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Course: CSPB 3112 Professional Development

Title: Becoming a Business Intelligence Data Analyst

<https://dleenheer.github.io/>

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Introduction:

My main goal for the semester was to explore data science and specifically look at the skills and knowledge needed to become a Business Intelligence Data Analyst. In general, data is one of the topics that drew me to study computer science and the CSPB degree. I decided to explore Codecademy, found the Business Intelligence Data Analyst career pathway, and decided to work through as much of the pathway as time and scope for this project would allow. My goal for the pathway was to learn the material vs try to complete the pathway. I decided that it would be more valuable for me to focus on skill building and exploring the role vs setting a goal around completion.

Background:

I am currently between long term roles and am actively applying for full time roles. I am currently completing freelance work as a Technology and Software Development Consultant for the U.S. Anti-Doping Agency; this work has been a great experience and has increased my interest in data and software. For this semester I wanted a tangible way to further explore the data science space but also help my job search efforts. I reviewed various websites and information and found Codecademy. The platform seems well put together and has a lot of information that fits into the scope and goals of this class and project. While reviewing this website I found the career pathways section and specifically the Business Intelligence Data Analyst pathway. This pathway sounded interesting and was listed as the pathway needing the fewest hours to complete within the data science section.

Methodology, Materials, and Methods:

The main platform for the semester was the Codecademy website and Jupyter Notebook. The career pathway features step by step lessons, quizzes, external articles, and project files to complete. The project files started as a coding environment within the website with an information left-hand panel, a middle terminal screen, and right-hand display of the code results (which changed format depending on the lesson). Eventually they took things off the website and had you download Anaconda to access Jupyter Notebook. I enjoyed the exposure to the Jupyter Notebook environment, I think it's a great way to convey information and coding elements in an easy-to-read professional format.

Results:

Over the course of the semester, I learned a variety of things, mainly from the BI Data Analyst pathway. I refreshed my knowledge of python fundamentals (lists, dictionaries, functions, loops, etc.) and gained experience with lambda functions, pandas, and dataframes. The past couple of weeks have been focused on pandas and dataframe

manipulation (editing, filtering, creation, etc.) through completing lessons, quizzes, and project files. The pathway also covered the general goals of data analysts and topics like telling stories with data. I know that I learned the material through successful completion of the material in the pathway, including achieving 100% on the lesson quizzes. I haven't completed the full pathway yet but have achieved 100% on the lessons etc. that I have attempted thus far.

I also completed two different technical assessments as part of internship applications, one was a python project, and the other was putting together the backend of an internal application.

My initial project goal was to learn about the BI data analyst role and progress as far as I could through the analyst pathway as time allowed. I achieved these goals.

Discussion / Reflection:

I achieved my goals for the project and feel good overall about my progress this semester. I achieved my goals by creating a plan/focus each week. I made sure that the main goal was to learn the material vs just trying to get through a certain amount of the material. At one point in the semester, I decided to alternate work between the more in-depth project file I was working on with the next lesson in the pathway. This was the correct call as I was able to progress through the material a bit faster. The alternating also kept me from stalling out too much on the project. Rotating the focus helped keep the project file fresh and kept my main semester goal in mind of learning as much about the analyst role as time allowed. Overall, I enjoyed the Codecademy platform and career pathway. I will continue with both. I think it will help keep the CSPB coursework fresh while also providing an additional resource if I get stuck on something. I noticed that they have courses on many of the same topics as the CSPB program. I might try out some of these courses alongside the CSPB class, it might help reinforce the concepts.

Conclusion:

Overall, I view this semester as a success. Choosing the BI Data Analyst pathway was a great introduction to the BI analyst role and gave me further insight into data analysis. Working with data is a definite career interest of mine and my work this semester helped solidify my interest and gave me a look at business intelligence as a specialty. I'm still interested in data engineering but this past semester's look at the analysis side of data will also be beneficial to my future goals and career path. Moving forward I will continue with the BI analyst pathway and Codecademy in general as I think it's a great resource to include alongside the CSPB coursework.

References / Bibliography:

- Main GitHub Profile - <https://github.com/DLeenheer>
- Website for this course/project - <https://dleenheer.github.io/>
- My Codecademy Profile - [Dlearnstocode's profile | Codecademy](#)