Exploration 3 Journal

Hunter Ginther

[hagd5d@mail.missouri.edu](mailto:hagd5d@mail.missouri.edu)

For Exploration 3 I decided to combine a little bit of both my Exploration 1 and 2 to try and rebuild the last challenge using different tools (Challenge 4). I focused on learning more about NPM, Webpack, and React this time around. Essentially the last two explorations I’ve followed tutorials and build apps based on what the given code with a little exploration but this time I tried focusing on building something not in a tutorial without referencing tutorials all the time.

I started out by initializing a new npm project by running ***npm init –y*** and then I set up my dependencies minus a few from my Exploration 2 by pretty easily copying over and modifying my ***package.json*** file from that exploration and running npm install. I then made sure webpack was working and then set up react this time. It was surprisingly pretty easy and fast to set things back up and get them working.

Once I got the basics of my dependencies imported and linked successfully I then tried re-creating Challenge 4 using React and LocalStorage, with NPM and Webpack for the package/dependency handling. I ended up getting some of the basic functionality that was needed for Challenge 4 but not all of it. The main problems I faced were figuring out how to connect React state to Local Storage which ended up being pretty easy and getting a select element to work with React state. For the select there was a weird quirk where the user couldn’t change their selection even though everything else appeared fine. Turns out someone made an add-on that is specifically for that which I downloaded and implemented to get my select working. Other than those problems things went kind of smoothly trying to build something without using too much documentation. My end goal was to have everything working for both books and students but I didn’t get that far.

My main next steps for accomplishing my end goal would be to “lift up” my react states and make all my React components more scalable. One of the big things that would have made my project easily scalable would have been to “lift up” my states which essentially is taking my two separate states for the bookForm and bookTable and abstracting it up to another level where I could manage both states in one place and have each component be able to transfer data back and forth. Once I got my abstracted my state I should have been able to create different state models to feed into the forms and tables and make the forms and tables themselves more flexible and better for general use. Essentially the application probably would have been a lot more powerful if I had more time to experiment with things. I believe I could get to the point where I could conditionally render whatever form or table I needed with any kind of input/datatype.

Being able to abstract my state so that I could display students/books/both would be the next milestone for me because once I figured out how to do that I think I would have been able to really master React. One of the things I noticed while I was developing was that Webpack worked wonders in the sense that I just had to transfer one folder over in FileZilla if I wanted to push code to my instance rather than having to move a lot of files at the same time. Plus having webpack made my index.html file very, very slim and I didn’t have to put in any <link> or <script> tags (Minus just the one needed for bundle.js).

All in all, I would say I learned more about the capabilities of NPM, Webpack, and React in this exploration. I figured out my next steps for learning more about React and everything. I think once I get to the point where I can really understand custom React states I could make some pretty cool scalable state-driven applications.

The node\_modules/ folder was not included in code because that is the download files that NPM automatically downloads and is massive which would take forever to transfer.