**Calculating Order Form Items with JavaScript**

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This week, we were tasked with calculating selected items on a web form. I will use both for and if statements to accomplish this task. The *for* statement loops through code repeatedly as long as a conditional expression is true (Vodnic & Gosselin, 2015). In this project, the function to calculate total uses checkboxes, so the *for* statement loops through the list of checked items to display the total. The *if* statements are used to decide whether to execute a specific code if the conditional expression returns true (Vodnic & Gosselin, 2015). When the Submit button is clicked, the program must determine compatibility with the browser. I wrote code to accommodate older browser versions. This essay will outline the programming process, demonstrate project completion with screenshots, and discuss my experience and challenges.

**The Process**

Using data files from the HandsOnProject 3-1 folder, the project began with the simple task of reviewing the HTML code and adding authoring information at the top. At the bottom of the code before the ending body tag, I added the <script> and </script> tags to begin this section. Using comments to guide through the code, I created the function for calcTotal, determined global variables for items and itemTotal by using the getElementsByTagName method, and wrote out the first *for* statement that would loop through the checked items during the calculation. Before the end of the function, I wrote code to display the results on the web browser with the getElementById method to access the total and string together the result with a result response. Finally, we added a decision-making statement with if/else to create an event listener that works on older Internet Explorer browser versions. The figures below demonstrate the code and demonstration.

**Figure 1**

JavaScript Code with Comments

Text

Description automatically generated

*Note:* This screenshot demonstrates the function to calculate the total of selected items using for and if statements. There is also a backward-compatible event listener to accommodate older IE versions.

**Figure 2**

Live Script Demonstration

Graphical user interface, text

Description automatically generated

**Experience and Challenges**

There were no significant challenges to this project. However, if anyone were to copy and paste the code from the learning management system, they may get errors due to a couple of typos in the instructions. In step 6, the system reads “submitBotton” instead of “submitButton” and “attachEven” instead of “attachEvent.” In the future, I would like to learn how to make this form more intuitive with an automatic calculation. This would require some code adjustments and utilize a *return* statement (Prasanth, M.J., n.d.). Overall, this project served as a good starting point for creating interactive web forms.

**References**

Prasanth, M. J. (n.d.). *Doing real-time calculations in a form using JavaScript.* JavaScript Coder. <https://www.javascript-coder.com/javascript-form/javascript-calculator-script/>

Vodnik, S., & Gosselin, D. (2015). *JavaScript: The web warrior series.* (6th ed.). Cengage