V516 Homework_2

Part 1

The “Inventory System” is set up to assure that the supplies and raw materials the business depends on are always on hand (available). To accomplish this, there is an inventory-monitor that continuously monitors the current level of all supplies and raw materials (stock items). The Inventory-monitor provides the data about stock-on-hand to the Inventory System. The Inventory system receives invoices from Suppliers when supplies and raw materials (stock items) are delivered and added to the inventory. The Inventory System is capable of determining when to re-order supplies or raw-materials from a supplier. To accomplish the re-ordering task, the Inventory system has threshold values for each stock item; when the inventory level of a given stock item reaches it’s threshold, the Inventory System generates an order to a Supplier to replenish the inventory level for that stock item(s).

For the following Context and Level_0 data flow diagram, redraw the Level_0 diagram using appropriate diagramming software, labeling each data flow. Use snipping tool or other recording method to capture your completed diagram. Add additional subprocesses (5.0, 6.0…) if you feel they are necessary. (7 points)
Part 2: (13 points)
Create a Level 0 DFD for this version of the ParkIT_DC Context Diagram:

What is Park It DC?
Park It DC is an application that allows you to check a specific area in the district for parking information. Why not check parking information before you leave and see what streets you can park on. Check what meters cost money and what ones are free. Park It DC will even help you not get a ticket for parking in an RPP zone!

How does it Work?
In Short, we store all data in a database. Every 10 mins. we make a call to the crime and service request feed and either update the already existing record or insert a new one. Then we use Google Maps API calls to read XML files that we generate from the database and plot the data on the map.

RPP = Residential Parking Permit
Data Flow Diagram (context level) for Park It information system:

Part 3:
Write a memo - 500 words or less- to your future public_sector boss, advising them why your agency (organization) should adopt and standardize on an Open_Source platform like LAMP. (5 points)

Public Sector Boss,

The Open Source Platform, LAMP, can be an important tool for a public agency to use. The largest benefit is the lack of a high capital expenditure on purchasing software licenses. Another additional benefit is the ability to provide customized software to meet the unique needs of the agency, which would not be as easily available if the organization purchased commercial software. A very important consideration for the use of open source software is whether or not we have the expertise in-house to develop, implement and provide support for the software. The use of open source software raises additional staffing concerns. With commercial software, our employees will be able to access and rely on support provided by those companies. In the case of open source software, support must be provided by staff in-house leading to the potential of overtime pay or having IT staff on-call during overnight hours. In turn, the use of open source software makes our organization even more dependent on these internal resources. An additional concern is that development and implementation time will be much longer than if the organization purchased turn-key commercial software. In conclusion, provided we have the necessary in-house expertise in our IT department, adoption of the Open Source Platform, LAMP, is an appropriate course of action.