



## LABTrack Tech Note 08-015

### Defining Forms that Perform Calculations

Applicable to all versions of LABTrack.

LABTrack forms and templates can perform calculations, validate entered values and even apply rules and logic. This technical note provides two examples that show how to create forms that perform calculations. The steps described below require administrator rights in LABTrack.

LABTrack stores all notebook pages in HTML format. HTML can incorporate form elements (such as text input boxes, lists, check boxes etc.) which themselves can be defined to include Javascript. The combination of these HTML form elements and Javascript gives the administrator the ability to create forms that perform many advanced functions.

The following two examples show how HTML form elements and Javascript can be defined to perform calculations.

Examples:

#### 1. Simple Addition Example

The following example shows how two numbers can be added together. The two numeric values are prompted for and stored in the text boxes named Text1 and Text 2.

The OnChange event for these text boxes updates the third text box (Text3) with the entered value. Text3, let's call it the Agregator field, is used to build and store the formula that will be evaluated when the user clicks the Calculate button. The result of this evaluation is displayed in Text4.

Note: Text3 can be hidden from the user by adding the Hidden=True setting as shown in the next example. Using OnChange, Eval and other math functions you can define more complicated calculations.

To try this using this example form - Copy the code below, logon to LABTrack and browse to an unlocked empty notebook page, switch to HTML mode and paste in the code. Switch to Preview mode and enter numbers in the first two boxes. Then click on the Calculate Button.



## **Saving Templates**

Forms, like the examples provided in this technical note, are best saved as Non-Editable templates. After creating the form, click on the Save as Template button, enter a name for the template and make sure that the Editable check box is Not Checked. When the template is loaded in the future it will force the editor into Preview Mode automatically and the users will only be able to enter values and click on the Calculate button. They will not be able to modify the format of the page, the HTML or Javascript.

## **Advanced Javascript Functions**

There are many functions that are supported for Math, Date, String and Boolean manipulations in Javascript. We recommend browsing to <http://www.w3schools.com/jsref/default.asp> for a complete listing of these standard functions.