**COMP 2831 Week Four Exercise A01029917 Andrew Hewitson**

1. **Describe data and process modeling concepts and tools.**

A graphical model to show the process of how a system processes data into useful information.

The three main tools are data flow diagrams, a data dictionary and process descriptions.

**3. What is the difference between a context diagram and diagram 0? Which symbol**

**is *not* used in a context diagram?**

A Context diagram is a top-level view of an information system that shows the system’s boundaries and scope. It is the highest level DFD, so it ‘contains’ process 0. The next level of detail inside process 0 is described in diagram 0. Data stores are not shown in the context diagram because they are shown in Diagram 0. Diagram 0 shows the major processes, data stores and data flows. It is an exploded view of the context diagrams process symbol.

**5. Describe a data dictionary and list the types of information it contains.**

The central documentation tool for structured analysis. The details within a set of DFDs. A central storehouse/documentation tool for all the information about the system’s data. It contains data flows, data stores, entities, records and processes.

**8. What is the purpose of decision tables? How do you create them?**

A logical structure that shows every combination of conditions and resulting actions/outcomes. You can create decision tables with software such as PowerPoint, Word or Excel.

**9. Why would a manager prefer a decision tree instead of a decision table?**

A decision tree shows the logical structure of a horizontal form. A graphical representation of the conditions, actions, and rules found in the decision table. A manager might prefer one over the other as a matter of preference although a decision table might be a better way to handle a complex combination of conditions. A decision tree is an effective way to describe a relatively simple process in an easy to understand manner.