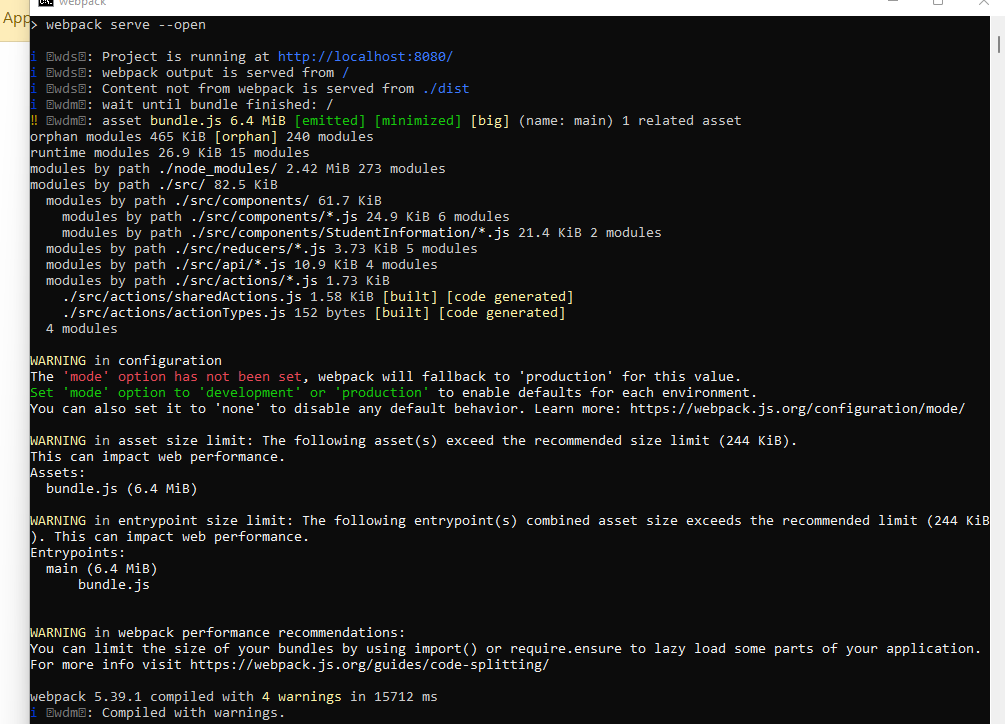
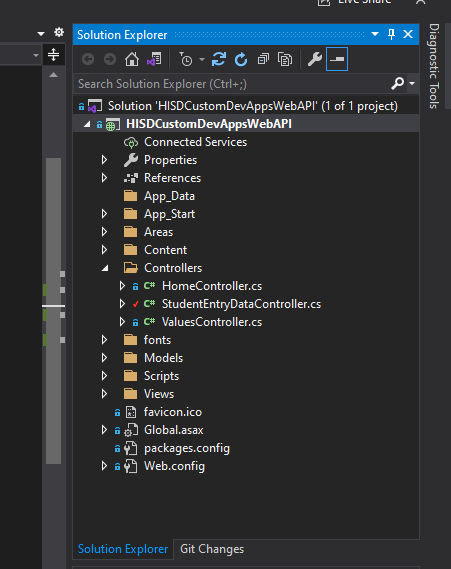
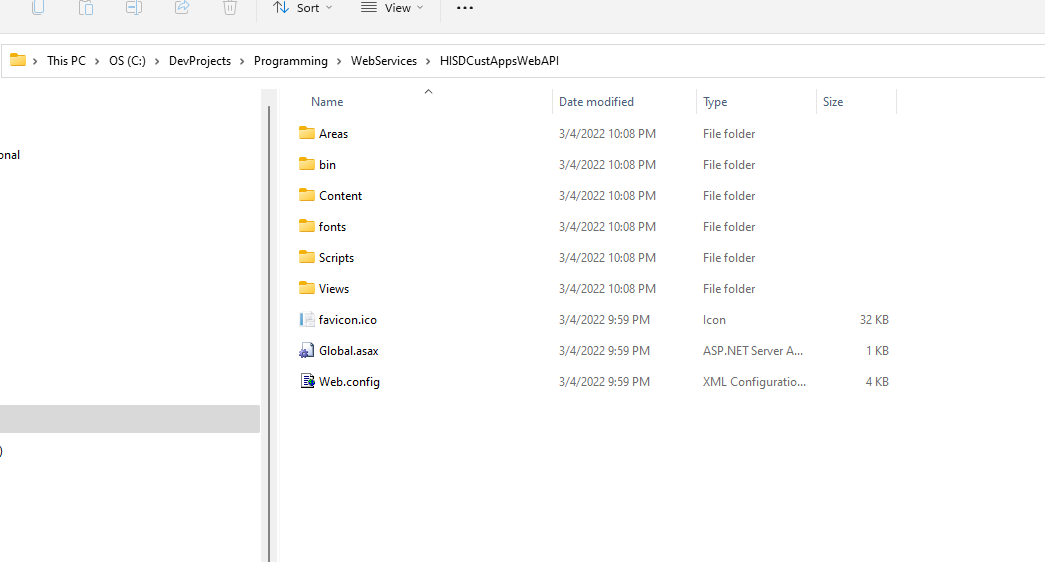
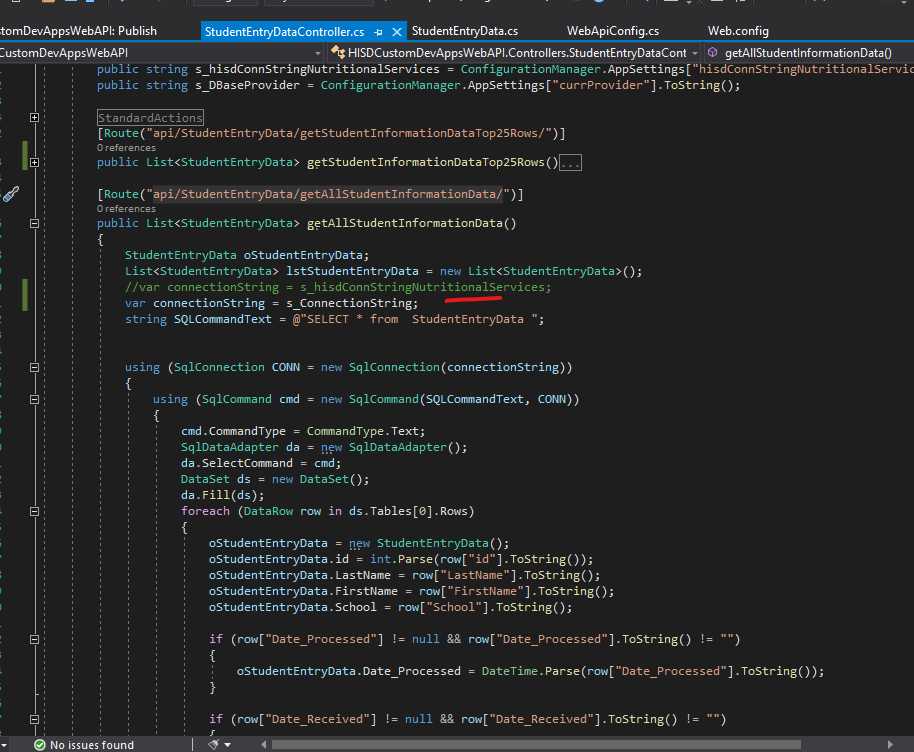
**Misc Tips:  
Tip**: Issue running npm install and running your project

For HISD  
**First check your node version**  
Graphical user interface, text, application

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If you are having an issue getting the node\_modules to install running   
npm install  
Delete the **node\_modu**les directory  
Make sure you don’t have any files open or in use in your project  
Open a command prompt as “Administrator”  
run  
npm install  
If no errors, run  
npm run start:dev  


**WEBAPI Project**  
 **Location:**C:\DevProjects\Programming\VisualStudio\HISDCustomDevAppsWebAPI\  
Local Web Install – IIS  
C:\DevProjects\Programming\WebServices\HISDCustAppsWebAPI  
  
  
**I CHANGED THE CONNECTION STRINGS  
**

**Current Project Locations  
Name:**

HISDCustomDevAppsWebAPI

FOR GITHUB: - I pushed the project to GitHUB  
git clone:  
https://github.com/lionel5116/SBHISDCustomDevAppsWebAPI.git

**For my personal SandBox React Project – WEBAPI**

**Graphical user interface, text, application, email

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**Graphical user interface, text, application, email

Description automatically generated**

**https://github.com/lionel5116/SBHISDCustomDevAppsWebAPI.git**

C:\DevProjects\Programming\SANDBOX\_REACT\_WEBAPI\_PROJECT\_FILES\HISDCustomDevAppsWebAPI

echo "# SBHISDCustomDevAppsWebAPI" >> README.md

git init

git add README.md

git commit -m "first commit"

git branch -M main

git remote add origin https://github.com/lionel5116/SBHISDCustomDevAppsWebAPI.git

git push -u origin main  
  
git remote add origin https://github.com/lionel5116/SBHISDCustomDevAppsWebAPI.git

git branch -M main

git push -u origin main

Text

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The Deployed Location  
Graphical user interface, table

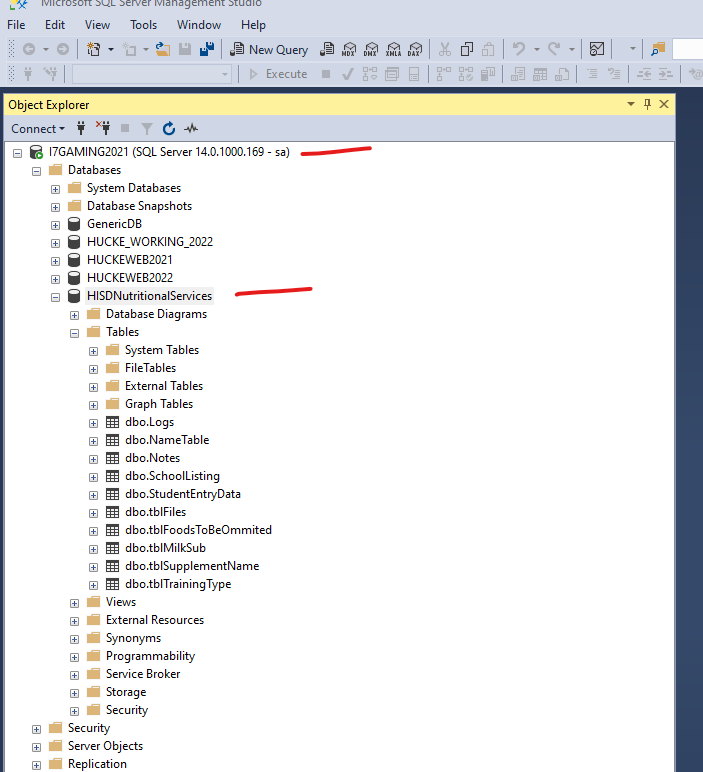
Description automatically generated with medium confidence  
Graphical user interface, text, application

Description automatically generated  
  
Graphical user interface, application

Description automatically generated  
  
Name is IIS

HISDCustAppsWebAPI

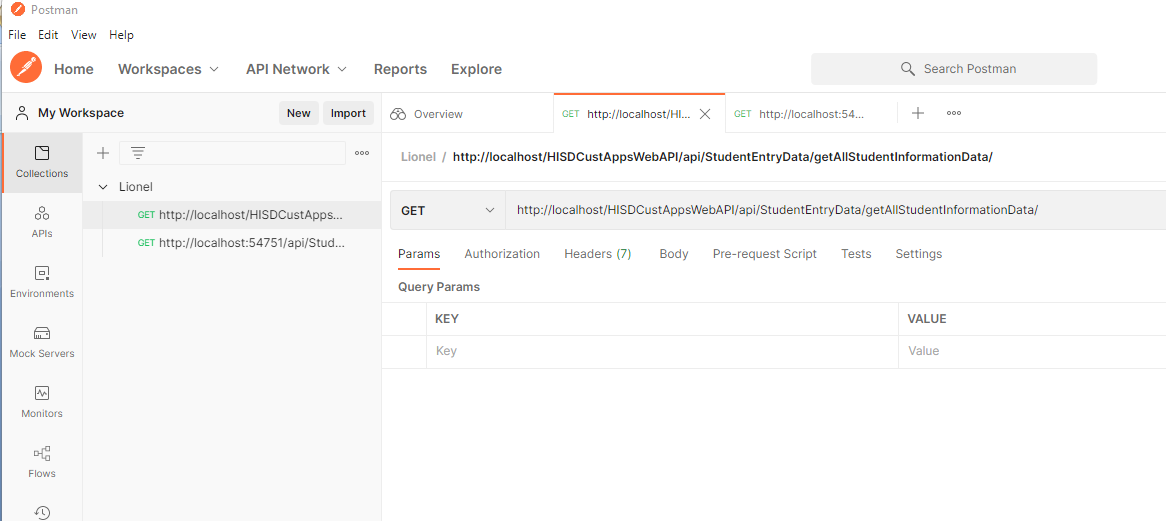
**FOR THE DATABASE**

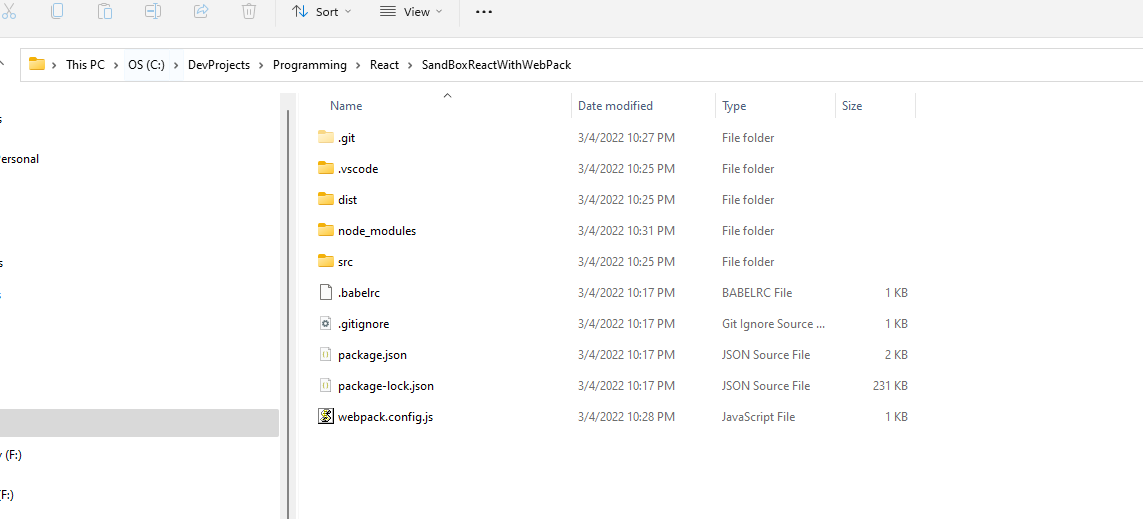
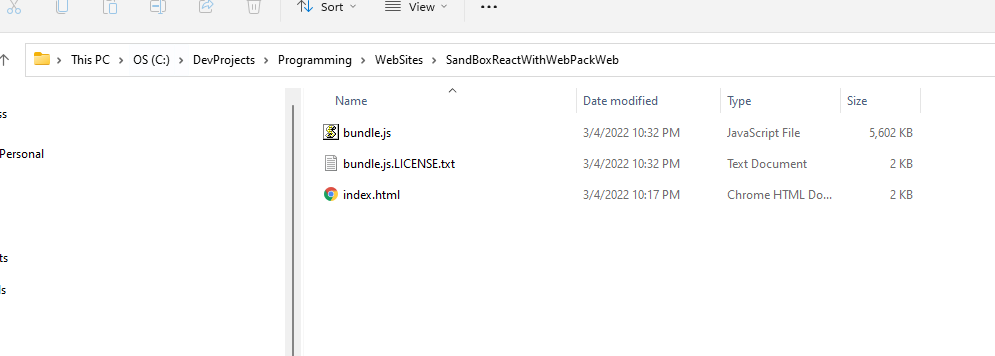
****

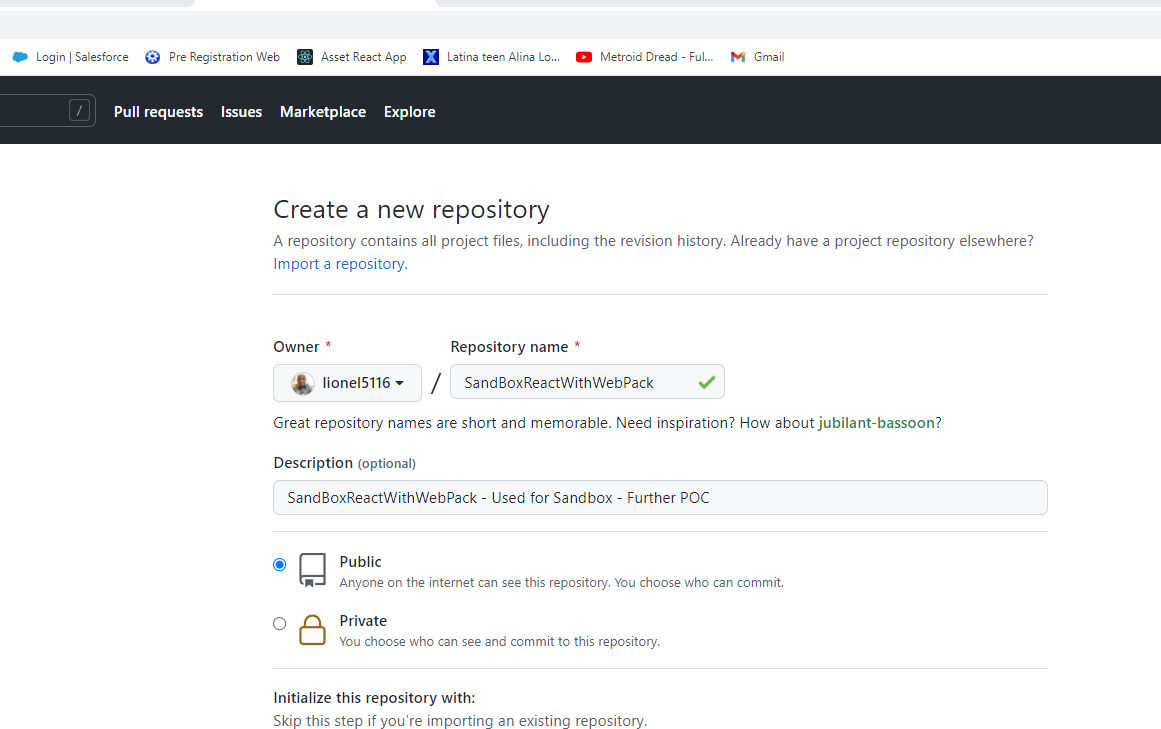
I am using a local copy of the HISDNutritionalServices DB

**POSTMAN ENDPOINTS**

http://localhost/HISDCustAppsWebAPI/api/StudentEntryData/getAllStudentInformationData/  
http://localhost:54751/api/StudentEntryData/getAllStudentInformationData/



React Project  
C:\DevProjects\Programming\React\SandBoxReactWithWebPack  
  
Site Install  
C:\DevProjects\Programming\WebSites\SandBoxReactWithWebPackWeb  
  
Renamed project in package.json file

  
Then deleted node\_modules and did a   
**npm install**  
To build project  
**npm run build**  
To run project:  
**npm run start:dev**  
  
**I CREATED A GIT REPO**  
**First Initialize**git init

git remote add origin https://github.com/lionel5116/SandBoxReactWithWebPack.git

**For subsequent pushes**

git add -A

git add .

git status

git commit -m "change notes"

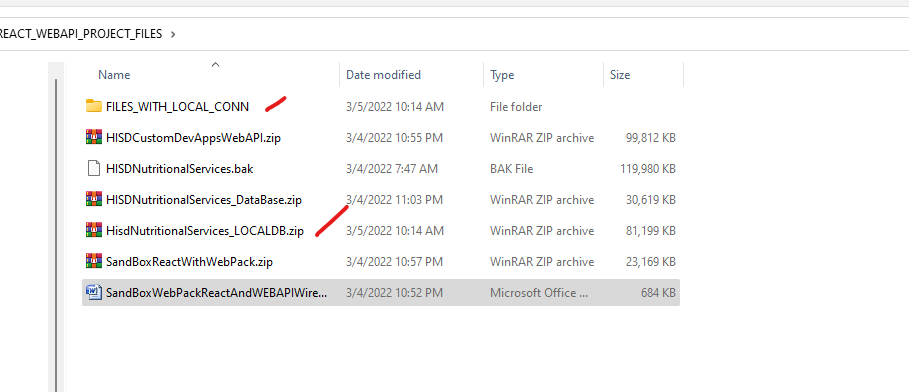
git push origin master

If you get this error:

error: failed to push some refs

to 'https://github.com/lionel5116/HisdNutritionalServices.git'

Type this command:

git push origin main  
  
**Nutritional Services – Web Project and Local DB Files**The FILES with LOCAL\_CONN are the web.config file and function for pulling shool data  
  
**React NPM’s for file-upload**  
<https://www.npmjs.com/package/use-file-upload>  
**React-dropzone-npm**

**Below is a good video on how to use react hooks with nodejs API**

<https://www.youtube.com/watch?v=PEGUFi9Sx-U>  
**Another good video on file upload**  
<https://www.youtube.com/watch?v=sp9r6hSWH_o>

**Good Video Series on React**

**React Hooks:**

Allow you to use React features without having to write a class, Ex; State of a component

<https://www.youtube.com/watch?v=cF2lQ_gZeA8&list=PLC3y8-rFHvwgg3vaYJgHGnModB54rxOk3&index=44>  
  
**React Effects**  
Mimics lifecycle hooks for a functional component. i:e componentDidMount, it essentially adds "effects" to a functional component

<https://www.youtube.com/watch?v=BH4xvzHa7H8&list=PLC3y8-rFHvwgg3vaYJgHGnModB54rxOk3&index=52>

**Great Article on React Hooks with REDUX**

<https://thoughtbot.com/blog/using-redux-with-react-hooks>  
**How to use Redux with Hooks**

React Redux now includes its own useSelector and useDispatch Hooks that can be used instead of **connect**.

**useSelector** is analogous to connect’s **mapStateToProps**. You pass it a function that takes the Redux store state and returns the pieces of state you’re interested in.

**useDispatch** replaces connect’s **mapDispatchToProps** but is lighter weight. All it does is return your store’s dispatch method so you can manually dispatch actions. I like this change, as binding action creators can be a little confusing to newcomers to React Redux.

Alright, so now let’s convert a React component that formerly used connect into one that uses Hooks.

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**Here a working example – This is in the sandbox project**

<https://www.freecodecamp.org/news/learn-redux-by-making-a-counter-application/>

A screenshot of a computer

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**And it works:**

Graphical user interface, text, application

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**­­A recap of REDUX  
Diagram

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Actions:  
Text

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Text

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**Definition of a pure function**

A function application has no side effects (no mutation of local static variables,

non-local variables, mutable reference arguments or input/output streams).

**Use Effect**[**https://reactjs.org/docs/hooks-effect.html**](https://reactjs.org/docs/hooks-effect.html)Since we are using pure functions, (that don’t allow for side effects), the only way to add side effects is to use .. well (useEffect)

**Understanding Side Effects**

React is centered around functional programming. A side effect is any execution that affects something

outside the scope of the function being executed. It is not a React specific term,

it’s a general concept about the behavior of a function. For example, if a function modifies a

global variable, then that function is introducing a side effect —

the global variable doesn’t belong to the scope of the current function.

Data fetching, setting up a subscription, and manually changing the DOM in React components are all

examples of side effects. Whether or not you’re used to calling these operations “side effects”

(or just “effects”), you’ve likely performed them in your components before.  
  
Graphical user interface, text, application, email

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**A screenshot of a computer

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**React Bootstrap5 Sample Page Demo**

<https://www.youtube.com/watch?v=l2131Rok8XU>  
We implemented a react bootstrap web page  
**NOTE**: WE ALSO DID LIVE MARKUP CODING, WE STARTED THE WEBSITE AND CODED AND SAVED THE FILE WHILE IT DID LIVE RELOADING!!!  
Docs:  
<https://react-bootstrap.github.io/getting-started/introduction>  
Page: “SampleReactBootStrapWebPage.js”  
Key Notes on the Page  
Text

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The **’px-4 my-5’** is padding an margins in bootstrap react  
  
**Responsive Grids:**  
<https://react-bootstrap.netlify.app/layout/grid/#grid-system>  
  
**Images**  
Text

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**Notice how when you using regular markup (not components):**class (for regular elements)  
className (for components)  
  
https://react-bootstrap.github.io/components/cards/  
A screenshot of a computer

Description automatically generated  
He also just copied and pasted the sample card code from the website (sweet), just like regular bootrap example coding  
  
After coding:

A screenshot of a computer

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SWEET!!!!!  
He also has some information on free web page hosting of your react application, kinda like Heroku  
<https://www.youtube.com/watch?v=VLGLlIhn3Ng>  
  
For spacing in bootstrap react

https://getbootstrap.com/docs/5.1/utilities/spacing/  
Text

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**You first specify what spacing you want either:**  
m (margin)  
p( padding)  
Then you specify the sides  
t (top  
b(bottom)  
…..  
Then a # between 0 and 5 (also auto) (You cannot specify any other numbers)

So for this example below, he used “mt-4” (margin-top) with a 4 spacer (\* 1.5)

Text

Description automatically generated

And for Text  
https://getbootstrap.com/docs/5.1/utilities/text/  
Its in the docs

Graphical user interface, text, application, email

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For example:

Text

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**Adding a Custom Style css attribute**

If you want to add your own custom style for a component, you have to use in the format below:  
{ { <style: ‘ ‘}}  
Text

Description automatically generated  
  
  
For Components used by bootstrap react

https://react-bootstrap.github.io/components/alerts/  
  
  
<https://reactjs.org/docs/hooks-state.html>  
What is a hook in functional programming  
A Hook is a special function that lets you “hook into” React features  
**When would I use a Hook?**

If you write a function component and realize you need to add some state to it,

previously you had to convert it to a class. Now you can use a Hook inside the existing function component  
  
**Example:**

const [count, setCount] = useState(0);

What do we pass to useState as an argument? The only argument to the useState() Hook is the initial state.

Above we pass in 0 as the initial value

What does useState return?

It returns a pair of values: the current state and a **function** that updates it.

This is why we write const [count, **setCount**] = useState()

This is similar to this.state.count and this.**setState** in a class

Graphical user interface, text

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Graphical user interface

Description automatically generated

Real world example I used in my file upload component example:  
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How to kill server when seeing “EADDRINUSE: address already in use”

<https://levelup.gitconnected.com/how-to-kill-server-when-seeing-eaddrinuse-address-already-in-use-16c4c4d7fe5d>

C:\Users\admin>netstat -ano|findstr "PID :3000"

Proto Local Address Foreign Address State PID

TCP 0.0.0.0:3000 0.0.0.0:0 LISTENING 18264

To kill this process (the /f is force):

taskkill /pid 18264 /f  
  
How React let’s you do an import as an “an”

A screenshot of a computer

Description automatically generated with medium confidence  
  
Notice above how you can reference a reducer as an alias without spelling out the actual function name

**Testing the App out at HISD**  
Nutritional Services  
Server - SQLINT01  
NutritionalServices  
User Name : u\_NutSvs  
Password: 8~QXCob/Zp  
  
Building the project  
**run npm build**

Changed the web.config file’s connection string out in the WEBAPI Project  
Published the files out the Dev Server  
  
On the Server  
WAPPDEVWEB01  
  
Graphical user interface, text, application

Description automatically generated  
  
Named the Virtual Directory  
SBHISDCustomDevAppsWebAPI  
  
Graphical user interface, text, application, email

Description automatically generated  
  
Graphical user interface, text, application, chat or text message

Description automatically generated  
  
<http://appsdev.houstonisd.org/SBHISDCustomDevAppsWebAPI>

**The Final URLS:**  
<http://appsdev.houstonisd.org/SBHISDCustomDevAppsWebAPI>  
<http://appsdev.houstonisd.org/SandBoxReactWithWebPack>

Graphical user interface, text, application

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Now for installing the React App  
I changed the config.js file:  
A screenshot of a computer

Description automatically generated with medium confidence  
  
Did a test to see if the files would upload from my local build  
  
Looked at SQL  
Graphical user interface, text

Description automatically generated  
  
Ran the page  
Graphical user interface, application

Description automatically generated  
  
And it works

A screenshot of a computer

Description automatically generated with medium confidence

Now I am going to do a build and deploy:  
npm run build  
  
Graphical user interface, application

Description automatically generated  
  
  
I named web application the same as the project on the dev server  
Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated  
  
The URL

<http://appsdev.houstonisd.org/SandBoxReactWithWebPack>  
Graphical user interface, text, application

Description automatically generated  
  
Starting the test:

Graphical user interface, application

Description automatically generated  
And it works:

Graphical user interface, text, application

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Graphical user interface, table

Description automatically generated  
  
Getting the attachment code to work from the Grid  
Graphical user interface, application, Word

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I used a cell formatter

Text

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A picture containing graphical user interface

Description automatically generated  
  
I updated the service with the same code in HISDNutritional Services  
Text

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**Boilerplate code for new component**import {Button,

Card,

Container,

Row,

Col,

Image} from 'react-bootstrap';

<div>

<main>

<Container>

<Row>

<Col sm={12}>

</Col>

</Row>

</Container>

</main>

</div>