

Assignment 10

(Use jQuery)

(Total: 100 points)

Learning Objectives

- Hands-on practice on how to use jQuery selector and methods in JavaScript program.

Complete your assignment

Download the zip file named “CS381_A10.zip” and then unzip the zip file. In the unzipped folder (by default with name “CS381_A10”), you will find two files: [jQuery_auto_shop.html](#), [jQuery_auto_shop.js](#).

Add JavaScript code in the “: [jQuery_auto_shop.js](#)” to complete the following steps (Use the sample code “online_shoppingApp_jQuery” in Lecture8.2 as reference):

Step 1 [5 points]: Add jQuery *ready()* method to hold all the code in the script.

Step 2 [30 points]: Work on drop down menu

- [5 points] Call **displayDropdown()** function to set up the drop down selection list.
- [5 points] Add jQuery code in **displayListing()** function to remove class “hide” from car list table.
- [10 points] In **displayListing()** function, add js code to complete the *for* loop and *if* statement to display car list in the web page according to users’ selection on different car types.
- [10 points] use jQuery event method *.on()* to add an event handler to the drop down list. So that when users change selection option based on car type, then only that type of cars will be displayed in the car list table in the web page.
[Hint: function **displayListing** can be called to display car list in event handler].

Step 3 [15 points]: Work on **Add** buttons.

- [10pts] Use jQuery event method *.on()* to apply event delegation technique to add event handler so that when users click **Add** buttons, the selected cars will be added to the shopping cart without any duplication, the selected cars’ information including stockid, make, model, price, quantity and type will be displayed in the shopping cart list on the web page, the number of items in the shopping cart as well as the Checkout invoice information including subtotal, tax, registration fee, and total amount will be updated.
[Hint: push selected car index to cart array, and call functions **addQty**, and **updateShoppingCart** to complete those tasks in event handler.]
- [5pts] In **updateShoppingCart** function, add jQuery code in this function to remove class "hide" from shopping cart table, and also from check out table.

Step 4 [10 points]: Work on **Delete** buttons. Use jQuery event method *.on()* method to apply event delegation technique to add event handler so that when users click **Delete** buttons, the selected cars will be removed from the shopping cart and removed from the shopping cart list in the web page as well. Meanwhile, the number of items in the shopping cart as well as the Checkout invoice information including subtotal, tax, registration fee, and total amount will be updated. [Hint:

deleteItemFromCart, and **updateShoppingCart** functions will be called to complete those tasks in event handler function].

Step 5 [10 points]: Use jQuery event method `.on()` method to apply event_delegation technique to add event handler so that when users change the ordering quantities of selected cars in the shopping list in the web page, the ordering quantities of selected cars the Checkout invoice information including subtotal, tax, registration fee, and total amount will be updated. [Hint: **updateCartItemQty**, and **updateShoppingCart** functions will be called to complete those tasks in event handler function].

Step 6 [10 points]: Complete **calculateCheckoutCost()** function, add js code calculate subtotal (the sum of selected product price * selected product quantity), tax (subtotal * taxRate), registration fee (subtotal*feeRate), and total amount (the sum of subtotal, tax, and fee), and then display all those information in check out table by using jQuery selectors and jQuery `.text()` method.

Step 7 [15 points]: Test and debug your program in web browsers to make sure that there is no syntax and logical errors, and everything works properly. If there are some errors that you cannot figure out, please write a notes in your program or leave a message in your dropbox.

After you complete this assignment, you should see the web page looks similar to the following screenshot when it is loaded to the browser window.

Choose a car type

Select a category to display ▼

Car List

Check Out

Shopping Cart

You have 0 items in your Shopping Cart

After **selecting an option in the drop down list (e.g., SUV)**, the web page will display the following info.

Choose a car type								
SUV ▼								
Car List								
Stock ID	Make	Model	Year	Type	Color	Price	Mileage	Select
1321	Porsche	Panamera	2012	SUV	Red	\$104250	10567	<button>Add</button>
1855	Toyota	Highlander	2008	SUV	Silver	\$18555	55060	<button>Add</button>
4002	Audi	R8	2012	SUV	Black	\$181370	4500	<button>Add</button>

After some Add buttons are clicked, the web page will display the following info.

Shopping Cart

You have 3 items in your Shopping Cart

Stock Id	Make	Model	Price	Quantity	Type	
1321	Porsche	Panamera	104250	<input type="text" value="2"/>	SUV	<button>Delete</button>
1855	Toyota	Highlander	18555	<input type="text" value="1"/>	SUV	<button>Delete</button>
4002	Audi	R8	181370	<input type="text" value="1"/>	SUV	<button>Delete</button>

Check Out

Subtotal:	\$408425.00
Taxes (6%):	\$24505.50
Registration fee (5%):	\$20421.25
Total due:	\$453351.75

After changing the ordering quantities in the shopping cart, the web page will update the following info.

Shopping Cart

You have 3 items in your Shopping Cart

Stock Id	Make	Model	Price	Quantity	Type	
1321	Porsche	Panamera	104250	<input type="text" value="1"/>	SUV	<button>Delete</button>
1855	Toyota	Highlander	18555	<input type="text" value="0"/>	SUV	<button>Delete</button>
4002	Audi	R8	181370	<input type="text" value="0"/>	SUV	<button>Delete</button>

Check Out

Subtotal:	\$104250.00
Taxes (6%):	\$6255.00
Registration fee (5%):	\$5212.50
Total due:	\$115717.50

After clicking the delete buttons in shopping cart, the web page will be updated as follows.

Shopping Cart

You have 1 items in your Shopping Cart

Stock Id	Make	Model	Price	Quantity	Type	
1321	Porsche	Panamera	104250	<input type="text" value="1"/>	SUV	<input type="button" value="Delete"/>

Check Out

Subtotal:	\$104250.00
Taxes (6%):	\$6255.00
Registration fee (5%):	\$5212.50
Total due:	\$115717.50

Submit your assignment [5 points]

After you complete, please **save and zip** the “CS381_A10” folder that including all the files, and then rename and submit the zipped file “**A10_yourLastNameFirstName.zip**”, to the assignment drop box named **Assignment-10**.

Note: If your computer does not have the ability to “zip” (i.e., compress or uncompress) files, download and use a free zip program such as 7-Zip (<http://www.7-zip.org/>)