

ASSIGNMENT 5

Version 21/FA

MAPPINGS:

The following course objectives and/or outcomes are measured in this assignment:

COURSE OBJECTIVES

- 5E: Use jQuery to develop common DOM scripting applications.
- 5F: Use any of the jQuery selectors, methods, and event methods for working with forms and controls in a JavaScript application.

COURSE OUTCOMES

- 1. Use JavaScript to create interactive web applications.
- 2. Use JavaScript to interact with application programming interfaces (APIs).
- 3. Write clean, consistent code.

Continues . . .



GRADING:

Task	Points	Criteria
Part 1		
1.1 Setup		
6	5	Each line of the standard opening comment is worth 1 point. Subtract 1 point per missing item.
7	5	Pass/Fail
1.2 Add jQuery		
1	10	Deduct points if the version or flavor of jQuery is incorrect.
1a	5	Pass/Fail
1.3 Test the Application		
There are no points in this section of the assignment.		
1.4 Add Validation		
2	8	1 point per each field whose string has been trimmed; 1 point for each field whose contents are replaced with trimmed string.
3	9	1 point for each error message implemented.
4	7	1 point for each error tracked.
5	4	Pass/Fail
Part 2		
2.1 Reset		
1a	8	1 point for each span cleared (6 total). If the student accomplished this in a single line of code, award 2 extra points (total of 8).
1b	4	Pass/Fail
2.2 Reset		
1	4	Pass/Fail
Total	69	

Penalties		
Deduct 50% from entire assignment for the use of the var keyword in variable declarations.		
Deduct 30% from the entire assignment if the solution does not load and/or if errors appear in the console that are not generated by explicit methods of the console object (in other words, errors that have not been troubleshot and resolved by the student prior to submission).		
Deduct 60% from the entire assignment if JavaScript is inline/embedded instead of external.		
Deduct a maximum of 25% for failure to use jQuery methods when specified explicitly in assignment writeup. This is at the instructor's discretion and may be less than 25% if minor errors/oversight on the student's part.		
Deduct a maximum of 10% for code that does not comply with the course <i>Style Guide</i> and/or which is messy/unorganized, uncommented, or missing semicolons.		

Continues...



TASK:

MODIFY THE APPLICATION

Part 1

1.1 SETUP

1. Review the course *JavaScript Style Guide* before starting this assignment. Part of the assignment will be graded on your adherence to the *Style Guide*.
2. Download **assignment05_starter.zip** from the *Module 5: Assignment* drop box in Canvas. The file is located beneath the heading *Assignment Resources*.
3. Extract **assignment05_starter.zip**. The file contains two files and one subfolder:
 - a. a single HTML document named *index.html*.
 - b. a single JavaScript file named *script.js*.
 - c. a subfolder named *css*, which contains one file
 - i. a single Stylesheet named *style.css*
4. **script.js** has already been linked to **index.html** for you.
5. Open **script.js**.
6. Add the **Standard Opening Comment** to the top of the script (**5 points**).
7. Add "use strict" beneath the **Standard Opening Comment**. (**5 points**).

1.2 ADD JQUERY

1. Open **index.html**
2. Add a reference to jQuery core **3.4.1** minified. (**10 points**).
 - a. Make sure to include *SRI* attributes and appropriate information. (**5 points**).

Continues . . .



1.3 TEST THE APPLICATION

1. Double-click **index.html** to launch it in your browser; examine the application's behavior.
 - a. The page will open, and the content shown in Figure 1 should appear.

Food Service Survey

Thank you for eating at our establishment! Please fill out this survey to help us improve our service!

Please Enter Your First Name

Please Enter Your Last Name

Please enter your MCC Student Email Address

Please Input Your Age

Please Select Your Meal

- ☐ Breakfast
- ☐ Lunch
- ☐ Dinner

Please rate your meal

- ☐ ☆☆☆
- ☐ ★☆☆
- ☐ ★★☆☆
- ☐ ★★★☆
- ☐ ★★★★

Figure 1: Starter version of index.html

Continues...

- b. Click **Submit meh!** The browser will submit the form and redirect you to <http://grosas.faculty.mccinfo.net/courses/info2124/v21fa/assignment05/processform.php> - this is shown in Figure 2.

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Whoops!

You successfully submitted your form, but it looks like the following errors exist:

- First name is missing or blank
- Last name is missing or blank
- Email address is missing or blank
- Age is missing or blank
- Meal selection is missing or blank
- Meal option selection is missing or blank
- Meal rating is missing or blank

Go back and look at your code - for some odd reason, your solution is allowing an incomplete form to get submitted! Make sure your JavaScript is checking that every field in the form has a value (e.g., every field's value is not equal to an empty string, or "" or "").

Click your browser's back button to return to your form.

Figure 2

Continues . . .



1.4 ADD VALIDATION

1. Open **script.js**
2. Modify the existing code with within the body of the `click()` event handler so that each text field value is trimmed of leading and trailing spaces. Replace each text field's value with the trimmed version of the string. **(8 points)**
3. Within the body of the `click()` event handler, flesh out the body of each `if` and `if else` statement so that an error message is written to the `` following the relevant control. **This should be completed using jQuery methods. (9 points)**
 - a. For example, the `if` statement in Figure 3 (below) should write an error message in the `` following the `<input>` with the id value of `firstName`.

```
if(firstName == "") {  
  
}
```

Figure 3

4. In the event a required piece of information is missing, make sure to set `error` equal to `true`. This will track whether an error has occurred. **(7 points)**
5. In the event an error has occurred, invoke the error object's `preventDefault()` method. **(4 points)**.

Continues . . .



6. Test your solution. Figure 4 shows an example of expected behavior once 1.2 step 2 has been completed and the user attempts to submit the form with all fields empty.

Food Service Survey

Thank you for eating at our establishment! Please fill out this survey to help us improve our service!

Please Enter Your First Name First name is required!

Please Enter Your Last Name Last name is required!

Please enter your MCC Student Email Address Email address is required!

Please Input Your Age Age is required!

Please Select Your Meal

- ☐ Breakfast
☐ Lunch
☐ Dinner

Meal selection is required!

Please rate your meal

- ☐ ★★★★★
☐ ★★★★★
☐ ★★★★★
☐ ★★★★★
☐ ★★★★★

Meal rating is required!

Figure 4

7. Fill out all form fields. Then, resubmit your form. The form should submit if all fields are completed. Figure 5 shows an example of what you should see when the form is submitted (your information will differ). You should also receive a copy of this form at your MCC email address (check your SPAM/Junk folder).

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Congratulations!

You successfully submitted your form! The following information was submitted:

Field	Value
First Name:	Bob
Last Name:	Johnson
Email Address:	grosas@mccnebedu
Age:	41
Meal Selection:	lunch
Meal Option:	lunch
Meal Rating:	2 stars (out of 4 stars)

Figure 5

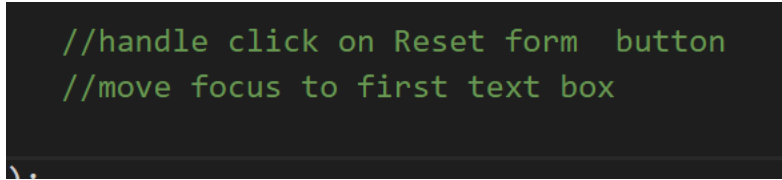
Continues . . .



Part 2

2.1: RESET

Find the comment illustrated in Figure 6.



```
//handle click on Reset form button  
//move focus to first text box
```

Figure 6

1. Add an event handler to listen for the jQuery `click()` event on the reset button. In the `click()` event handler,
 - a. Clear all error messages from all `` elements on the form.
 - b. Move the focus to the first text box on the form.

2.2 LOAD

1. When the document loads, move the focus to the first text box on the form.

SUBMISSION

When complete, create a single **ZIP** file containing your solution for Parts 1 and 2 of this assignment. The ZIP file should contain all files included in the original starter code or added as part of this assignment.

Attach and upload the ZIP file to Assignment 5 and submit.

NOTE: Canvas is configured to only accept ZIP files, DOC files, and DOCX files; it will not accept ZIPx, 7ZIP, pZip, RAR, etc.

End Assignment.

