CISY 8503

Peer Review Questions

Reviewer: Aaron Williams

**Site Identity and Purpose**

1. Whose software are you reviewing?
   1. This peer review is on the data warehouse system built by Flynn Raymos
2. The Needs Assessment
   1. The company mission at the beginning of the document was a good Idea and I’m sure the notes mean something to Flynn as he’s working on the project but there really isn’t any explanation on what these bullet points mean. The dataflow diagram was also a good idea but because this is a data warehouse a ERD or even just a description of the data being processed and what it will turn into would have been nice to see.
3. What is the goal(s) of this software?
   1. The goal of the software is to act as an ETL between a github dataset and a DataStudio report. This is mostly explained in the needs assessment because the software itself has no user interface. All of them are scripts that need to be manually or automatically run to get, clean, and upload the data. I would have liked to see at the very least some kind of “run” button so if the code did need to be run manually then it could be done with one button press.
4. Who is the target audience?
   1. According to the needs assessment the plan was this was for a business setting about E-sports. This idea was clearly scrapped at some point in favor of a D&D dataset. Because it is built for a business setting it was a good idea for everything to be automated with little to no human interaction. It also was a good thought to try an incorporate third part software in the form of BigQuery and DataStudio because that’s how most large companies would operate.
5. Does the software communicate the available tasks effectively?
   1. While this software is effective to some degree, I don’t think it is very efficient. To do this pier review I actually had to be shown the whole process because I couldn’t make sense of it. Each section of the code was in its own file that needed to be run without some kind of master controller. Also, data being processed had to be stored in several different text files every time some new processing was done to it. There was clearly a lot of reduction that could be done on this project to remove the buffer files. Other than the inefficiency each section runs well and interacts properly with everything else.

**Interactions, Content Delivery and Accessibility**

1. How does the software deliver its content? Is the content delivered accessible to a variety of users?
   1. The software delivers its content to a text file that is then manually uploaded to BigQuery and DataStudio. With these two programs the data can be displayed in several different ways depending on the information the user wants out of it but the biggest issue is that users need access to a google account and permissions to access the proper BigQuery and DataStudio setups. Because of the use of third-party systems there really isn’t a way round that, but I could see it causing some issues. The only way around it I can see is creating your own in-house output display.
2. Does thesoftware display and/or deliver its information regarding content, interactions and use effectively?
   1. The way this system currently works it displayed its final information rather well because of the third-party programs in use. The down side is comments and overall documentation is lacking to the point where I had to get a presentation on how this all works. I had no idea what loose code files did and how to use any of it. On top of that the user also needs to learn how to use the third-party systems. With a system like this that has no UI elements outside of the third-party systems I would suggest including clear documentation that describes how to use each part.
3. Do the software’s functional elements work well?
   1. All the systems work well and I have yet to run into any issues. The problem is like I said in the previous sections this all isn’t very intuitive in its current form. This would all be fixed by automating the system. The good thing is this whole system is already set where it could easily be set up to run automatically. Also the ETL system works rather quickly even if the actual Loading part is a manual process.

**User Interface and User Experience**

1. Is the software interface appropriate for the software’s intended uses and audience?
   1. The biggest complaint is the lack of an interface. The whole ETL system is a few files that need to be run. This is perfect for an automated system but it would be even better at least with some instructions on how to set up the automates system. The only interface being used is part of the third-party systems. Like I said before I would suggest adding some kind of control panel with at minimum a set of buttons that trigger each step in the ETL system.
2. Are the design layout guidelines being used appropriate to the software’s problem solving approach?
   1. I think that the lack of a UI is appropriate for this system. In an ideal setting it would be running automatically in the background so there’s no real point in having a complicated or advanced UI.

**Software Security**

1. Does the software follow industry specifications regarding the implementation of security practices?
   1. Most security needs I could see for a data warehouse would mostly be surrounding access control. This would mean the data that will be processed and the finished data would ideally be kept in a separate secure location. In addition the third party programs would need to be vetted somehow to confirm that they could be trusted to handle sensitive information. Really the main issue is how secure does the data need to be. In this case it is just information about D&D characters so the need for security isn’t that high however if it was more sensitive information like financial records that would be an entirely different issue.
2. Is the software appropriately secure based on its needs, users and intended purposes?
   1. I would say that it is almost secured for what it needs. The data isn’t very sensitive so allowing users direct access to the input and output of the ETL isn’t an issue and while I am unsure how trustworthy the third-party systems are there isn’t really anything in that data worth stealing. The only part I worry about is the user having to manually move the output to the third-party systems. This isn’t so much a mistrust but a worry about human error.

**Peer Review Pointers**

Point out what you didn’t like and what the software did well in a professional manner.

* 1. Do this after your first interaction with the software and again after several interactions to see if you have changed your mind.
  2. Use constructive terms and if possible direct the individual to resources that may help in the implementation of better software.
  3. If a design element does not make sense to you immediately or improve the interface, the developer needs to know your opinion. Then look at the software as if you were the intended target audience and share your comments.
  4. Focus on helping the developer improve his or her software, rather than just earning points for CISY 8503.