*Building Data Flow Diagrams*

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**Introduction**

A Data Flow Diagram is a system that is graphically represented. It can contain data flows, processes, sources, destinations, and stores. A Use Case Diagram shows you some of the use cases in your system, some of the actors in your system, and the relationships between them. Since data flows show what the users will be putting into the system and taking out it’s a much more detailed representation of the system.

By creating both the data flow level 0 and level 1 diagrams I am able to convey major tasks that are expected of employees through the new system, and also how they will connect to the different processes. The level 0 data flow diagram shows the employees right way what their main tasks will be and whether or not they are inputting information into the system or taking out information. Level 1 then will allow them to see where that data is going specific to there instance of work. Having this will allow APC’s team to learn their new system and its processes much faster and can clear up miscommunications that would arise if there were no visual representations.

**Topic Analysis**

**Part 1:****Create a Context Diagram for APC**

*In this section provide a brief setup for how you developed a DFD Context Diagram that captures the elements of your project. In addition to a sized and annotated Context diagram graphic, provide a complete explanation of how you arrived at the external elements and how you determined the data flow associations of each. Demonstrate that you understand how the DFD is consistent with the functional requirements of the system*

**Part 2:****Create a Level 1 diagram for APC**

*Expand the Context diagram into a Level 1 diagram. I recommend that you create a major process for each use case identified in the Use Case Diagram. Explain your numbering system and defend the associations you describe between elements with the System Level 1. Using the rules for developing the DFD, make sure all data stores are identified and connection correctly. Make sure to provide a clear explanation for each decision you make in the design. Your inputs and outputs (I/O) must be consistent with the Context Diagram.*

**Part 3***:* **Expand your most complex process from the level 1 diagram into a level 2 diagram.**

*Provide sufficient support to allow the reader to see that you understand how to decompose the Level 1 diagram into a level 2 diagram. Make sure all I/O are consistent with the Level 1 and Context diagrams. Demonstrate you understanding of how these diagrams support the requirements identified for the system.*

**Conclusion**

*Provide a clear summary of what you learned in the exercise. Demonstrate your understanding of the purpose and uses of a Data Flow Diagram and identify when you would use this tool. Identify how this tool would be used with the stakeholders of the project*

**If you use references, put them on a separate reference page with APA formatted references**