**React JS Chat Application Notes**

* <https://www.youtube.com/watch?v=Bv9Js3QLOLY>
* We will learn about, routing, social authentication, firebase, react context, rest api’s, environmental variables
* We will also use Chat Engine

**Starter Code**

* Go to <https://github.com/adrianhajdin/unichat-course>
* Click code and download as a zip
* Put zip on desktop and extract it
* Go inside the extracted folder and bring out the unichat-course-master folder which is what we will work in
* Open the folder in vs code
* Run npm install (this will install all the necessary dependencies)
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* When you get to here, run npm start
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* We should see an empty html page
* Go to the files and this is the quick rundown:
  + index.js is very basic and doesn’t have much and all it does it render the App component (which we have to make) and import the index.css file
  + App.js has some basic imports from react-router-dom. It also has imports we will need in the future that are currently commented out.

**Creating Login**

* Go to App.js
* Inside the return, we have a div which has a router component. Inside the Router, we have a Switch component which tells react to render one of the Route components we can see. Thus, we will either render the login form or the chats component
* Uncomment <Route path="/" component={Login} />
* Now, if we have a path of ‘/’, then react will render the login component
* To use the login component, uncomment its import and create a new Login.js file inside the components folder
* Go to Login.js and import React from ‘react’ and {GoogleOutlined, FacebookOutlined} from '@ant-design/icons'
* In the return of the Login function, we have the div which renders a header, and two divs.
* The first of the two divs renders a GoogleOutlined component which allows users to sign in via their google account
* The second of the two divs renders a FacebookOutlined component which allows users to sign in via their facebook account

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Graphical user interface, text, application, chat or text message

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Firebase

* Now we want to create our firebase, connecting it to our chat, and making our app work
* Go to <https://firebase.google.com/>
* Create a new project, disable google analytics, and create the project
* Click the settings icon beside the project overview tab and click project settings
* Scroll down and click the </> icon
* Name the app name unichat and toggle on ‘set Firebase Hosting’ and click register app
* Keep clicking next and click continue to console
* Still in project settings, scroll down and find the sdk setup and config tab
* Click the config toggle and copy the code
* Graphical user interface, text, application

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* Inside the src folder, we will create a firebase.js file
* import firebase from "firebase/app" which is inside our node modules which we installed using npm install
* import "firebase/auth"; (just do it)
* Now copy paste the config code from firebase into the file and make it look like the following
* Now, we are exporting the auth created by firebase that includes all of our apiKeys, authDomains, etc.
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* Now we want to add Facebook and Google into our Firebase application
* Go to Firebase and Click the build tab and click authentication
* Click get started
* Click Google, click enable, and enter any of our own google emails, then click save
* Click Facebook, and copy that OAuth link
* Go to <https://developers.facebook.com/> and click get started (which uses your facebook account)
* Now on the top right, click my apps and click the green create app button
* Click consumer and next
* Name it unichatmessenger123 and create app
* Click setup on the facebook login icon which should take you to
* Graphical user interface

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* Click Web, enter <http://localhost:3000/> for now as the url and click save and continue and keep clicking next until we are done
* Now on the left, under the facebook login tab, click settings
* Paste the OAuth link into Valid OAuth Redirect URIs
* Click save changes
* Now, go to settings, click basic and copy the app ID and the app secret
* Now go back to firebase and paste the app ID and the app secret and click save
* Now, we should have google and facebook login enabled
* Go to Login.js, and import the following
* import "firebase/app";
* import { auth } from "../firebase"; this is the auth configuration object that we exported from the firebase.js file
* import firebase from 'firebase/app';
* Go to the two divs which act as buttons for the user to click to login
* Inside the div, create onClick={() => auth.signInWithRedirect(new firebase.auth.GoogleAuthProvider())} for google and a similar one for facebook

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Context

* NGL, no clue what any of this code does, relearn later after u learn context
* First we create a context using const AuthContext = React.createContext(); and then we create a function, useAuth which allows us to grab that context.
* Then we set the loading and user states and grab the user from the Firebase and using react-router-dom to push our application to /chats. Next, we have to use this Auth Provider in the index.js file.
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Left of at <https://youtu.be/Bv9Js3QLOLY?t=1254>