Business Modeling Project

Assignment

In this assignment you will develop a Protos model for a cross-organizational business scenario.

- You have already completed the pre-project survey.
- Post-project survey will be emailed after the project completion.
- It is critical that you complete project worklog, a short form, every time you work on the project.
- Surveys and worklog will be graded based on completeness and timeliness. Note that there are no right or wrong answers, and the contents of the survey will not in any way affect the grade.

Other than the surveys, there are two deliverables in this assignment.

1. Develop a Protos business model for the given scenario. You can follow Steps 1–5 as outlined in Protos overview document. Submit a report showing the output of each Step, and the resulting business model.
2. Develop an operational model (UML 2.0 sequence diagrams) that shows the message exchange between the participants. Refer to the Protos overview document which shows the operationalization (sequence diagrams) for each of the business modeling patterns. You may use UML 2.0 sequence diagram operators such as opt, loop, and alt. Submit a report with the sequence diagrams, and a description for each of them.

You may use a tool such as Visio, or hand draw the sequence diagrams. Please ensure that the diagrams are legible.

Grading

This assignment is part of a research study being conducted by the Service Oriented Computing Lab at NCSU. An integral part of the assignment is the completion of pre and post project surveys as well as keeping a record of your progress throughout the assignment.

Pre-project survey	5%
Post-project survey	10%
Project worklog	25%
Deliverable 1	30%
Deliverable 2	30%

Scenario

MedEq, a large company, is in the business of selling medical equipment. MedEq designs the equipment in-house, but it outsources manufacturing to two contract manufacturers: FlexMan and SoleMan. For shipping the equipment to the customer's site, MedEq employs two shippers: FedUp and UpFed.

To purchase the equipment, a customer submits its requirements to MedEq. MedEq analyzes the requirements, and creates a proposal containing the equipment details, and a quoted price. The customer may accept the proposal or request MedEq for a better price. There can be up to two iterations between MedEq and the customer before they either agree upon the price, or they abort the transaction.

If MedEq and a customer reach an agreement on the quote, the customer may proceed to placing an order for the equipment. The order contains details on the equipment, shipping address, contact information, and payment information. Upon receiving the order, MedEq validates the order. In case the order is found to be valid, MedEq accepts the order. Otherwise, MedEq rejects the order.

MedEq has warehouses of its own in which it stocks the equipment. In case the equipment necessary to fulfill an order is in stock, MedEq requests a shipper to ship the equipment to the customer. MedEq pays the shipping fees to the shipper.

If the equipment necessary to fulfill an order is not in stock, MedEq places a stock replenishment order with a contract manufacturer. The contract manufacturer employs a shipper to ship the equipment to MedEq's warehouse. MedEq pays the contract manufacturer for the equipment. Once the equipment is in stock, MedEq fulfills customer's order.