slice(0, size)

.map((Coins) => {

const { name, uuid } = Coins;

return (

<section key={uuid}>

<h4>{name}</h4>

<Link to={`/detail/${uuid}`}>Detail</Link>

</section>

);

})}

See we are set ***Link to={`/detail/${uuid}`}***

Link come from react-router-dom , first import Link.

Import {Link} from ‘react-router-dom’

Then call him in to maping data for creat button to Link <Detail/> component

9 – okey now we going to Detail component and call useParamas() hook

useParams() coming from react-router-dom agin first import him

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

remember we are set name ‘detail/:id’ from app component into react-router-dom right ? okey now call him with useParamash() hook ,

Like This :

const id = useParams();

and pass uuid data id from Home component , if we are console.log(id);

show us :

console.log(id); // {id: 'razxDUgYGNAdQ'}

this data id now we have data id , and we can create Detail page

10 – now we have data id okey good but we need orginal data .

We are get data from Redux toolkit

(you need orginal data , with props or context or reduxtoolkit or other way );

Now we need one function for set condition to finde useParmas() id === data.id

Like this :

useEffect(() => {

const FindeDataForDetail = data.find(

(itemsId) => String(itemsId.uuid) === String(id.id)

);

return SetDetail(FindeDataForDetail);

}, []);

***Don’t be forget both id most be string if they not string you get error always set String() for both id***

**Create useffect() hook because need just one time render this function.**

**Create one state and set this state finde function .**

const [detail, SetDetail] = useState({});

***don’t be forget your state most be empty object or arraye .***

11 – now we can call them like maping data , but this object call they As below

return (

<div>

<p>{detail.name}</p>

</div>

);

If we are click detail button at Home component , you can see Detail component give us same name data

**Part 6 : Show news for top 10 crypto in Home component**

**1 – we need news api I use this api**

`https://newsapi.org/v2/everything?q=bitcoin&apiKey=`

***Go to site and get your key , set your key after apiKey***

**2 – get your api key and set to api ,**

**3 – create <News/> component and get this api , I get api with axios**

**4 – call axios get into useeffect() hook because we need just 1 time get this api**

**5 – set api to usestate hook . this state must be empty []**

const [getData, setGetdata] = useState([]);

// get data

useEffect(async () => {

const data = await axios.get(

`https://newsapi.org/v2/everything?q=${optionValue}&apiKey=yourkey`

);

setGetdata(data.data.articles);

}, [optionValue]);

**6 – see opstionValue to passed to q=${opstionValue}**

**And call him to [] useeffect() hook.**

**Opstion value get the value from <select> tag**

**Like below:**

<form>

<select

onInput={(e) => {

// console.log(e.target.value);

SetOptionValue(e.target.value);

}}

>

{coinsData.slice(0, 10).map((items, index) => {

const { name } = items;

return <option key={index}> {name}</option>;

})}

</select>

</form>

**7 – okey now we set to query api this opstion value .**

**What is opstion values ? they get name orginal data ,**

**Called orginal data agin and map <opstion> tag from orginal data**

**And print name data into opstion .**

***now we have value name in orginal data and pass to query news .. good***

***Lets continue***

**9 – now need map news data , remember we set satate**

const [getData, setGetdata] = useState([]);

**This state get data from news api , but we set query to him ,**

const data = await axios.get(

`https://newsapi.org/v2/everything?q=${optionValue}&apiKey=2c324d939e0d4645b32d17c4902ac9aa`

);

setGetdata(data.data.articles);

**This query have opstion values ,**

**What is opstion value ? opstion value have name from orginal data .**

**Okey now we maped state .**

News //text

{getData.map((items, index) => {

const { author, urlToImage, description, title, url } = items;

// console.log(items);

return (

<div key={index}>

<h2>{title}</h2>

<p>{author}</p>

{urlToImage ? (

<a href={url}>

<figure>

<img

lazy="true"

src={urlToImage}

alt=""

style={{

width: '250px',

height: '250px',

}}

/>

<figcaption>{description}</figcaption>

</figure>

</a>

) : (

<p>no img</p>

)}

<a href={url}>read more</a>

</div>

);

})}

***Alwys if u want be pss someting to query api we need accese query and set the state or varibelI use query in the news component because I need to accese to query if u have better way for this used 😉***

***Part 7 : add Chart.js to show dynamic some data .***

**1 – create component Chart**

**2 – call him to Detail component because we need get same crypto and get they data show to charts**

    return (

        <div>

            <p>{detail.name}</p>

            <ChartComponet coinsDetail={detail}></ChartComponet>

        </div>

    );

**3 – what is detail ? this usestate()**

    const [detail, SetDetail] = useState({});

**empty object first and then get the data . for show detail in to Detail component**

    useEffect(() => {

        const FindeDataForDetail = data.find(

            (itemsId) => String(itemsId.uuid) === String(id.id)

        );

        return SetDetail(FindeDataForDetail);

    }, []);

**Remember that ? oky good now we pass this state to <ChartComponet /> with props**

<ChartComponet coinsDetail={detail}></ChartComponet>

**4 – get back to CharComponet**

**First be install chart.js and ‘react-chart-js-2’**

**5 – then import them**

import {

    Chart as ChartJS,

    CategoryScale,

    LinearScale,

    BarElement,

    Title,

    Tooltip,

    Legend,

    ArcElement,

} from 'chart.js';

**They coming from chart.js but we most register them for working like below**

import { Bar, Doughnut } from 'react-chartjs-2';

**they shape chart … u can select more . but first read the chart.js doc**

ChartJS.register(

    CategoryScale,

    LinearScale,

    ArcElement,

    BarElement,

    Title,

    Tooltip,

    Legend

);

**Chartjs.register render the chart.js**

**6 – add the state for create opstion chart.js**

  const [chartOptions, setChartOptions] = useState({});

**7 – create a const array for set detail data coming at props**

    const stateData = [

        (coinsDetail.listedAt / 500) % 500,

        (+coinsDetail.marketCap / 500) % 300,

        +coinsDetail.price / 500,

    ];

**They data you want be show to the char**

**8 – called use effect and set opstion chart to chartOptions**

    // chart use effect

    useEffect(() => {

        setChartOptions({

            responsive: true,

            plugins: {

                legend: {

                    position: 'top',

                },

                Title: {

                    display: true,

                    text: 'Coins algoritm',

                },

            },

        });

    }, []);

**9 – now call the charts we are import them**

<div>

<Doughnut

options={chartOptions}

data={{

labels: ['listedAt', 'marketCap', 'price'],

datasets: [

{

data: stateData,

backgroundColor: ['rgb(255, 99, 132)','rgb(33, 9, 157)',

'rgb(79, 233, 23)',

],

hoverOffset: 4,

},

],

}}

></Doughnut>

</div>

**See data:statData this arry we are create and pass props data**

    const stateData = [

        (coinsDetail.listedAt / 500) % 500,

        (+coinsDetail.marketCap / 500) % 300,

        +coinsDetail.price / 500,

    ];

**Remember that this data:[] this mean u can replace [] with your arraye like up**

**U can set data:[1 , 2 ,3 ] or [‘a’ , ‘b’] but I need show dynamic data coming from detail page and I set this arrye to the data**

data: stateData, //chart data

    const stateData = [

        (coinsDetail.listedAt / 500) % 500,

        (+coinsDetail.marketCap / 500) % 300,

        +coinsDetail.price / 500,];

**10 – set other chart <Bar/> bar chart**

     <Bar

                        options={chartOptions}

                        data={{

                            labels: [

                                'spark line 1 ',

                                'spark line 2',

                                'spark line 3',

                                'spark line 4',

                                'spark line 5',

                            ],

                            datasets: [

                                {

                                    label: ['sparkline'],

                                    data: coinsDetail.sparkline,

                                    backgroundColor: [

                                        'rgb(255, 99, 132)',

                                        'rgb(33, 9, 157)',

                                        'rgb(79, 233, 23)',

                                    ],

                                    hoverOffset: 4,

                                },

                            ],

                        }}

                    ></Bar>

**This give same options , read the doc chart.js**

**And this time data get sparkline**

**This coming from props and i passed to the data bar like top .**

**This same , data:[] , and conisDetail.sparkline === [] ,**

**Okey now I can pass him to the data:coinsDetail.sparkline.**

**U can set data:[‘string’ , 2 ] string and numbers .**

**I set usestae to for both data but sometimes not working and I chose this way , for one data create the array and set different numbers and convert them to**

**number before be passed to chart ,**

    const stateData = [

        (coinsDetail.listedAt / 500) % 500,

        (+coinsDetail.marketCap / 500) % 300,

  +coinsDetail.price / 500,

    ]; // data Doughunt

**And for <Bar/> chart I just pass in arraye coming from props .**

    data: coinsDetail.sparkline, //data <Bar/>

**I hope u enjoy this project and learn something 😉**

**My name is mohsen abasi I fronet end developer ,**