

Assignment #1

Assignment Due Date: 2/17/19 by 11:59pm

Assignment Submission:

Submit your assignment as a SINGLE PDF document on Blackboard by the due date

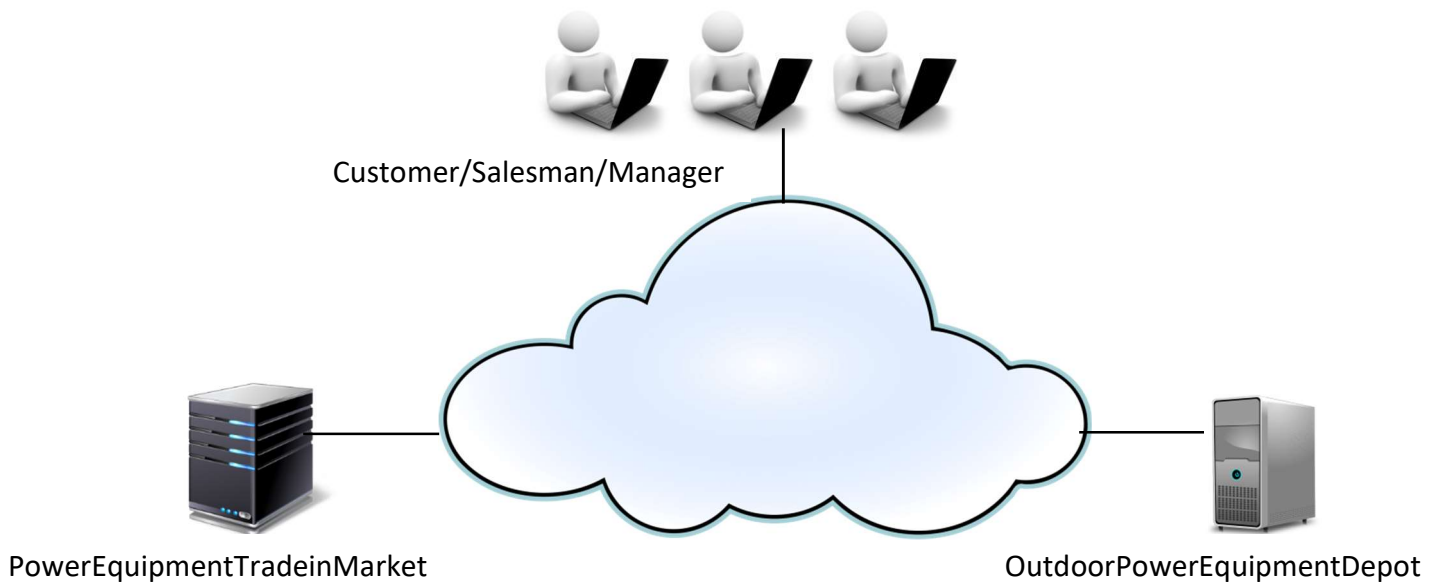
Assignment Deliverables:

Submit your assignment as a single PDF document that has the following:

1. List of actors
2. List of use cases
3. UML Use-Case Diagram
4. The Activity diagram for placing an online order for lawn mower Toro-22 model with no replacement plan for home delivery.
5. At least one of the use-cases identified should be documented in the fully dressed format.
6. All **screen-shots** for the Diagrams shall be captured and saved in the homework you are submitting
7. Create your homework using MS-Word and then generate a PDF file for it; you can download FREE PDF generator to your laptop from <http://cutepdf.com/>

Project Overview Statement:

Build an application for OutdoorPowerEquipmentDepot retailer that will give it the competitive advantage over its rivals to offer its customers maximum flexibility, speed, simplicity, and freedom to buy, trade-in, and lease outdoor power Equipment. Using the newly introduced online PowerEquipmentTradeinMarket software, the retailer and customer can determine the current market value of the trade-in equipment in a matter of seconds.



Software Product High-Level Description:



Consider the following high-level description for OutdoorPowerEquipmentDepot retailer:

- The intent is to build an application that will allow the customer to buy, trade-in, or rent equipment from the retailer either in-store or online
- The store has a StoreManager, Customers, and Salesmen
- The retailers sells, trade-in, lease new and pre-owned products
- The StoreManager can Add/Delete/Update products
- There are number of equipment Manufacturers and each offers its own models.
- Every equipment has an extended warranty plan that could be bought separately from the retailer
- The customer can choose one of the following options when buying a new equipment
 1. Buy the new equipment with no replacement
 2. Buy the new equipment with 1 year replacement for 50% fee of the equipment retail price; under this plan the customer can replace the equipment by a new one any time during the year (Equipment can be replaced only once for the customer).

3. Buy the new equipment with lifetime replacement for 65% fee of the equipment retail price; under this plan the customer can replace the equipment by another new one any time (Equipment can be replaced only once for the customer).
- The customer can trade-in equipment
 - The customer can rent equipment. However, there are a number of lease plans that the store like to offer its customers
 1. Limited duration rental (for example renting an equipment for 2 days)
 2. Single season rental (for example rent a snow blower for the entire winter season for a \$100 fee per season)
 3. All seasons rental (for example the customer gets a snow blower for winter and a lawn mower for spring/summer for \$150 fee annually)
 - The customer can place an order, check the status of an order, or cancel an order.
 - The customer can choose home-deliver or in-store pickup for the equipment rental. Equipment delivery or pick up shall be done within a reasonable amount of time after order is placed by the customer.
 - The customer can pay in cash, check, or credit card
 - Customers who are renting equipment must be at least 25 years old, have a valid ID and credit card.
 - The customer has the choice to enroll (or cancel) and become PowerMember in order to receive 5% discount for every item purchased or leased for an annual fee of \$30
 - Some of the equipment may have store special-discounts
 - Some of the equipment may have manufacturer rebates
 - The Customer or salesman can determine the current market-value of the trade-in equipment through the PowerEquipmentTradeinMarket using the serial number of the equipment, date bought, and current condition (excellent, average, poor)
 - Due to storage space limitation, the store requires to have at least 50% of its rental equipment be leased out to its customers at any time. If that threshold is violated, the store will send 25% discount promotional lease offers through email to its customers

in an attempt to reduce the number of equipment in its rental storage

- To minimize the cost of restocking new equipment at the end of every season (winter and summer mainly), the retailer email its customers about the 20% discount for the clearance event at the end of every season.