Develop a Context Diagram and a Top-Level diagram (sometimes called a Level-0 diagram) for the Contracting System described below. If you discover that the narrative is incomplete, make up reasonable explanations to complete the story. Supply these extra narratives along with the diagrams.

Remember:

A **Context Diagram** is a simplified, overview of the system, which contains one process, and the primary inputs and outputs.

A **Top Level or Level-0 diagram** describes the whole system of interest. In other words, it is a diagram representing the system's major processes, dataflows, and data stores at a high level of detail.

**The Narrative:**

You have taken a job with a Washington D.C.-based contracting firm called “Government Technology Solutions” or GTS. GTS sells computer equipment to federal government agencies.

Whenever a federal agency needs to purchase equipment from GTS, it issues a purchase order (PO) against a standing contract previously negotiated with the company.

GTS holds several standing contracts with various federal agencies. When a PO is received by GTS’ contracting officer, the contract number and the PO number are entered into the contract/PO database.

Using information from the database, the contracting officer reviews the term and conditions of the contract and determines whether the PO is valid. The PO is valid if the contract has not expired, the type of equipment is listed on the original contract, and the total cost of equipment ordered does not exceed a predetermined limit. If the PO is found to be valid, the contracting officer then flags the order as outstanding. If the PO is not valid, the contracting officer sends the PO back to the requesting agency with a letter stating why the PO cannot be filed. The rejection letter gets stored in the contract database.

Valid POs are then sent to the order fulfillment department. Here the inventory is checked for each item ordered. If any items are not in stock, the order fulfillment department creates a report listing the items not in stock and attaches it to the PO. These are stored in the PO/Contract database. A “warehouse” flag is attached to the PO.

The warehouse checks for open POs with warehouse flags. Items in stock are pulled from the shelves and shipped to the customer. The warehouse then attaches to the PO a copy of the shipping bill listing the items shipped and sends it to the contracting officer. If all items were shipped, the contracting officer closes the outstanding purchase order record in the contract/PO database. The PO, shipping bill, and exception report (if needed) are then filed in the contracts office and an invoice is sent to the agency.

Draw by hand or use a drawing tool in the computer room – Powerpoint, Open Office impress, Open Office Draw. But don't spend a lot of time with software – by hand is probably easiest.