



COMP 3711  
Lab 2  
September 15, 24

**Lab Exercise**

This lab focuses on the Reserve a Vehicle Use Case of a Vehicle Rental Business Case.

1. Examine the following write up of the “Reserve a Vehicle” use case and fill in the Use Case Detail Description Document template provided. Assume the reservation is being done directly by the customer, i.e. the only actor involved. Include the alternative path when there are no vehicles available that meet the customer’s specifications. After completing the Use Case Document, construct a Use Case Diagram using Rational Rose. Submit your Use Case Document and the Rational Rose Model Diagram file to the share-in.
2. Examine the following write up of the “Reserve a Vehicle” use case and extract all of the nouns into a table. Submit the completed Class Identification Summary Table to the share-in drive. A table template is given at the end of the document below. Sort the nouns alphabetically. For each noun in the table, the table must contain three other fields:
  - a. The meaning of the noun in this particular context
  - b. Whether or not the noun should be a candidate for an analysis class
  - c. The reason why the noun is or isn’t a candidate class

Here is an example of a noun with the appropriate table entries:

Noun	Meaning	Class?	Reason
address	Location of rental branch or customer residence	No	Attribute of another class such as customer or rental branch

1. This use case begins when a customer enters our rental Website page.
2. The system presents fields to prompt the customer for the pickup and return locations of the reservation, and the pickup and return dates and times. The customer indicates his desired locations and dates. The system also presents an option for the customer to limit the vehicle search to specific categories of vehicles — e.g., compact, SUV, full-size, .... The customer may specify a search category, or categories, if desired. The default is to search for all categories of vehicles. If the customer is participating in our rental awards program, he may enter his awards identification number in a separate field on the page. If this field is filled in, the system with access the customer’s rental profile, which the system will retain to pre-populate any required information.

3. If the customer indicates he wishes to continue the reservation session, the system accesses the vehicle inventory for the pickup location, and presents a new page with all vehicles of the specified categories available at the pickup location for the selected date and time. With each vehicle the system presents a base rate, which may be discounted based on the customer's rental profile. If the customer requests detail information on a particular vehicle, the system obtains this information from the vehicle inventory and presents it to the customer.
4. If the customer selects a vehicle for rental, the system presents a new page which prompts for information identifying the customer (full name, telephone number, email address for confirmation, credit card issuer,...). If a customer profile exists, the system prepopulates all known values. Some fields are mandatory; others (such as email address) are optional. The customer provides any remaining required information. The system also presents information on protection products (damage waiver, personal accident insurance, etc.) and their daily costs, and asks the customer to accept or decline each product. The customer indicates his choices.
5. If the customer indicates "accept reservation," the system presents a page summarizing the reservation (type of vehicle, dates and times, any elected protection products and their charges, total rental cost), and presents the customer a reservation confirmation. If the system has an email address for the customer, the system sends a reservation confirmation to that address.
6. This use case ends when the reservation confirmation has been presented to the customer.

Please extend the following table to fill in as much as you need. **Highlight the rows that contain candidate classes.** Be sure to format your work so that it is easy to read and understand.

### ***Marking Guide for the Lab Exercise***

Category	Maximum	Mark
Use Case Document	2	
Use Case Diagram	1	
List of nouns	1.5	
Descriptions	1.5	
Candidate Classes	2	
Reasons	2	
Total	10	

# Use Case Detail Description Document

(Please expand the rows to fit)

<b>Use Case Name</b>		
<b>Use Case Scenario</b>		
<b>Brief Description Of Use Case</b>		
<b>Actors</b>		
<b>Related Use Cases</b>		
<b>Stakeholders</b>		
<b>Preconditions</b>		
<b>Postconditions</b>		
<b>Activities Flow</b>	<b>Actor Action</b>	<b>Systems Response</b>
<b>Exception Conditions</b>		

## Class Identification Summary Table

(Please expand the rows to fit)

[illegible]