Jobster

Project in Action - Jobster

React Course

My React Course

Support

Find the App Useful? You can always buy me a coffee

Run The App Locally

```
npm run install && npm start
```

visit url http://localhost:3000/

Setup React App

```
npx create-react-app myApp
```

```
npx create-react-app@latest myApp
```

- set editor/browser side by side
- copy/paste assets and readme from complete project

1) Spring Cleaning

- in src remove
- App.css
- App.test.js
- logo.svg
- reportWebVitals.js
- setupTests.js
- fix App.js and index.js

2) Title and Favicon

- change title in public/index.html
- replace favicon.ico in public
- resource Generate Favicons

3) Normalize.css and Global Styles

- CSS in JS (styled-components)
- · saves times on the setup
- less lines of css
- · speeds up the development
- normalize.css
- small CSS file that provides cross-browser consistency in the default styling of HTML elements.
- normalize docs

npm install normalize.css

- · import 'normalize.css' in index.js
- SET BEFORE 'index.css'
- · replace contents of index.css
- · if any questions about normalize or specific styles
- Coding Addict Default Starter Video
- Repo Default Starter Repo

4) Landing Page - Setup

- zoom level 175%
- markdown preview extension
- get something on the screen
- · react router and styled components right after
- create pages directory in the source
- for now Landing.js
- create component (snippets extension)
- setup basic return

<h4>Landing Page<h4>

- import logo.svg and main.svg
- import Landing in App.js and render

5) Landing Page - Structure

Landing.js

```
const Landing = () => {
  return (
    <main>
      <nav>
        <img src={logo} alt='jobster logo' className='logo' />
      </nav>
      <div className='container page'>
        {/* info */}
        <div className='info'>
          <h1>
            job <span>tracking</span> app
          </h1>
          some text
          <button className='btn btn-hero'>Login/Register</putton>
        </div>
        <img src={main} alt='job hunt' className='img main-img' />
    </main>
  );
};
export default Landing;
```

6) Styled Components - Basic Setup

- CSS in JS
- Styled Components
- · have logic and styles in component
- · no name collisions
- apply javascript logic
- Styled Components Docs
- Styled Components Course

```
npm install styled-components
import styled from 'styled-components';
const El = styled.el`
   // styles go here
`.
```

- element can be any html element (div,button,section, etc)
- no name collisions, since unique class
- vscode-styled-components extension
- · colors and bugs
- · style entire react component

7) Styled Components - Wrap Component

8) Wrappers

- assets/wrappers
- only responsible for styling

9) Logo and Images

- · logo built in Figma
- Cool Images

11) Logo Component

- create components folder in source
- create Logo.js
- move import and image logic
- export as default
- utilize index.js

Logo.js

```
import logo from '../assets/images/logo.svg';

const Logo = () => {
   return <img src={logo} alt='jobify' className='logo' />;
};

export default Logo;
```

12) Setup Pages

- · create Error, Register, Dashboard pages
- basic return
- · create index.js
- import all the pages
- · export one by one
- basically the same, as in components
- import App.js

13) React Router 6

- Please Reference React Router 6 Section
- React Router Docs

```
npm install react-router-dom@6
```

import three components from router

· go to Landing.js

14) Error Page

15) Auto Imports

- use while developing
- only sparingly while recording
- better picture
- · messes with flow
- just my preference
- · still use them, just not all the time

16) Register Page - Setup

```
import { useState, useEffect } from 'react';
import { Logo } from '../components';
import Wrapper from '../assets/wrappers/RegisterPage';
// redux toolkit and useNavigate later
const initialState = {
  name: '',
  email: '',
  password: '',
  isMember: true,
};
// if possible prefer local state
// global state
function Register() {
  const [values, setValues] = useState(initialState);
  // redux toolkit and useNavigate later
  const handleChange = (e) => {
    console.log(e.target);
  };
  const onSubmit = (e) => {
    e.preventDefault();
    console.log(e.target);
  };
  return (
    <Wrapper className='full-page'>
      <form className='form' onSubmit={onSubmit}>
        <Logo />
        <h3>Login</h3>
        {/* name field */}
        <div className='form-row'>
          <label htmlFor='name' className='form-label'>
            name
          </label>
          <input</pre>
            type='text'
            value={values.name}
            name='name'
            onChange={handleChange}
            className='form-input'
          />
        </div>
```

17) Switch To React 18

• index.js

```
import React from 'react';
import { createRoot } from 'react-dom/client';
import 'normalize.css';
import './index.css';
import App from './App';

const container = document.getElementById('root');
const root = createRoot(container);
root.render(<App tab='home' />);
```

18) FormRow Component

- create FormRow.js in components
- setup import/export
- setup one for email and password
- hint "type,name,value"

```
const FormRow = ({ type, name, value, handleChange, labelText }) => {
  return (
    <div className='form-row'>
      <label htmlFor={name} className='form-label'>
        {labelText | name}
      </label>
      ≺input
       type={type}
       value={value}
       name={name}
       onChange={handleChange}
       className='form-input'
      />
    </div>
  );
};
export default FormRow;
```

19) Toggle Member

```
const toggleMember = () => {
  setValues({ ...values, isMember: !values.isMember });
};
return (
  <Wrapper>
    {/* control h3 */}
    <h3>{values.isMember ? 'Login' : 'Register'}</h3>
    {/* toggle name */}
    {!values.isMember && (
      <FormRow</pre>
        type='text'
        name='name'
        value={values.name}
        handleChange={handleChange}
     />
    )}
    {/* right after submit btn */}
    {/* toggle button */}
    >
      {values.isMember ? 'Not a member yet?' : 'Already a member?'}
      <button type='button' onClick={toggleMember} className='member-btn'>
        {values.isMember ? 'Register' : 'Login'}
      </button>
    </Wrapper>
);
```

20) Handle Change and Empty Values

Dynamic Object Keys

Register.js

```
const handleChange = (e) => {
   const name = e.target.name;
   const value = e.target.value;
   console.log(`${name}:${value}`);
   setValues({ ...values, [name]: value });
 };
 const onSubmit = (e) => {
   e.preventDefault();
   const { name, email, password, isMember } = values;
   if (!email | !password | (!isMember && !name)) {
     consol.log('Please Fill Out All Fields');
     return;
   }
 };
21) React Toastify
```

```
React Toastify
 npm install --save react-toastify
App.js
 import { ToastContainer } from 'react-toastify';
 import 'react-toastify/dist/ReactToastify.css';
 return </Routes>
 <ToastContainer />
 <BrowserRouter>
Register.js
 import { toast } from 'react-toastify';
 if (!email || !password || (!isMember && !name)) {
   toast.error('Please Fill Out All Fields');
   return;
 }
```

modifications

position

```
.Toastify__toast {
  text-transform: capitalize;
}
```

22) User Slice - Setup

• features/user/userSlice.js

```
import { createSlice, createAsyncThunk } from '@reduxjs/toolkit';
import { toast } from 'react-toastify';
const initialState = {
  isLoading: false,
  user: null,
};
const userSlice = createSlice({
  name: 'user',
  initialState,
});
export default userSlice.reducer;
· create store.js
import { configureStore } from '@reduxjs/toolkit';
import userSlice from './features/user/userSlice';
export const store = configureStore({
  reducer: {
   user: userSlice,
 },
});
• index.js
```

23) RegisterUser, LoginUser - Placeholders

• userSlice.js

```
export const registerUser = createAsyncThunk(
  'user/registerUser',
  async (user, thunkAPI) => {
    console.log(`Register User : ${user}`)
);
export const loginUser = createAsyncThunk(
  'user/loginUser',
  async (user, thunkAPI) => {
    console.log(`Login User : ${user}`)
});
```

• Register.js

```
import { useSelector, useDispatch } from 'react-redux';
import { loginUser, registerUser } from '../features/user/userSlice';
const Register = () => {
  const dispatch = useDispatch();
  const { isLoading, user } = useSelector((store) => store.user);
const onSubmit = (e) => {
    e.preventDefault();
    const { name, email, password, isMember } = values;
    if (!email | !password | (!isMember && !name)) {
     toast.error('Please Fill Out All Fields');
      return;
    }
    if (isMember) {
      dispatch(loginUser({ email: email, password: password }));
      return;
    }
    dispatch(registerUser({ name, email, password }));
  };
```

24) HTTP Methods

- GET get resources from the server
- POST submit resource to the server
- PUT/PATCH modify resource on the server
- DELETE delete resource form the server

```
// GET
axios.get(url, options);
// POST
axios.post(url, resource, options);
// PATCH
axios.patch(url, resource, options);
// DELETE
axios.delete(url, options);
```

25) API

- Root URL
- https://jobify-prod.herokuapp.com/api/v1/toolkit

NODE COURSE

Register USER

- https://jobify-prod.herokuapp.com/api/v1/toolkit/auth/register
- POST /auth/register
- {name:'john',email:'john@gmail.com',password:'secret'}
- sends back the user object with token

Register USER - TESTING()

- POST /auth/testingRegister
- {name:'john',email:'john@gmail.com',password:'secret'}
- sends back the user object with token

Login USER

- POST /auth/login
- {email:'john@gmail.com',password:'secret'}
- sends back the user object with token

Update USER

utils/axios.js

userSlice.js

- PATCH /auth/updateUser
- { email:'john@gmail.com', name:'john', lastName:'smith', location:'my location' }
- sends back the user object with token

26) Custom Axios Instance

import axios from 'axios';

const customFetch = axios.create({
 baseURL: 'https://jobify-prod.herokuapp.com/api/v1/toolkit',
});

export default customFetch;

```
import customFetch from '../../utils/axios';

export const registerUser = createAsyncThunk(
   'user/registerUser',
   async (user, thunkAPI) => {
     try {
       const resp = await customFetch.post('/auth/testingRegister', user);
       console.log(resp);
     } catch (error) {
       console.log(error.response);
     }
   }
}
```

27) Register User

userSlice.js

```
export const registerUser = createAsyncThunk(
  'user/registerUser',
  async (user, thunkAPI) => {
   try {
      const resp = await customFetch.post('/auth/register', user);
      return resp.data;
   } catch (error) {
      return thunkAPI.rejectWithValue(error.response.data.msg);
   }
 }
)
   extraReducers: {
    [registerUser.pending]: (state) => {
      state.isLoading = true;
    [registerUser.fulfilled]: (state, { payload }) => {
      const { user } = payload;
      state.isLoading = false;
      state.user = user;
     toast.success(`Hello There ${user.name}`);
    },
    [registerUser.rejected]: (state, { payload }) => {
      state.isLoading = false;
      toast.error(payload);
   }
  }
```

Extra Reducers "Builder Callback" Notation

```
extraReducers: (builder) => {
   builder
      .addCase(registerUser.pending, (state) => {
        state.isLoading = true;
      })
      .addCase(registerUser.fulfilled, (state, { payload }) => {
        const { user } = payload;
        state.isLoading = false;
        state.user = user;
        addUserToLocalStorage(user);
       toast.success(`Hello There ${user.name}`);
      })
      .addCase(registerUser.rejected, (state, { payload }) => {
        state.isLoading = false;
       toast.error(payload);
      .addCase(loginUser.pending, (state) => {
        state.isLoading = true;
      })
      .addCase(loginUser.fulfilled, (state, { payload }) => {
        const { user } = payload;
        state.isLoading = false;
        state.user = user;
        addUserToLocalStorage(user);
       toast.success(`Welcome Back ${user.name}`);
      })
      .addCase(loginUser.rejected, (state, { payload }) => {
        state.isLoading = false;
       toast.error(payload);
      .addCase(updateUser.pending, (state) => {
        state.isLoading = true;
      .addCase(updateUser.fulfilled, (state, { payload }) => {
        const { user } = payload;
        state.isLoading = false;
        state.user = user;
        addUserToLocalStorage(user);
        toast.success(`User Updated!`);
      })
      .addCase(updateUser.rejected, (state, { payload }) => {
        state.isLoading = false;
        toast.error(payload);
      })
      .addCase(clearStore.rejected, () => {
        toast.error('There was an error..');
```

```
});
},
```

28) Login User

userSlice.js

```
export const loginUser = createAsyncThunk(
  'user/loginUser',
  async (user, thunkAPI) => {
   try {
      const resp = await customFetch.post('/auth/login', user);
      return resp.data;
    } catch (error) {
      return thunkAPI.rejectWithValue(error.response.data.msg);
   }
  }
   extraReducers: {
    [loginUser.pending]: (state) => {
      state.isLoading = true;
    },
    [loginUser.fulfilled]: (state, { payload }) => {
      const { user } = payload;
      state.isLoading = false;
      state.user = user;
     toast.success(`Welcome Back ${user.name}`);
    [loginUser.rejected]: (state, { payload }) => {
      state.isLoading = false;
      toast.error(payload);
    }
  }
);
```

29) LocalStorage

• utils/localStorage.js

```
export const addUserToLocalStorage = (user) => {
  localStorage.setItem('user', JSON.stringify(user));
};
export const removeUserFromLocalStorage = () => {
  localStorage.removeItem('user');
};
export const getUserFromLocalStorage = () => {
  const result = localStorage.getItem('user');
  const user = result ? JSON.parse(result) : null;
  return user;
};

    invoke getUserFromLocalStorage when app loads (set it equal to user)

const initialState = {
  isLoading: false,
  user: getUserFromLocalStorage(),
};
[registerUser.fulfilled]: (state, { payload }) => {
      const { user } = payload;
      state.isLoading = false;
      state.user = user;
      addUserToLocalStorage(user);
      toast.success(`Hello There ${user.name}`);
    },
[loginUser.fulfilled]: (state, { payload }) => {
      const { user } = payload;
      state.isLoading = false;
      state.user = user;
      addUserToLocalStorage(user);
      toast.success(`Welcome Back ${user.name}`);
    },
```

30) Programmatically Navigate To Dashboard

Register.js

```
import { useNavigate } from 'react-router-dom';

const Register = () => {
  const navigate = useNavigate();

useEffect(() => {
    if (user) {
      setTimeout(() => {
        navigate('/');
      }, 3000);
    }
  }, [user, navigate]);
};
```

31) Setup Dashboard Pages

- remove Dashboard.js
- create Dashboard Folder
- create Stats, Profile, AddJob, AllJobs, SharedLayout,
- create index.js and setup import/export

App.js

```
import {
  AllJobs,
  Profile,
  SharedLayout,
  Stats,
  AddJob,
} from './pages/dashboard';
function App() {
  return (
    <BrowserRouter>
      <Routes>
        <Route path='/' element={<SharedLayout />}>
          <Route index element={<Stats />} />
          <Route path='all-jobs' element={<AllJobs />} />
          <Route path='add-job' element={<AddJob />} />
          <Route path='profile' element={<Profile />} />
        </Route>
        <Route path='register' element={<Register />} />
        <Route path='landing' element={<Landing />} />
        <Route path='*' element={<Error />} />
      </Routes>
      <ToastContainer position='top-center' />
    </BrowserRouter>
  );
}
```

32) Navbar, SmallSidebar, BigSidebar

- create Navbar, SmallSidebar, BigSidebar in components
- import Wrappers from assets/wrappers
- simple return
- import/export

```
SharedLayout.js;
import { Outlet } from 'react-router-dom';
import { Navbar, SmallSidebar, BigSidebar } from '../../components';
import Wrapper from '../../assets/wrappers/SharedLayout';
const SharedLayout = () => {
  return (
    <>
      <Wrapper>
        <main className='dashboard'>
          <SmallSidebar />
          <BigSidebar />
          <div>
            <Navbar />
            <div className='dashboard-page'>
              <Outlet />
            </div>
          </div>
        </main>
      </Wrapper>
    </>>
  );
};
export default SharedLayout;
```

33) Shared Layout CSS

• import Wrappers in BigSidebar, SmallSidebar and Navbar

34) React Icons

React Icons

```
npm install react-icons
```

35) Navbar Structure

Navbar.js;

```
import Wrapper from '../assets/wrappers/Navbar';
import { FaAlignLeft, FaUserCircle, FaCaretDown } from 'react-icons/fa';
import Logo from './Logo';
import { useState } from 'react';
import { useDispatch, useSelector } from 'react-redux';
const Navbar = () => {
  const { user } = useSelector((store) => store.user);
  const dispatch = useDispatch();
  return (
    <Wrapper>
      <div className='nav-center'>
        <button
          type='button'
          className='toggle-btn'
          onClick={() => console.log('toggle sidebar')}
        >
          <FaAlignLeft />
        </button>
        <div>
          <Logo />
          <h3 className='logo-text'>dashboard</h3>
        </div>
        <div className='btn-container'>
          <button
            type='button'
            className='btn'
            onClick={() => console.log('toggle logout dropdown')}
            <FaUserCircle />
            {user?.name}
            <FaCaretDown />
          </button>
          <div className='dropdown show-dropdown'>
            <button
              type='button'
              className='dropdown-btn'
              onClick={() => {
                console.log('logout user');
              }}
              logout
            </button>
          </div>
        </div>
      </div>
    </Wrapper>
  );
```

```
};
export default Navbar;
```

```
36) Toggle Sidebar
userSlice.js
 const initialState = {
   isLoading: false,
   isSidebarOpen: false,
   user: getUserFromLocalStorage(),
 };
 reducers: {
     toggleSidebar: (state) => {
       state.isSidebarOpen = !state.isSidebarOpen;
     },
   },
 export const { toggleSidebar } = userSlice.actions;
Navbar.js
 import { toggleSidebar } from '../features/user/userSlice';
 const toggle = () => {
   dispatch(toggleSidebar());
 };
 <button type='button' className='toggle-btn' onClick={toggle}>
   <FaAlignLeft />
 </button>;
```

37) Toggle Dropdown

38) Logout User

```
userSlice.js
```

```
reducers: {
   logoutUser: (state) => {
      state.user = null;
      state.isSidebarOpen = false;
      removeUserFromLocalStorage();
   },
   toggleSidebar: (state) => {
      state.isSidebarOpen = !state.isSidebarOpen;
   },
   },
export const { logoutUser, toggleSidebar } = userSlice.actions;
```

Navbar.js

```
import { toggleSidebar, logoutUser } from '../features/user/userSlice';
 <div className={showLogout ? 'dropdown show-dropdown' : 'dropdown'}>
   <button
     type='button'
     className='dropdown-btn'
     onClick={() => {
       dispatch(logoutUser());
     }}
     logout
   </button>
 </div>;
39) Restrict Access

    pages/ProtectedRoute.js

 import { Navigate } from 'react-router-dom';
```

```
import { useSelector } from 'react-redux';
 const ProtectedRoute = ({ children }) => {
   const { user } = useSelector((store) => store.user);
   if (!user) {
     return <Navigate to='/landing' />;
   }
   return children;
 };
 export default ProtectedRoute;
App.js
 < Route
   path='/'
   element={
     <ProtectedRoute>
       <SharedLayout />
     </ProtectedRoute>
   }
 </Route>
```

40) Small Sidebar - Setup

```
SmallSidebar.js;
import Wrapper from '../assets/wrappers/SmallSidebar';
import { FaTimes } from 'react-icons/fa';
import { NavLink } from 'react-router-dom';
import Logo from './Logo';
import { useSelector, useDispatch } from 'react-redux';
export const SmallSidebar = () => {
  return (
    <Wrapper>
      <div className='sidebar-container show-sidebar'>
        <div className='content'>
          <button className='close-btn' onClick={() => console.log('toggle')}>
            <FaTimes />
          </button>
          <header>
            <Logo />
          </header>
          <div className='nav-links'>nav links</div>
        </div>
      </div>
    </Wrapper>
  );
};
export default SmallSidebar;
```

41) Small Sidebar - Toggle

SmallSidebar.js;

42) Setup Links

• create utils/links.js

```
import { IoBarChartSharp } from 'react-icons/io5';
import { MdQueryStats } from 'react-icons/md';
import { FaWpforms } from 'react-icons/fa';
import { ImProfile } from 'react-icons/im';
const links = [
 {
   id: 1,
   text: 'stats',
   path: '/',
   icon: <IoBarChartSharp />,
 },
  {
   id: 2,
   text: 'all jobs',
   path: 'all-jobs',
   icon: <MdQueryStats />,
 },
 {
   id: 3,
   text: 'add job',
   path: 'add-job',
   icon: <FaWpforms />,
  },
 {
   id: 4,
   text: 'profile',
   path: 'profile',
   icon: <ImProfile />,
 },
];
export default links;
```

43) Small Sidebar - Nav Links

SmallSidebar.js

```
import { NavLink } from 'react-router-dom';
return (
  <div className='nav-links'>
    {links.map((link) => {
      const { text, path, id, icon } = link;
      return (
        <NavLink</pre>
          to={path}
          className={({ isActive }) =>
            isActive ? 'nav-link active' : 'nav-link'
          }
          key={id}
          onClick={toggle}
          <span className='icon'>{icon}</span>
          {text}
        </NavLink>
      );
    })}
  </div>
);
```

REACT ROUTER UPDATE !!!

Stack Overflow

```
<NavLink
to={path}
key={id}
onClick={toggleSidebar}
className={({ isActive }) =>
isActive ? 'nav-link active' : 'nav-link'}
end
>
```

44) Nav Links Component

- create components/NavLinks.js
- styles still set from Wrapper
- also can setup in links.js, preference

```
import { NavLink } from 'react-router-dom';
import links from '../utils/links';
const NavLinks = ({ toggleSidebar }) => {
  return (
    <div className='nav-links'>
      {links.map((link) => {
        const { text, path, id, icon } = link;
        return (
          <NavLink
            to={path}
            key={id}
            onClick={toggleSidebar}
            className={({ isActive }) =>
              isActive ? 'nav-link active' : 'nav-link'
            }
            <span className='icon'>{icon}</span>
            {text}
          </NavLink>
        );
      })}
    </div>
  );
};
export default NavLinks;
SmallSidebar.js;
import NavLinks from './NavLinks';
return <NavLinks toggleSidebar={toggle} />;
```

45) Big Sidebar

```
import NavLinks from './NavLinks';
import Logo from '../components/Logo';
import Wrapper from '../assets/wrappers/BigSidebar';
import { useSelector } from 'react-redux';
const BigSidebar = () => {
  const { isSidebarOpen } = useSelector((store) => store.user);
  return (
    <Wrapper>
      <div
        className={
          isSidebarOpen
            ? 'sidebar-container '
            : 'sidebar-container show-sidebar'
        }
        <div className='content'>
          <header>
            <Logo />
          </header>
          <NavLinks />
        </div>
      </div>
    </Wrapper>
  );
};
export default BigSidebar;
```

46) Profile Page - Structure

Profile.js

```
import { useState } from 'react';
import { FormRow } from '../../components';
import Wrapper from '../../assets/wrappers/DashboardFormPage';
import { useDispatch, useSelector } from 'react-redux';
import { toast } from 'react-toastify';
const Profile = () => {
  const { isLoading, user } = useSelector((store) => store.user);
  const dispatch = useDispatch();
const [userData, setUserData] = useState({
  name:user?.name ||''
  email:user?.email | ''
  lastName:user?.lastName | | ''
  location:user?.location | ''
})
  const handleSubmit = (e) => {
    e.preventDefault();
        const { name, email, lastName, location } = userData;
    if (!name || !email || !lastName || !location) {
      toast.error('Please Fill Out All Fields');
      return;
    }
  };
const handleChange = (e) =>{
  const name = e.target.name
  const value = e.target.value
  setUserData({...userData,[name]:value})
}
  return (
    <Wrapper>
      <form className='form' onSubmit={handleSubmit}>
        <h3>profile</h3>
        <div className='form-center'>
          < Form Row
            type='text'
            name='name'
            value={userData.name}
            handleChange={handleChange}
          />
          <FormRow</pre>
            type='text'
            labelText='last name'
            name='lastName'
            value={userData.lastName}
            handleChange={handleChange}
```

```
/>
          <FormRow</pre>
            type='email'
            name='email'
            value={userData.email}
            handleChange={handleChange}
          />
          <FormRow</pre>
            type='text'
            name='location'
            value={userData.location}
            handleChange={handleChange}
          />
          <button className='btn btn-block' type='submit' disabled={isLoading}>
            {isLoading ? 'Please Wait...' : 'save changes'}
          </button>
        </div>
      </form>
    </Wrapper>
  );
};
export default Profile;
```

47) Update User - Complete

Update USER

- PATCH /auth/updateUser
- { email:'john@gmail.com', name:'john', lastName:'smith', location:'my location' }
- authorization header: 'Bearer token'
- sends back the user object with token

userSlice.js

```
export const updateUser = createAsyncThunk(
   'user/updateUser',
   async (user, thunkAPI) => {
     try {
       const resp = await customFetch.patch('/auth/updateUser', user, {
         headers: {
           authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
         },
       });
       return resp.data;
     } catch (error) {
       console.log(error.response);
       return thunkAPI.rejectWithValue(error.response.data.msg);
     }
   }
 );
 // extra reducers
     [updateUser.pending]: (state) => {
       state.isLoading = true;
     },
     [updateUser.fulfilled]: (state, { payload }) => {
       const { user } = payload;
       state.isLoading = false;
       state.user = user;
       addUserToLocalStorage(user);
       toast.success('User Updated');
     },
     [updateUser.rejected]: (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     },
Profile.js
 import { updateUser } from '../../features/user/userSlice';
 const handleSubmit = (e) => {
   e.preventDefault();
   const { name, email, lastName, location } = userData;
   if (!name | !email | !lastName | !location) {
     toast.error('Please Fill Out All Fields');
     return;
   dispatch(updateUser({ name, email, lastName, location }));
 };
```

48) Unauthorized - Logout User

userSlice.js

```
export const updateUser = createAsyncThunk(
  'user/updateUser',
  async (user, thunkAPI) => {
   try {
      const resp = await customFetch.patch('/auth/updateUser', user, {
        headers: {
          // authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
          authorization: `Bearer `,
       },
      });
      return resp.data;
    } catch (error) {
      // console.log(error.response);
      if (error.response.status === 401) {
        thunkAPI.dispatch(logoutUser());
        return thunkAPI.rejectWithValue('Unauthorized! Logging Out...');
      }
      return thunkAPI.rejectWithValue(error.response.data.msg);
    }
  }
);
// logoutUser
logoutUser: (state) => {
      state.user = null;
      state.isSidebarOpen = false;
      toast.success('Logout Successful!');
      removeUserFromLocalStorage();
    },
```

49) Refactor Async Functionality

• features/user/userThunk.js

```
import customFetch from '.../.../utils/axios';
import { logoutUser } from './userSlice';
export const registerUserThunk = async (url, user, thunkAPI) => {
  try {
    const resp = await customFetch.post(url, user);
    return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
export const loginUserThunk = async (url, user, thunkAPI) => {
  try {
    const resp = await customFetch.post(url, user);
    return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
export const updateUserThunk = async (url, user, thunkAPI) => {
    const resp = await customFetch.patch(url, user, {
      headers: {
        authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
      },
    });
    return resp.data;
  } catch (error) {
    // console.log(error.response);
    if (error.response.status === 401) {
      thunkAPI.dispatch(logoutUser());
      return thunkAPI.rejectWithValue('Unauthorized! Logging Out...');
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
```

userSlice.js

```
import {
  loginUserThunk,
  registerUserThunk,
  updateUserThunk,
} from './userThunk';
export const registerUser = createAsyncThunk(
  'user/registerUser',
  async (user, thunkAPI) => {
    return registerUserThunk('/auth/register', user, thunkAPI);
  }
);
export const loginUser = createAsyncThunk(
  'user/loginUser',
  async (user, thunkAPI) => {
   return loginUserThunk('/auth/login', user, thunkAPI);
  }
);
export const updateUser = createAsyncThunk(
  'user/updateUser',
  async (user, thunkAPI) => {
   return updateUserThunk('/auth/updateUser', user, thunkAPI);
  }
);
```

50) Job Slice

• features/job/jobSlice.js

```
import { createSlice, createAsyncThunk } from '@reduxjs/toolkit';
 import { toast } from 'react-toastify';
 import customFetch from '../../utils/axios';
 import { getUserFromLocalStorage } from '../../utils/localStorage';
 const initialState = {
   isLoading: false,
   position: '',
   company: '',
   jobLocation: '',
   jobTypeOptions: ['full-time', 'part-time', 'remote', 'internship'],
   jobType: 'full-time',
   statusOptions: ['interview', 'declined', 'pending'],
   status: 'pending',
   isEditing: false,
   editJobId: '',
 };
 const jobSlice = createSlice({
   name: 'job',
   initialState,
 });
 export default jobSlice.reducer;
store.js
 import jobSlice from './features/job/jobSlice';
 export const store = configureStore({
   reducer: {
     user: userSlice,
     job: jobSlice,
   },
 });
```

51) Add Job - Structure

AddJob.js

```
import { FormRow } from '../../components';
import Wrapper from '../../assets/wrappers/DashboardFormPage';
import { useSelector, useDispatch } from 'react-redux';
import { toast } from 'react-toastify';
const AddJob = () => {
  const {
    isLoading,
    position,
    company,
    jobLocation,
    jobType,
    jobTypeOptions,
    status,
    statusOptions,
    isEditing,
    editJobId,
  } = useSelector((store) => store.job);
  const dispatch = useDispatch();
  const handleSubmit = (e) => {
    e.preventDefault();
    if (!position || !company || !jobLocation) {
      toast.error('Please Fill Out All Fields');
      return;
    }
  };
  const handleJobInput = (e) => {
    const name = e.target.name;
    const value = e.target.value;
  };
  return (
    <Wrapper>
      <form className='form'>
        <h3>{isEditing ? 'edit job' : 'add job'}</h3>
        <div className='form-center'>
          {/* position */}
          <FormRow</pre>
            type='text'
            name='position'
            value={position}
            handleChange={handleJobInput}
          />
          {/* company */}
          <FormRow</pre>
            type='text'
            name='company'
```

```
value={company}
            handleChange={handleJobInput}
          />
          {/* location */}
          <FormRow</pre>
            type='text'
            labelText='job location'
            name='jobLocation'
            value={jobLocation}
            handleChange={handleJobInput}
          />
          {/* job status */}
          {/* job type */}
          {/* btn container */}
          <div className='btn-container'>
            <button
              type='button'
              className='btn btn-block clear-btn'
              onClick={() => console.log('clear values')}
              clear
            </button>
            <button
              type='submit'
              className='btn btn-block submit-btn'
              onClick={handleSubmit}
              disabled={isLoading}
            >
              submit
            </button>
          </div>
        </div>
      </form>
    </Wrapper>
  );
};
export default AddJob;
```

52) FormRowSelect

```
// job status
return (
  <div className='form-row'>
    <label htmlFor='status' className='form-label'>
    </label>
    <select
      name='status'
      value={status}
      onChange={handleJobInput}
      className='form-select'
      {statusOptions.map((itemValue, index) => {
        return (
          <option key={index} value={itemValue}>
            {itemValue}
          </option>
        );
      })}
    </select>
  </div>
);
```

• FormRowSelect.js

```
const FormRowSelect = ({ labelText, name, value, handleChange, list }) => {
   return (
     <div className='form-row'>
        <label htmlFor={name} className='form-label'>
          {labelText || name}
        </label>
        <select
         name={name}
         value={value}
         id={name}
         onChange={handleChange}
         className='form-select'
          {list.map((itemValue, index) => {
            return (
              <option key={index} value={itemValue}>
                {itemValue}
              </option>
            );
         })}
        </select>
     </div>
   );
 };
 export default FormRowSelect;
AddJob.js
   /* job status */
 <FormRowSelect</pre>
   name='status'
   value={status}
   handleChange={handleJobInput}
   list={statusOptions}
 />
 <FormRowSelect</pre>
   name='jobType'
   labelText='job type'
   value={jobType}
   handleChange={handleJobInput}
   list={jobTypeOptions}
 />
```

53) User Slice - HandleChange Reducer

```
// reducers
     handleChange: (state, { payload: { name, value } }) => {
       state[name] = value;
     },
 export const { handleChange } = jobSlice.actions;
AddJob.js
 import { handleChange } from '../../features/job/jobSlice';
 const handleJobInput = (e) => {
   const name = e.target.name;
   const value = e.target.value;
   dispatch(handleChange({ name, value }));
 };
54) User Slice - ClearValues Reducer
     // reducers
     clearValues: () => {
       return {
         ...initialState
       };
       return initialState
     },
 export const { handleChange, clearValues } = jobSlice.actions;
AddJob.js
 import { clearValues, handleChange } from '../../features/job/jobSlice';
 return (
   <button
     type='button'
     className='btn btn-block clear-btn'
     onClick={() => dispatch(clearValues())}
     clear
   </button>
```

);

55) Create Job Request

state.isLoading = false; toast.error(payload);

},

}

```
    POST /jobs

    { position: 'position', company: 'company', jobLocation: 'location', jobType: 'full-time', status: 'pending'

  }

    authorization header: 'Bearer token'

    sends back the job object

export const createJob = createAsyncThunk(
  'job/createJob',
  async (job, thunkAPI) => {
    try {
      const resp = await customFetch.post('/jobs', job, {
        headers: {
          authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
        },
      });
      thunkAPI.dispatch(clearValues());
      return resp.data;
    } catch (error) {
      // basic setup
      return thunkAPI.rejectWithValue(error.response.data.msg);
      // logout user
      if (error.response.status === 401) {
      thunkAPI.dispatch(logoutUser());
      return thunkAPI.rejectWithValue('Unauthorized! Logging Out...');
    return thunkAPI.rejectWithValue(error.response.data.msg);
    }
);
// extra reducers
extraReducers: {
    [createJob.pending]: (state) => {
      state.isLoading = true;
    },
    [createJob.fulfilled]: (state, action) => {
      state.isLoading = false;
      toast.success('Job Created');
    },
    [createJob.rejected]: (state, { payload }) => {
```

```
import {
  clearValues,
  handleChange,
  createJob,
} from '../../features/job/jobSlice';

const handleSubmit = (e) => {
  e.preventDefault();

  if (!position || !company || !jobLocation) {
    toast.error('Please Fill Out All Fields');
    return;
  }

  dispatch(createJob({ position, company, jobLocation, jobType, status }));
};
```

56) Use Existing User Location

```
AddJob.js
```

```
const { user } = useSelector((store) => store.user);

useEffect(() => {
    // eventually will check for isEditing
    if (!isEditing) {
        dispatch(handleChange({ name: 'jobLocation', value: user.location }));
    }
}, []);

jobSlice.js

// reducers
clearValues: () => {
    return {
        ...initialState,
        jobLocation: getUserFromLocalStorage()?.location || '',
        };
    },
```

57) Logout Message

userSlice.js

58) AllJobs Slice

• features/allJobs/allJobsSlice.js

```
import { createSlice, createAsyncThunk } from '@reduxjs/toolkit';
 import { toast } from 'react-toastify';
 import customFetch from '.../.../utils/axios';
 const initialFiltersState = {
   search: '',
   searchStatus: 'all',
   searchType: 'all',
   sort: 'latest',
   sortOptions: ['latest', 'oldest', 'a-z', 'z-a'],
 };
 const initialState = {
   isLoading: false,
   jobs: [],
   totalJobs: 0,
   numOfPages: 1,
   page: 1,
   stats: {},
   monthlyApplications: [],
   ...initialFiltersState,
 };
 const allJobsSlice = createSlice({
   name: 'allJobs',
   initialState,
 });
 export default allJobsSlice.reducer;
store.js
 import { configureStore } from '@reduxjs/toolkit';
 import userSlice from './features/user/userSlice';
 import jobSlice from './features/job/jobSlice';
 import allJobsSlice from './features/allJobs/allJobsSlice';
 export const store = configureStore({
   reducer: {
     user: userSlice,
     job: jobSlice,
     allJobs: allJobsSlice,
   },
 });
```

59) AllJobs Page Structure

- create
- components/SearchContainer.js
- components/JobsContainer.js
- components/Job.js
- import/export

AllJobs.js

60) JobsContainer.js

```
import { useEffect } from 'react';
import Job from './Job';
import Wrapper from '../assets/wrappers/JobsContainer';
import { useSelector, useDispatch } from 'react-redux';
const JobsContainer = () => {
  const { jobs, isLoading } = useSelector((store) => store.allJobs);
  const dispatch = useDispatch();
  if (isLoading) {
    return (
      <Wrapper>
        <h2>Loading...</h2>
      </Wrapper>
    );
  }
  if (jobs.length === 0) {
    return (
      <Wrapper>
        <h2>No jobs to display...</h2>
      </Wrapper>
    );
  }
  return (
    <Wrapper>
      <h5>jobs info</h5>
      <div className='jobs'>
        {jobs.map((job) => {}
          return <Job key={job._id} {...job} />;
        })}
      </div>
    </Wrapper>
  );
};
export default JobsContainer;
```

CSS Only Loading Spinner

Loading.js

```
const Loading = ({ center }) => {
    return <div className={center ? 'loading loading-center' : 'loading'}></div>;
};

export default Loading;

JobsContainer.js

import Loading from './Loading';

if (isLoading) {
    return <Loading center />;
}
```

61) GetAllJobs Request

- GET /jobs
- authorization header: 'Bearer token'
- returns {jobs:[],totalJobs:number, numOfPages:number }

allJobsSlice.js

```
export const getAllJobs = createAsyncThunk(
   'allJobs/getJobs',
   async (_, thunkAPI) => {
     let url = `/jobs`;
     try {
       const resp = await customFetch.get(url, {
         headers: {
           authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
         },
       });
       return resp.data;
     } catch (error) {
       return thunkAPI.rejectWithValue(error.response.data.msg);
     }
   }
 );
 // extra reducers
 extraReducers: {
     [getAllJobs.pending]: (state) => {
       state.isLoading = true;
     },
     [getAllJobs.fulfilled]: (state, { payload }) => {
       state.isLoading = false;
       state.jobs = payload.jobs;
     },
     [getAllJobs.rejected]: (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     },
 }
JobsContainer.js
 import { getAllJobs } from '../features/allJobs/allJobsSlice';
 useEffect(() => {
   dispatch(getAllJobs());
 }, []);
```

62) Single Job

Job.js

```
import { FaLocationArrow, FaBriefcase, FaCalendarAlt } from 'react-icons/fa';
import { Link } from 'react-router-dom';
import Wrapper from '../assets/wrappers/Job';
import { useDispatch } from 'react-redux';
const Job = ({
  _id,
  position,
  company,
  jobLocation,
  jobType,
  createdAt,
  status,
}) => {
  const dispatch = useDispatch();
  return (
    <Wrapper>
      <header>
        <div className='main-icon'>{company.charAt(0)}</div>
        <div className='info'>
          <h5>{position}</h5>
          {company}
        </div>
      </header>
      <div className='content'>
        <div className='content-center'>
          <h4>more content</h4>
          <div className={`status ${status}`}>{status}</div>
        </div>
        <footer>
          <div className='actions'>
            <Link
              to='/add-job'
              className='btn edit-btn'
              onClick={() => {
                console.log('edit job');
              }}
              Edit
            </Link>
            <button
              type='button'
              className='btn delete-btn'
              onClick={() => {
                console.log('delete job');
              }}
              Delete
            </button>
```

63) Jobinfo

• components/JobInfo.js

```
import Wrapper from '../assets/wrappers/JobInfo';
 const JobInfo = ({ icon, text }) => {
   return (
     <Wrapper>
       <span className='icon'>{icon}</span>
       <span className='text'>{text}</span>
     </Wrapper>
   );
 };
 export default JobInfo;
Job.js
 const date = createdAt
 <div className='content-center'>
   <JobInfo icon={<FaLocationArrow />} text={jobLocation} />
   <JobInfo icon={<FaCalendarAlt />} text={date} />
   <JobInfo icon={<FaBriefcase />} text={jobType} />
   <div className={`status ${status}`}>{status}</div>
 </div>
```

64) Moment.js

```
moment.js
```

```
npm install moment
Job.js
```

```
const date = moment(createdAt).format('MMM Do, YYYY');
```

65) Toggle Loading in AllJobs

allJobsSlice.js

```
reducers: {
    showLoading: (state) => {
        state.isLoading = true;
    },
    hideLoading: (state) => {
        state.isLoading = false;
    },
}
export const {
    showLoading,
    hideLoading,
} = allJobsSlice.actions;
```

66) Delete Job Request

- DELETE /jobs/jobld
- authorization header : 'Bearer token'

jobSlice.js

```
import { showLoading, hideLoading, getAllJobs } from '../allJobs/allJobsSlice';
 export const deleteJob = createAsyncThunk(
   'job/deleteJob',
   async (jobId, thunkAPI) => {
     thunkAPI.dispatch(showLoading());
     try {
       const resp = await customFetch.delete(`/jobs/${jobId}`, {
         headers: {
           authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
         },
       });
       thunkAPI.dispatch(getAllJobs());
       return resp.data;
     } catch (error) {
       thunkAPI.dispatch(hideLoading());
       return thunkAPI.rejectWithValue(error.response.data.msg);
     }
 );
Job.js
 <button
   type='button'
   className='btn delete-btn'
   onClick={() => {
     dispatch(deleteJob(_id));
   }}
   Delete
 </button>
```

67) SetEditJob Reducer

```
jobSlice.js

reducers:{

    setEditJob: (state, { payload }) => {
        return { ...state, isEditing: true, ...payload };
        },
    }

    export const { handleChange, clearValues, setEditJob } = jobSlice.actions;
```

```
Job.js
```

```
import { setEditJob, deleteJob } from '../features/job/jobSlice';
 <Link
   to='/add-job'
   className='btn edit-btn'
   onClick={() => {
     dispatch(
       setEditJob({
         editJobId: _id,
         position,
         company,
         jobLocation,
         jobType,
         status,
       })
     );
   }}
   Edit
 </Link>;
AddJob.js
 useEffect(() => {
   if (!isEditing) {
     dispatch(handleChange({ name: 'jobLocation', value: user.location }));
   }
 }, []);
```

68) EditJob Request

- PATCH /jobs/jobId
- { position:'position', company:'company', jobLocation:'location', jobType:'full-time', status:'pending'
 }
- · authorization header: 'Bearer token'
- sends back the updated job object

jobSlice.js

```
export const editJob = createAsyncThunk(
  'job/editJob',
  async ({ jobId, job }, thunkAPI) => {
      const resp = await customFetch.patch(`/jobs/${jobId}`, job, {
        headers: {
          authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
       },
      });
      thunkAPI.dispatch(clearValues());
      return resp.data;
    } catch (error) {
      return thunkAPI.rejectWithValue(error.response.data.msg);
    }
  }
);
extraReducers:{
  [editJob.pending]: (state) => {
      state.isLoading = true;
    },
    [editJob.fulfilled]: (state) => {
      state.isLoading = false;
      toast.success('Job Modified...');
    },
    [editJob.rejected]: (state, { payload }) => {
      state.isLoading = false;
     toast.error(payload);
    },
}
```

AddJob.js

```
import {
  clearValues,
  handleChange,
  createJob,
  editJob,
} from '../../features/job/jobSlice';
if (isEditing) {
  dispatch(
    editJob({
      jobId: editJobId,
      job: {
        position,
        company,
        jobLocation,
        jobType,
        status,
      },
    })
  );
  return;
}
```

69) Job Thunk

• features/job/jobThunk.js

```
import customFetch from '.../.../utils/axios';
import { showLoading, hideLoading, getAllJobs } from '../allJobs/allJobsSlice';
import { clearValues } from './jobSlice';
export const createJobThunk = async (job, thunkAPI) => {
  try {
    const resp = await customFetch.post('/jobs', job, {
      headers: {
        authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
      },
    });
   thunkAPI.dispatch(clearValues());
   return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
export const deleteJobThunk = async (jobId, thunkAPI) => {
  thunkAPI.dispatch(showLoading());
  try {
    const resp = await customFetch.delete(`/jobs/${jobId}`, {
      headers: {
        authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
      },
    });
   thunkAPI.dispatch(getAllJobs());
    return resp.data;
  } catch (error) {
   thunkAPI.dispatch(hideLoading());
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
export const editJobThunk = async ({ jobId, job }, thunkAPI) => {
    const resp = await customFetch.patch(`/jobs/${jobId}`, job, {
      headers: {
        authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
      },
    });
   thunkAPI.dispatch(clearValues());
    return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
```

```
import { createJobThunk, deleteJobThunk, editJobThunk } from './jobThunk';
export const createJob = createAsyncThunk('job/createJob', createJobThunk);
export const deleteJob = createAsyncThunk('job/deleteJob', deleteJobThunk);
export const editJob = createAsyncThunk('job/editJob', editJobThunk);
```

70) AuthHeader - File Approach

jobThunk.js

```
const authHeader = (thunkAPI) => {
  return {
    headers: {
      authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
    },
  };
};
export const createJobThunk = async (job, thunkAPI) => {
  try {
    const resp = await customFetch.post('/jobs', job, authHeader(thunkAPI));
    thunkAPI.dispatch(clearValues());
   return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
```

70) AuthHeader - Utils Approach

· create utils/authHeader.js

```
const authHeader = (thunkAPI) => {
  return {
    headers: {
       authorization: `Bearer ${thunkAPI.getState().user.user.token}`,
      },
    };
};
export default authHeader;
```

jobThunk.js

72) AuthHeader - Axios Interceptors Approach

• utils/axios.js

```
import axios from 'axios';
import { getUserFromLocalStorage } from './localStorage';
const customFetch = axios.create({
  baseURL: 'https://jobify-prod.herokuapp.com/api/v1/toolkit',
});
customFetch.interceptors.request.use(
  (config) => {
    const user = getUserFromLocalStorage();
    if (user) {
      config.headers['Authorization'] = `Bearer ${user.token}`;
      // in the latest version "common" returns undefined
      // config.headers.common['Authorization'] = `Bearer ${user.token}`;
   return config;
  },
  (error) => {
    return Promise.reject(error);
  }
);
export default customFetch;
```

remove auth header

73) Test User

- email : testUser@test.com
- password : secret
- read only!
- dummy data

Register.js

74) Get Stats Request

```
• GET /jobs/stats
```

• authorization header: 'Bearer token'

```
    returns
{
        defaultStats:{pending:24,interview:27,declined:24},
        monthlyApplications:[{date:"Nov 2021",count:5},{date:"Dec 2021",count:4} ]
    }
```

 last six months allJobsSlice.js

```
export const showStats = createAsyncThunk(
  'allJobs/showStats',
  async (_, thunkAPI) => {
   try {
      const resp = await customFetch.get('/jobs/stats');
      console.log(resp.data));
      return resp.data;
   } catch (error) {
      return thunkAPI.rejectWithValue(error.response.data.msg);
    }
  }
);
// extraReducers
    [showStats.pending]: (state) => {
      state.isLoading = true;
    },
    [showStats.fulfilled]: (state, { payload }) => {
      state.isLoading = false;
      state.stats = payload.defaultStats;
      state.monthlyApplications = payload.monthlyApplications;
    },
    [showStats.rejected]: (state, { payload }) => {
      state.isLoading = false;
     toast.error(payload);
    },
```

75) Stats Page

- create
- components/StatsContainer.js
- components/ChartsContainer.js
- import/export

Stats.js

```
import { useEffect } from 'react';
import { StatsContainer, Loading, ChartsContainer } from '../../components';
import { useDispatch, useSelector } from 'react-redux';
import { showStats } from '../../features/allJobs/allJobsSlice';
const Stats = () => {
  const { isLoading, monthlyApplications } = useSelector(
    (store) => store.allJobs
  );
  const dispatch = useDispatch();
  useEffect(() => {
    dispatch(showStats());
    // eslint-disable-next-line
  }, []);
  if (isLoading) {
   return <Loading center />;
  }
  return (
    <>
      <StatsContainer />
      {monthlyApplications.length > 0 && <ChartsContainer />}
  );
};
export default Stats;
```

76) Stats Container

• create components/StatItem.js

StatsContainer.js

```
import StatItem from './StatItem';
import { FaSuitcaseRolling, FaCalendarCheck, FaBug } from 'react-icons/fa';
import Wrapper from '../assets/wrappers/StatsContainer';
import { useSelector } from 'react-redux';
const StatsContainer = () => {
  const { stats } = useSelector((store) => store.allJobs);
  const defaultStats = [
    {
      title: 'pending applications',
      count: stats.pending | 0,
      icon: <FaSuitcaseRolling />,
      color: '#e9b949',
      bcg: '#fcefc7',
    },
      title: 'interviews scheduled',
      count: stats.interview | 0,
      icon: <FaCalendarCheck />,
      color: '#647acb',
      bcg: '#e0e8f9',
    },
      title: 'jobs declined',
      count: stats.declined | 0,
      icon: <FaBug />,
      color: '#d66a6a',
      bcg: '#ffeeee',
   },
  ];
  return (
    <Wrapper>
      {defaultStats.map((item, index) => {
        return <StatItem key={index} {...item} />;
      })}
    </Wrapper>
  );
};
export default StatsContainer;
```

77) Stat Item

StatItem.js

78) Charts Container

- create
- components/AreaChart.js
- components/BarChart.js

ChartsContainer.js

```
import React, { useState } from 'react';
import BarChart from './BarChart';
import AreaChart from './AreaChart';
import Wrapper from '../assets/wrappers/ChartsContainer';
import { useSelector } from 'react-redux';
const ChartsContainer = () => {
  const [barChart, setBarChart] = useState(true);
  const { monthlyApplications: data } = useSelector((store) => store.allJobs);
  return (
    <Wrapper>
      <h4>Monthly Applications</h4>
      <button type='button' onClick={() => setBarChart(!barChart)}>
        {barChart ? 'Area Chart' : 'Bar Chart'}
      </button>
      {barChart ? <BarChart data={data} /> : <AreaChart data={data} />}
    </Wrapper>
  );
};
export default ChartsContainer;
```

79) Recharts Library

npm install recharts

Recharts

```
• For now does not work with React 18

npm install react@17 react-dom@17

npm install recharts

npm install react@18 react-dom@18
```

80) AreaChart

AreaChart.js

```
import {
  ResponsiveContainer,
  AreaChart,
  Area,
  XAxis,
  YAxis,
  CartesianGrid,
  Tooltip,
} from 'recharts';
const AreaChartComponent = ({ data }) => {
  return (
    <ResponsiveContainer width='100%' height={300}>
      <AreaChart data={data} margin={{ top: 50 }}>
        <CartesianGrid strokeDasharray='3 3' />
        <XAxis dataKey='date' />
        <YAxis allowDecimals={false} />
        <Tooltip />
        <Area type='monotone' dataKey='count' stroke='#1e3a8a' fill='#3b82f6' />
      </AreaChart>
    </ResponsiveContainer>
  );
};
export default AreaChartComponent;
```

81) BarChart.js

```
import {
  BarChart,
  Bar,
  XAxis,
  YAxis,
  CartesianGrid,
  Tooltip,
  ResponsiveContainer,
} from 'recharts';
const BarChartComponent = ({ data }) => {
  return (
    <ResponsiveContainer width='100%' height={300}>
      <BarChart data={data} margin={{ top: 50 }}>
        <CartesianGrid strokeDasharray='3 3 ' />
        <XAxis dataKey='date' />
        <YAxis allowDecimals={false} />
        <Tooltip />
        <Bar dataKey='count' fill='#3b82f6' barSize={75} />
      </BarChart>
    </ResponsiveContainer>
  );
};
export default BarChartComponent;
```

82) Search Container

SearchContainer.js

```
import { FormRow, FormRowSelect } from '.';
import Wrapper from '../assets/wrappers/SearchContainer';
import { useSelector, useDispatch } from 'react-redux';
const SearchContainer = () => {
  const { isLoading, search, searchStatus, searchType, sort, sortOptions } =
    useSelector((store) => store.allJobs);
  const { jobTypeOptions, statusOptions } = useSelector((store) => store.job);
  const dispatch = useDispatch();
  const handleSearch = (e) => {};
  const handleSubmit = (e) => {
    e.preventDefault();
  };
  return (
    <Wrapper>
      <form className='form'>
        <h4>search form</h4>
        <div className='form-center'>
          {/* search position */}
          <FormRow</pre>
            type='text'
            name='search'
            value={search}
            handleChange={handleSearch}
          />
          {/* search by status */}
          <FormRowSelect</pre>
            labelText='status'
            name='searchStatus'
            value={searchStatus}
            handleChange={handleSearch}
            list={['all', ...statusOptions]}
          />
          {/* search by type */}
          <FormRowSelect</pre>
            labelText='type'
            name='searchType'
            value={searchType}
            handleChange={handleSearch}
            list={['all', ...jobTypeOptions]}
          />
          {/* sort */}
          <FormRowSelect</pre>
            name='sort'
            value={sort}
            handleChange={handleSearch}
            list={sortOptions}
          />
          <button
```

83) Handle Change and Clear Filters

```
allJobsSlice.js
 reducers:{
   handleChange: (state, { payload: { name, value } }) => {
       // state.page = 1;
       state[name] = value;
     },
     clearFilters: (state) => {
       return { ...state, ...initialFiltersState };
     },
 }
 export const { showLoading, hideLoading, handleChange, clearFilters } =
   allJobsSlice.actions;
SearchContainer.js
 import { handleChange, clearFilters } from '../features/allJobs/allJobsSlice';
 const handleSearch = (e) => {
   if (isLoading) return;
   dispatch(handleChange({ name: e.target.name, value: e.target.value }));
 };
 const handleSubmit = (e) => {
   e.preventDefault();
   dispatch(clearFilters());
 };
```

84) Pagination Setup

• server returns 10 jobs per page

- create
- components/PageBtnContainer.js

```
allJobsSlice.js
```

```
extraReducers:{
     [getAllJobs.fulfilled]: (state, { payload }) => {
       state.isLoading = false;
       state.jobs = payload.jobs;
       state.numOfPages = payload.numOfPages;
       state.totalJobs = payload.totalJobs;
     },
   }
JobsContainer
 const { jobs, isLoading, page, totalJobs, numOfPages } = useSelector(
   (store) => store.allJobs
 );
 return (
   <Wrapper>
     <h5>
       {totalJobs} job{jobs.length > 1 && 's'} found
     </h5>
     <div className='jobs'>
       {jobs.map((job) => {}
         return <Job key={job._id} {...job} />;
       })}
     </div>
     {numOfPages > 1 && <PageBtnContainer />}
   </Wrapper>
 );
```

85) PageBtnContainer Structure

JS Nuggets - Array.from()

```
import { HiChevronDoubleLeft, HiChevronDoubleRight } from 'react-icons/hi';
import Wrapper from '../assets/wrappers/PageBtnContainer';
import { useSelector, useDispatch } from 'react-redux';
const PageBtnContainer = () => {
  const { numOfPages, page } = useSelector((store) => store.allJobs);
  const dispatch = useDispatch();
  const pages = Array.from({ length: numOfPages }, (_, index) => {
    return index + 1;
  });
  const nextPage = () => {};
  const prevPage = () => {};
  return (
    <Wrapper>
      <button className='prev-btn' onClick={prevPage}>
        <HiChevronDoubleLeft />
       prev
      </button>
      <div className='btn-container'>
        {pages.map((pageNumber) => {
          return (
            <button
              type='button'
              className={pageNumber === page ? 'pageBtn active' : 'pageBtn'}
              key={pageNumber}
              onClick={() => console.log('change page')}
              {pageNumber}
            </button>
          );
        })}
      </div>
      <button className='next-btn' onClick={nextPage}>
        <HiChevronDoubleRight />
      </button>
    </Wrapper>
  );
};
export default PageBtnContainer;
```

86) Change Page

allJobsSlice.js

```
reducers:{
   changePage: (state, { payload }) => {
       state.page = payload;
     },
 }
 export const {
   showLoading,
   hideLoading,
   handleChange,
   clearFilters,
   changePage,
 } = allJobsSlice.actions;
PageBtnContainer.js
 import { changePage } from '../features/allJobs/allJobsSlice';
 const nextPage = () => {
   let newPage = page + 1;
   if (newPage > numOfPages) {
     newPage = 1;
   }
   dispatch(changePage(newPage));
 };
 const prevPage = () => {
   let newPage = page - 1;
   if (newPage < 1) {</pre>
     newPage = numOfPages;
   dispatch(changePage(newPage));
 };
 return (
   <div className='btn-container'>
     {pages.map((pageNumber) => {
       return (
         <button
           type='button'
           className={pageNumber === page ? 'pageBtn active' : 'pageBtn'}
           key={pageNumber}
           onClick={() => dispatch(changePage(pageNumber))}
           {pageNumber}
         </button>
       );
     })}
   </div>
 );
```

87) Query String Params

allJobsSlice

```
export const getAllJobs = createAsyncThunk(
   'allJobs/getJobs',
   async (_, thunkAPI) => {
     const { page, search, searchStatus, searchType, sort } =
       thunkAPI.getState().allJobs;
     let url = `/jobs?status=${searchStatus}&jobType=${searchType}&sort=${sort}&page=${page}`;
     if (search) {
       url = url + `&search=${search}`;
     }
     try {
       const resp = await customFetch.get(url);
       return resp.data;
     }
   }
 )
JobsContainer.js
 const {
   jobs,
   isLoading,
   page,
   totalJobs,
   numOfPages,
   search,
   searchStatus,
   searchType,
   sort,
 } = useSelector((store) => store.allJobs);
 useEffect(() => {
   dispatch(getAllJobs());
   // eslint-disable-next-line
 }, [page, search, searchStatus, searchType, sort]);
```

88) Change Page and isLoading

allJobsSlice.js

```
reducers:{
  handleChange: (state, { payload: { name, value } }) => {
    state.page = 1;
    state[name] = value;
  },

SearchContainer.js

const handleSearch = (e) => {
  if (isLoading) return;
  dispatch(handleChange({ name: e.target.name, value: e.target.value }));
};
```

89) Refactor allJobsSlice.js

- create
- features/allJobs/allJobsThunk.js

```
import customFetch from '../../utils/axios';
export const getAllJobsThunk = async (thunkAPI) => {
  const { page, search, searchStatus, searchType, sort } =
    thunkAPI.getState().allJobs;
  let url = `/jobs?page=${page}&status=${searchStatus}&jobType=${searchType}&sort=${sort}`;
  if (search) {
    url = url + `&search=${search}`;
  }
  try {
    const resp = await customFetch.get(url);
   return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
export const showStatsThunk = async (_, thunkAPI) => {
   const resp = await customFetch.get('/jobs/stats');
   return resp.data;
  } catch (error) {
    return thunkAPI.rejectWithValue(error.response.data.msg);
  }
};
```

```
import { showStatsThunk, getAllJobsThunk } from './allJobsThunk';
export const getAllJobs = createAsyncThunk('allJobs/getJobs', getAllJobsThunk);
export const showStats = createAsyncThunk('allJobs/showStats', showStatsThunk);
```

90) Clear Store - Setup

```
allJobsSlice.js
 reducers:{
   clearAllJobsState: () => initialState,
 }
```

91) clearStore

```
userThunk.js
 import { logoutUser } from './userSlice';
 import { clearAllJobsState } from '../allJobs/allJobsSlice';
 import { clearValues } from '../job/jobSlice';
 export const clearStoreThunk = async (message, thunkAPI) => {
   try {
     // logout user
     thunkAPI.dispatch(logoutUser(message));
     // clear jobs value
     thunkAPI.dispatch(clearAllJobsState());
     // clear job input values
     thunkAPI.dispatch(clearValues());
     return Promise.resolve();
   } catch (error) {
     // console.log(error);
     return Promise.reject();
   }
 };
userSlice.js
 import { clearStoreThunk } from './userThunk';
 export const clearStore = createAsyncThunk('user/clearStore', clearStoreThunk);
 extraReducers:{
   [clearStore.rejected]: () => {
       toast.error('There was an error');
     },
 }
```

92) UnAuthorized Requests

```
axios.js
 import { clearStore } from '../features/user/userSlice';
 export const checkForUnauthorizedResponse = (error, thunkAPI) => {
   if (error.response.status === 401) {
     thunkAPI.dispatch(clearStore());
     return thunkAPI.rejectWithValue('Unauthorized! Logging Out...');
   return thunkAPI.rejectWithValue(error.response.data.msg);
 };
allJobsThunk.js
 import customFetch, { checkForUnauthorizedResponse } from '../../utils/axios';
 export const showStatsThunk = async (_, thunkAPI) => {
     const resp = await customFetch.get('/jobs/stats');
     return resp.data;
   } catch (error) {
     return checkForUnauthorizedResponse(error, thunkAPI);
   }
 };
```

refactor in all authenticated requests

Refactor All Extra Reducers to Builder Callback Notation

allJobsSlice.js

```
extraReducers: (builder) => {
   builder
     .addCase(getAllJobs.pending, (state) => {
       state.isLoading = true;
     })
     .addCase(getAllJobs.fulfilled, (state, { payload }) => {
       state.isLoading = false;
       state.jobs = payload.jobs;
       state.numOfPages = payload.numOfPages;
       state.totalJobs = payload.totalJobs;
     })
     .addCase(getAllJobs.rejected, (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     })
     .addCase(showStats.pending, (state) => {
       state.isLoading = true;
     })
     .addCase(showStats.fulfilled, (state, { payload }) => {
       state.isLoading = false;
       state.stats = payload.defaultStats;
       state.monthlyApplications = payload.monthlyApplications;
     .addCase(showStats.rejected, (state, { payload }) => {
       state.isLoading = false;
      toast.error(payload);
     });
 },
```

jobSlice.js

```
extraReducers: (builder) => {
    builder
      .addCase(createJob.pending, (state) => {
        state.isLoading = true;
      })
      .addCase(createJob.fulfilled, (state) => {
        state.isLoading = false;
        toast.success('Job Created');
      })
      .addCase(createJob.rejected, (state, { payload }) => {
        state.isLoading = false;
        toast.error(payload);
      })
      .addCase(deleteJob.fulfilled, (state, { payload }) => {
        toast.success(payload);
      })
      .addCase(deleteJob.rejected, (state, { payload }) => {
        toast.error(payload);
      })
      .addCase(editJob.pending, (state) => {
        state.isLoading = true;
      })
      .addCase(editJob.fulfilled, (state) => {
        state.isLoading = false;
        toast.success('Job Modified...');
      })
      .addCase(editJob.rejected, (state, { payload }) => {
        state.isLoading = false;
       toast.error(payload);
      });
  },
```

userSlice.js

```
extraReducers: (builder) => {
   builder
     .addCase(registerUser.pending, (state) => {
       state.isLoading = true;
     })
     .addCase(registerUser.fulfilled, (state, { payload }) => {
       const { user } = payload;
       state.isLoading = false;
       state.user = user;
       addUserToLocalStorage(user);
       toast.success(`Hello There ${user.name}`);
     })
     .addCase(registerUser.rejected, (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     })
     .addCase(loginUser.pending, (state) => {
       state.isLoading = true;
     })
     .addCase(loginUser.fulfilled, (state, { payload }) => {
       const { user } = payload;
       state.isLoading = false;
       state.user = user;
       addUserToLocalStorage(user);
       toast.success(`Welcome Back ${user.name}`);
     })
     .addCase(loginUser.rejected, (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     })
     .addCase(updateUser.pending, (state) => {
       state.isLoading = true;
     })
     .addCase(updateUser.fulfilled, (state, { payload }) => {
       const { user } = payload;
       state.isLoading = false;
       state.user = user;
       addUserToLocalStorage(user);
       toast.success(`User Updated!`);
     .addCase(updateUser.rejected, (state, { payload }) => {
       state.isLoading = false;
       toast.error(payload);
     .addCase(clearStore.rejected, () => {
       toast.error('There was an error..');
     });
 },
```

Switch To Local Search

- remove isLoading from handleSearch
- import useState and useMemo from react
- setup localSearch state value
- replace search input functionality so it updates localSearch

```
import { useState, useMemo } from 'react';
const SearchContainer = () => {
  const [localSearch, setLocalSearch] = useState('');
  const handleSearch = (e) => {
    dispatch(handleChange({ name: e.target.name, value: e.target.value }));
  };
  return (
    <Wrapper>
      <form className='form'>
        <h4>search form</h4>
        <div className='form-center'>
          {/* search position */}
          <FormRow</pre>
            type='text'
            name='search'
            value={localSearch}
            handleChange={(e) => setLocalSearch(e.target.value)}
          />
          // ...rest of the code
        </div>
      </form>
    </Wrapper>
  );
};
export default SearchContainer;
```

Setup Debounce

```
import { useState, useMemo } from 'react';
const SearchContainer = () => {
  const [localSearch, setLocalSearch] = useState('');
  const handleSearch = (e) => {
    dispatch(handleChange({ name: e.target.name, value: e.target.value }));
  };
  const debounce = () => {
    let timeoutID;
    return (e) => {
      setLocalSearch(e.target.value);
      clearTimeout(timeoutID);
      timeoutID = setTimeout(() => {
        dispatch(handleChange({ name: e.target.name, value: e.target.value }));
      }, 1000);
    };
  };
  const handleSubmit = (e) => {
    e.preventDefault();
    setLocalSearch('');
    dispatch(clearFilters());
  };
  const optimizedDebounce = useMemo(() => debounce(), []);
  return (
    <Wrapper>
      <form className='form'>
        <h4>search form</h4>
        <div className='form-center'>
          {/* search position */}
          <FormRow</pre>
            type='text'
            name='search'
            value={localSearch}
            handleChange={optimizedDebounce}
          />
          // ...rest of the code
        </div>
      </form>
    </Wrapper>
  );
};
export default SearchContainer;
```