

:PROJECT FOUR

This outline is a work-in-progress, and may change in the future – medatech@medasf.org

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ONLINE TOOL

Everyday, people type information into computers so that the computer can do the work instead of themselves, this is how computers have become useful. With this project, you will be creating a simple online form that calculates something specific that can be useful for a person. You will be using HTML and CSS to build the interface and jQuery to take in the data from the forms, calculate using JavaScript, and use jQuery again to put the results back on the web page. While not required for this project, it is highly recommended you plan out your website structure, layout, and even logic, to make it easier when it is time to code. **Expect to dedicate about *four hours* to complete this project!**

ONLINE TOOL STEPS

You will be creating a web page that calculates something specific:

A) Think of a time when you thought you could have used an online form to calculate something specific that would have made your life easier. Some simple examples are below:

- ➔ Figure out the actual fuel usage of your car.
- ➔ Calculate BMI (Body Mass Index) of a person.
- ➔ Convert one currency to another.

If you feel confident in your coding and math skills, you can take on more complex tools. Here are some examples:

- ➔ Create a form to see how much you are saving compared to spending.
- ➔ Count the amount of words, characters, and paragraphs in a piece of text.
- ➔ Calculate total sunlight per day based on date and location.

The goal here though is not to pick one of these examples, instead is to think about something you can create that you, your family or friends, or even community can use that you understand. This is not a project to create a calculator app like you have on

your phone. Instead you want to have a form that you may use often or occasionally. This tool could be related to your hobby or business, but ultimately it should be “quick and easy”.

- B) Take a look at your Portfolio Planning Documents, and create some of those documents for this project, not all of it is required as this is a simple one web page project. The pass or no pass grade will not focus on your planning but instead on your code and idea.
- C) Break the logic of your tool into three parts: What does the tool need or what data does it need to work, or how many forms does it need? What does the tool do with the data it receives? And how does it display the results to the user? Write down notes on this as it will help guide you through writing the logic of your JavaScript.
- D) Start coding your web page using HTML and CSS, write code comments to remind you where data is being received and displayed.
- E) Once you have your web page with form elements on it, test your jQuery by trying to get data from the web page and storing it in JavaScript Variables. Please take a look at the jQuery .val() method on how to read and write information on a web page.
- F) Once you have data properly being stored in JavaScript, start writing out the math operations to get results based on this data. Use console.log() to understand how your data is traveling through your code.
- G) Finally update your web page so a user understands how to use your online tool, provide instructions and labels for your forms. Make sure that the resulting calculations are correct for what you are trying to calculate.
- H) **Test your code using the W3 HTML Validator and W3 CSS Validator. Fix all JavaScript errors.** Commit and push your final files and write in the commit message “**Online Tool 1.0**”.

RUBRIC

MEDA Web Design Projects are graded with a Pass or No Pass. In order to get a Pass for the Fictional Data Web Page project, you need to meet the following requirements by the deadline:

- ✓ Have a web page that has a form and instructions on how to use the online tool.

- ✓ The online tool should be able to calculate properly based on the values provided by the user.
- ✓ There are no HTML and CSS validation errors and no JavaScript errors in the JavaScript Console.

PROJECT SUBMISSION

This project has been made optional, and as such, it will not be graded and there will be no due date for this project.

NOTES
