

Lab 5 - APIs and Form Enhancement

4/14/2024

100/100 Points

Attempt 1



Review Feedback

4/14/2024

Attempt 1 Score:

100/100



Add Comment

Anonymous Grading: no

1 Attempt Allowed

4/21/2024

v Details

APIs and Form Enhancement

This lab demonstrates material from chapters 9 and 13 of the textbook.

After experiencing the power of jQuery, you have the opportunity to explore APIs and Form Enhancement to create professional interactive web pages.

Read through the [jQuery UI Library Instructions \(https://iu.instructure.com/courses/2214520/pages/jquery-ui-library-instructions\)](https://iu.instructure.com/courses/2214520/pages/jquery-ui-library-instructions) to get a good idea of the options available for this API.

Activities

For this lab, you will:

1. Create a new HTML file separate from previous labs. This allows you to keep all previous labs exactly as they were when you turned them in. Your new HTML page should contain as many page elements as you need to produce the required output.
2. Your page must use the same theme as your previous labs. Please describe your theme in an HTML comment. Each requirement must reflect your chosen theme.
3. Create a form that is enhanced using the jQuery UI Library.
Include the Google-hosted jQuery library before your JS file in your HTML.



```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>
```

Use a predefined theme or create your own. Your form will contain jQuery UI widgets and all fields will be styled and enhanced using the API.

4. Use either an **Accordion Widget** [\(https://api.jqueryui.com/accordion/\)](https://api.jqueryui.com/accordion/) or a **Tabs Widget** [\(https://api.jqueryui.com/tabs/\)](https://api.jqueryui.com/tabs/) as a larger navigation scheme. It can be used for factual information or for form elements.
5. Use at least one of the following jQuery UI Widgets.
 - **Slider Widget** [\(https://api.jqueryui.com/slider/\)](https://api.jqueryui.com/slider/)
 - **Spinner Widget** [\(https://api.jqueryui.com/spinner/\)](https://api.jqueryui.com/spinner/)
 - **Datepicker Widget** [\(https://api.jqueryui.com/datepicker/\)](https://api.jqueryui.com/datepicker/)
 - **Autocomplete Widget** [\(https://api.jqueryui.com/autocomplete/\)](https://api.jqueryui.com/autocomplete/) with data that is relevant to your themeDocumentation for each widget is available at <https://api.jqueryui.com/> [\(https://api.jqueryui.com/\)](https://api.jqueryui.com/).
6. Include at least three of the following input fields:
 - password field `<input type="password">`
 - checkboxes with multiple selections

- radio buttons with at least two mutually exclusive selections
 - telephone field `<input type="tel">`
 - email field `<input type="email">`
 - text field `<input type="text">`
7. In your form, include the following:
- `<form method="get">` Do not use `method="post"`.
 - submit button
 - reset button
8. Create an output area that is separate from the form on your page. This area should be blank until the user submits the form.
9. When the user submits the form, all form data should echo to the output area with labels. For example:
- Name: Fred Flintstone
- Address: 222 Rocky Way
- Email: fred.flintstone@gmail.com
- Rocks (checkboxes) granite pumice slate shale
10. Data can be extracted from the form using JavaScript `value`, `checked` or `selected` properties as appropriate or jQuery `.val()` method, `:checked` filter or `:selected` filter. See Chapter 7 of the textbook for a list of jQuery form filters.
11. Use jQuery to validate at least one input field with a regular expression. Also use the placeholder attribute in the same field to show an example of valid input for the user.
12. Use at least one form method listed in Chapter 13 of the text to add functionality to your form [`.focus()` `.blur()` `.select()` `.click()`].
13. Use the jQuery `.on()` method with at least one form event listed in Chapter 13 of the text to add functionality to your form [`blur` `focus` `change` `input` `keydown` `keypress`].
14. Test your form in three different browsers. Leave a comment in the HTML describing the results of the test.

Notes:

- All **HTML should validate**  (<https://validator.w3.org/>).
- All **CSS should validate**  (<https://jigsaw.w3.org/css-validator/>).
- Use **The JS Console** (<https://iu.instructure.com/courses/2214520/pages/the-js-console>) to check for errors in your code. **If your page crashes, there will be a 50% penalty.**
- Each file must contain a header block comment.
- All CSS and JavaScript must be stored in external files.
- All form output must be labelled clearly in the output area.
- All requirements listed in the rubric below **must be labelled clearly with comments** in the JavaScript file.
- All output requirements must produce visible results on the page.

✓ View Rubric

Select Grader

Sravani Muddana (TA)



Lab 5 - APIs & Form Enhancement

Criteria	Ratings	Pts
Requirements reflect the chosen theme.		10 / 10 pts

Lab 5 - APIs & Form Enhancement

Criteria	Ratings	Pts
view longer description		
The page contains a form that is enhanced using the jQuery UI library.		5 / 5 pts
The page contains either an Accordion Widget or a Tabs Widget.		10 / 10 pts
view longer description		
The form contains at least one jQuery UI input widget.		5 / 5 pts
view longer description		
The form contains at least three form fields for input.		10 / 10 pts
view longer description		
The form contains a reset button that resets all fields without reloading the page.		2 / 2 pts
view longer description		
The form contains a submit button that sends user input to the output area.		2 / 2 pts
view longer description		
The page contains a labelled output area.		2 / 2 pts
view longer description		
Upon form submission, all form data should accurately echo to the output area with labels for each field.		10 / 10 pts
view longer description		
All required form field values are extracted from the form and stored into variables.		8 / 8 pts

Lab 5 - APIs & Form Enhancement

Criteria	Ratings	Pts
A regular expression is used for validation of one form field. The placeholder attribute is used to show an example of valid input to the user.		5 / 5 pts
At least one form method is used. view longer description		5 / 5 pts
At least one form event is used. view longer description		5 / 5 pts
Page has been tested in three different browsers. HTML contains a comment that tells the results of the test.		2 / 2 pts
CSS is stored in an external file.		2 / 2 pts
JavaScript is stored in an external file.		2 / 2 pts
Each requirement is labelled with comments. view longer description		10 / 10 pts
HTML validates at https://validator.w3.org/		2 / 2 pts
All student files contain header block comments. view longer description		3 / 3 pts
		Total Points: 100

<https://cs.iupui.edu/~parmsing/n341/labfive/labfive.html>



(<https://iu.instructure.com/courses/2214520/modules/items/31320396>)



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