The main purpose of this assignment is to develop a complete use case model for the *Requested For Quote (RFQ)* System based on the requirements given in this document.

Use *Microsoft Visio, Word or a UML* drawing tool to develop your use case model. Make sure to export your diagram to a .pdf file before submitting your work on Blackboard. You may partition your model according to the primary actor.

Please make sure that all of the printed models/diagrams are easy to read (i.e. they are large enough to review and to assign a grade.)

Remember to include the following information in your assignment file and on the printed copy:
- Your first name and last name
- Your student id
- Course number and section number
- Assignment number
- Due date and time of the assignment

Use the appropriate standard UML notations to develop a complete use case model for the *RFQ* system. Clearly show all of the components of your use case model – system boundary, system name, primary and secondary actors, and primary and supporting use cases. Also, indicate association relationship between actors and use cases, and among use cases. For now, please focus on showing the standard association relationship that we discussed in class. You are not required to show "include," "exclude," and dependency relationships in this assignment.

Use the appropriate UML notation and refer to the following requirements to develop a complete use case model:

1. The RFQ system must allow an authorized GPS's sales manager to create a new customer account. Each account contains a unique system-assigned account number/id, the company name, complete address (street, city, state and zip code) for billing and shipping, first name, last name, email and phone number of the company's representative. The sales manager must be able to indicate whether the customer can be auto-quote or manual-quote, and his (the manager's) email address and phone number. After the new account is created, the system creates a unique password for each customer and notifies the customer's representative via an email of the account login information (company id and password.)

2. The RFQ system must also allow an authorized sales manager to update an existing customer account.

3. The RFQ system must allow authorized sales managers and customers to search for parts by a part number or description. The output from the search, shown on the screen, must include the part number, part description and part images.

4. The RFQ system must allow authorized customer representative, who has the customer id and password, create a request for quote (create RFQ). The customer representative must be able to enter the part number, quantity, and require date for each part. The system must be able to accept one or more parts for a single RFQ.

    If the customer's account was set up as auto-quote, the system calculates the quote and displays the results to the customer immediately. If the customer's account was set up as manual-quote, then the system must notify the sales manager of the customer's generated RFQ.

5. The RFQ system must be able to generate sales quote for customers with "Auto Quote" accounts. The system-generated auto-quote contains a unique sales quote number, the date the quote was created, the part number, part description, part image(s), the quantity, the date that GPS can provide the part, the price and the date the quote expires. Typically, a sale quote (auto or manual) expires 30 days from the quote date. At this time, the sales quote has the "Created" status.

6. The RFQ system must allow authorized sales manager to create sales quote for a selected customer with an RFQ with the "Created" status. The sales manager must be able to select an RFQ associated with the selected customer. For each part on the RFQ, the sales manager must be able to indicate the date GPS can provide the part and the price for that part. After the manager confirms to create the sales quote, the system generates the sales quote, which contains a unique sales quote number, the date the quote was created, the part number, part description, part image(s), the quantity, the date that GPS can provide the part, the price and the date the quote expires (30 days from the sales quote date.) The system also sets the sales quote status to "Created."

7. The RFQ system must also allow an authorized sales manager to update an existing sales quote.

8. The RFQ system must allow an authorized sales manager to submit one or more sales quotes to a selected customer. Once submits, the system sets the status of the selected sales quotes to "Submitted to Customer" and sends a notification to the associated customer.

9. The RFQ system must allow an authorized customer to accept one or more unexpired sales quotes. After accepting the quote, the system updates the sales quote status to "Accepted" and automatically generates a sales order based on the data associated with the sales quote and associates the sales order to the customer. The system also generates and sends notifications to GPS's Accounts Receivable (AR), Sales Order Management (SOM) and Inventory Management (IM) systems.

A sales order contains a unique order number, the order date (the date the sales quote was accepted), required date, the customer name and complete address where to send the invoice and where to ship the ordered parts (each order line contains part number, description, order quantity and unit price) and sales order total amount. After the sales order is generated, the system sends a copy of the sales order to the associated customer using the email address of the customer's representative.

10. The RFQ system must allow an authorized customer to reject one or more unexpired sales quotes. Once the customer confirms to reject an existing generated sales quote(s), must update the sales quote status to "Cancelled by Customer" and notify the sales manager and the customer of the rejected quotes.

11. The RFQ system must allow authorized sales managers to generate and produce detailed and summary status reports for request for quotes (auto and/or manual).

12. The RFQ system must allow authorized sales managers to generate and produce detailed and summary sales order status report.

What to submit for grading:

Submit a printed copy of your complete use case model at the beginning of class on the due date. If you are working in a group, submit one copy -- on the printed copy, please indicate the first name, last name and z-id of all group members.

On Blackboard, each student must submit a file copy of the complete use case model for grading, by the due date and time.