**Topics – Important discoveries throughout the development process**

**Topic**: Project Location Details

**Topic**: Trying to get a .png file to load with webpack (local project images)

**Topic**: Bootstrap notation for css

**Topic**: Hiding webpack size limit warnings, just add an entry to your webpack.config

**Topic**: Getting Props to Work with Reusable Controls

**Tip**: Getting Navigation to work in Reactjs Functional Components

**Tip**: Getting Bootstrap Icons to work

**Topic**: Getting the URL to work when deployed to IIS

**Tip**: Alter Table Command

**Topic**: Getting dropdown list to work as a functional – reusable component

**Component(s):**  
Search.js

**Topic**: Fixing the modal and race condition when trying to set a value of a modal field before it’s shown

**Component(s):**  
Administration.js

**Topic**: Styling the Modal

**Tip**: Putting together a reusable Modal

**Component(s):**  
Administration.js  
GenericModal.js  
  
**Topic**: Using the new bootstrap table next  
**Component(s):**

Administration.js

**Topic**: Endpoints Tested from service:  
  
**Topic:** Getting a link in a table to navigate to another page with a query string  
**Component(s):**

Search.js

**Nutrition Services New Project**

**Topic**: Project Location Details

Git Project Location:  
<https://houstonisd@dev.azure.com/houstonisd/HISDNutritionServices/_git/HISDNutritionServices>  
  
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**React Project  
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Where we are so far:  
We have the menu navigation completed  
The only components that have been created are for the Reports  
Student Records Menu Items will be created next  
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**WEBAPI WebService**

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**GIT LOCATION FOR WEB SERVICE**  
<https://houstonisd@dev.azure.com/houstonisd/CustomHISDWebServices/_git/HISDCustomDevAppsWebAPI>  
  
I used the original WS Project and added the content from my test Sandbox WEBAPI Project

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Graphical user interface

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**I am committing code in VS Code**  
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**Topic**: Trying to get a .png file to load with webpack (**local project images**)

<https://stackoverflow.com/questions/34582405/react-wont-load-local-images>

First run this command:  
npm install --save-dev url-loader file-loader  
  
Then add this to your webpack.config file:  
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Then reference your image like below:  
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**Topic:** Bootstrap notation for css

**Bootstrap Spacing Notation**  
https://getbootstrap.com/docs/4.0/utilities/spacing/

**Topic**: Hiding webpack size limit warnings, just add an entry to your webpack.config

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**Topic**: Getting Props to Work with Reusable Controls  
Along with Reusable Components  
In my project, I was building a search screen. On the search screen, there was a select control that I needed to use multiple times. The only gotcha was, I needed the ID to be different for each select and have a re-usable control.

**Good Video on Passing multiple props to a functional component**

https://www.infoworld.com/article/3603276/how-to-use-react-functional-components.html

[**https://www.youtube.com/watch?v=6aPZR3qAIXg**](https://www.youtube.com/watch?v=6aPZR3qAIXg)

This was solved by:  
First creating a reusable select control  
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And as you can see, I am passing in the props for the ID and it works.  
This was taken from the React Docs  
<https://reactjs.org/docs/components-and-props.html>

This was also proven in my SandboxWebPackWEBApiWire project

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I got the School Listing Re-Usable Control to work as well  
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**Tip: Getting Navigation to work in Reactjs Functional Components**  
<https://www.codegrepper.com/code-examples/javascript/history.push+with+params>  
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And to grab the id

Text

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**Tip: Getting Bootstrap Icons to work**[**https://www.npmjs.com/package/react-bootstrap-icons**](https://www.npmjs.com/package/react-bootstrap-icons)npm install react-bootstrap-icons --save

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**To get the correct import**

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import { Pencil  } from 'react-bootstrap-icons';

As you type the name in the { } it will give you a list of icon names to select  
**To see a list of available icons, go to the link below, find the name you want, start typing in the import { }** and it will give you the correct reference  
<https://icons.getbootstrap.com/>

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**Topic**: Getting the URL to work when deployed to IIS  
The new Location:  
http://appsdev.houstonisd.org/NutritionServicesApp/  
You have to have “2” routes for the same component

Diagram

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Then in your navigation  
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**Tip:** Alter Table Command

ALTER TABLE tblMilkSub

ALTER COLUMN MilkSubName nvarchar(255);

**Topic:Getting dropdown list to work as a functional – reusable component  
In the Administration.js component**You have to use a “call back” to get the onChange event to work

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You also have to make sure you clear the items from the select as well each time you call the fetch items as well

You also have to use a callBack for the onChange event, notice below in the child component how I am passing the callback handler, **this is because it is an child component**, so for the items as well as the event handler, **you have to pass in a callback handler.**

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**And it works**

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**I CHANGED THE COE TO WORK WITH A BOOTSTRAP TABLE**

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**Topic**: Fixing the modal and race condition when trying to set a value of a modal field before it’s shown  
I had situation where I needed to set the value of a input field on a modal popup. The issue was that since the modal was hidden, and I wanted to set the value of the field dynamically, I need to render the modal first in order for the getElementbyID would work. The only way to get it to work was to show the modal first , then pause the thread for a ½ second before setting the value of the field  
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**Topic:** Styling the Modal

https://blog.hubspot.com/website/css-margin-vs-padding#:~:text=In%20CSS%2C%20a%20margin%20is,the%20space%20inside%20an%20element.  
  
In CSS, a margin is the space around an element’s border, while padding is the space between an element’s border and the element’s content. Put another way, the **margin** property controls the space **outside** an element, and the **padding** property controls the space **inside** an element. For example, for a button, the ***text*** **inside** the button’s spacing can be controlled by the **padding**.  
  
The modal needed to have room for long descriptions, and the labels were causing issues, so I nested the labels inside of the same column as the input field. I also added an inline style to make the input longer as well.  
Another thing to note:, you can also have multiple styles as well  
<input id='oldValue' style={{marginLeft: 5, width:300}}>

Graphical user interface, application

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Checking for an empty string in javascript

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Tip: Putting together a reusable Modal  
**Component(s):**  
Administration.js  
GenericModal.js **I created a reusable modal with a bunch of callbacks based solely on props**If you look at the GenericModal.js and the Administration page  
All props were passed in via the props object only, **Also it outlines how to show and hide a button in reactjs**Administration.js

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GenericModal.js  
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**Topic**: Using the new bootstrap table next  
<https://react-bootstrap-table.github.io/react-bootstrap-table2/>

**Component(s)**

Administration.js  
Search.js

**For basic wireup and pagination**

//react bootstrap table next

import BootstrapTable from 'react-bootstrap-table-next';

import paginationFactory from 'react-bootstrap-table2-paginator';

<BootstrapTable

striped

hover

keyField='ItemName'

data={tblSearchResults}

columns={columns}

pagination={ paginationFactory()}

rowStyle={rowStyle}

/>

const rowStyle = { height: '10px', padding: '2px 0' };

const columns = [{

dataField: 'ItemName',

text: 'Edit',

formatter: CellFormatter,

style: { width: '10px' }

}, {

dataField: 'ItemName',

text: 'Item Name',

}, ];

function CellFormatter(cell, row) {

return (

<div>

<Pencil

onClick={()=>showRowDetailInfo(row.ItemName)}/>

</div>

);

}

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**Topic:** Getting a link in a table to navigate to another page with a query string  
**UseHistory()**Search.js  
<https://v5.reactrouter.com/web/api/Hooks>  
https://stackoverflow.com/questions/59464337/how-to-send-params-in-usehistory-of-react-router-dom  
  
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**Graphical user interface, text

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For the look for Search**  
Graphical user interface, table

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In the cell formatter for the id field  
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<https://stackoverflow.com/questions/59464337/how-to-send-params-in-usehistory-of-react-router-dom>  
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**Topic**: Error with Form.Select with Webpack  
https://react-bootstrap.github.io/forms/layout/  
Taken from the form on bootstrap react website

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<Form.Group as={Col} controlId="formGridState">

<Form.Label>State</Form.Label>

**<Form.Select** defaultValue="Choose...">

<option>Choose...</option>

<option>...</option>

</Form.Select>

</Form.Group>

Webpack does not like :  
 <Form.Select  
  
When it compiles you get the following error  
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The way to fix it is to use:  
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<https://stackoverflow.com/questions/68166687/why-isnt-form-select-recognized-in-my-simple-react-bootstrap-app-following-the>

**Topic**: Building a complex form with useState Object  
Control:  
ComplexForm.js  
This is a good approach because it uses an object with useState

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And you are dynamically building the state object’s field/values using the setState hook

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Look at the syntax as well as it uses the spread operator in es6  
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The article below explains how to use useState with an predefined object

<https://stackoverflow.com/questions/59813926/usestate-to-update-multiple-values-in-react>  
  
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It explains how to leverage the spread operator  
https://daveceddia.com/usestate-hook-examples/

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**Topic**: Adding a WEBAPI Call with a Post (Using AXIOS) and adding a record using a complex object with reactjs and object from javascript  
  
After adding the complex form example above, I added a method to my webAPI project.  
Notice the [FromBody] attribute in the webAPI method, this says take content from the “body” of the request (POST)  
The type is of the type in .net (it needs a class) to expect an object with key value pairs

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Over on the javascript side:  
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When we call axios, we do not have to specify the type (i:e application type ‘text/json’)  
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When I use the useState = ([]), it builds a object with key value pairs that match what the API is expecting  
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I created a table in sQL:  
 CREATE TABLE [dbo].[studentComplexObject](

[firstName] [nvarchar](100) NULL,

[lastName] [nvarchar](100) NULL,

[Email] [nvarchar](100) NULL,

[Password] [nvarchar](100) NULL,

[Address] [nvarchar](100) NULL,

[City] [nvarchar](100) NULL,

[Status] [nvarchar](100) NULL,

[Zip] [nvarchar](100) NULL,

[FinalDate] [date] NULL

) ON [PRIMARY]

GO

Graphical user interface, text, application

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And it works

**Topic:** Endpoints Tested from service:

http://localhost:54751/api/Admin/fetchSchoolYears/

http://localhost:54751/api/StudentEntryData/fetchSchoolListings/

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

http://localhost:54751/api/StudentEntryData/getAllStudentInformationDataTEMPIDS

<http://localhost:54751/api/UploadFiles/getAttachments>

http://localhost:54751/api/StudentEntryData/fetchStudentEntryData/{sqlStatement}

http://localhost:54751/api/StudentEntryData/fetchStudentEntryDataAdminAndSearch/{sqlStatement}

http://localhost:54751/api/StudentEntryData/fetchStudentEntryDataAdminAndSearchLikeClauses/{strFieldValues}

http://localhost:54751/api/Admin/fetchSearchDDListData/ Milk Substitute