

Lab 13: HTML as data *view*, Javascript as data *model*.

How to work on your lab task - how to turn in your program:

Turn in your lab 13 task as "20140417-18 Lab 13 task" in the I211 Oncourse site -> Assignments thus:

- For today's lab, *every* student needs to submit the **Lab-Team-Feedback-Form.doc** file on Oncourse, on their own. In order to receive any credit for today's lab -- even if you choose not to fill any information in it -- you need to turn in this form for the Lab 13 task Assignment on Oncourse before your lab time is over.
 - You will work on this task with your lab team, but only *one* team member needs to turn in the HTML+Javascript solution code file *while in lab*, to receive full credit for the work done.
 - For today's lab, the person responsible to turn in the HTML+Javascript solution code is the *third* person listed in your lab team, as from the `teams-lab...` files on Oncourse. If the third person in your team is absent from lab, the next person on the list (e.g. the *fourth* person or the *first* person) is responsible to turn in the Javascript solution code, etc.
 - Upload your HTML+Javascript solution file to Oncourse under I211 Assignments->"20140417-18 Lab 13 task".
 - Include the following information as a `<!-- comment -->` at the top of the file you submit:

```
<!-- I211 Spring 2014 - Lab 13 -->
<!-- your name (First, Last) -->
<!-- your IU email address -->
<!-- your I211 lab team number -->
<!-- the names of all your I211 team members -->
```
 - Kindly make sure that your Javascript code and HTML page work correctly in a web browser before submitting.
 - To receive any credit for the work done, the Javascript source code file has to be turned in *at lab time and while in lab*. (including the information about yourself and your student team, as listed above. Submissions will lose 50% of the assigned grade if this information is missing from the submitted HTML file)
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Tasks

1. Start with the HTML file `I211-lab-13-starting-text.html` that is available on Oncourse under Resources->Labs.
2. (3 points) Complete the following task, similar to the "Group Task 2" described in Lecture 23 notes/slides at page 7:
 1. modify the `<table>` element to always display 30x30 pixel cells
 2. modify the `run()` function to display in each cell of the table the value $(i*j)+k$, where:
 - k = the total number of clicks on the "Add 1" button, plus twice the total number of clicks on the "Add 2" button
 - i and j = coordinates of the table cellhint: use a Javascript *array* to store each *value you compute* in one of the array elements; then update all the HTML *table cells* to show the values from the Javascript *array elements*.
 3. the HTML label "Clicks" needs to show the total number of clicks on *any* of the HTML buttons.
3. (3 points) In the style of the example comments in the file `I211-lab-13-starting-text.html` for the `run()` function the starting code, comment every individual line of code in your Javascript script:
 1. including any already (as yet uncommented) provided code that you may use, e.g. if you use the `MyArray2D()` function, or if you use the `myArray()` variable, you need to explain how and why you use them, in comments above each line.
 2. explain each Javascript reference to HTML elements, i.e.
 - whether any Javascript code outputs *to* HTML elements
 - whether any Javascript code receives input *from* HTML elements.
 3. (please see how the demo page works in lab)
4. Please see Lecture 22 and 23 notes for details.
5. Turn in your completed `I211-lab-13-starting-text.html` file and your **Lab-Team-Feedback-Form.doc** to Oncourse before you leave the lab.