Intro to Programming

This lab will introduce you to programming. It is a good idea to review chapter 17 and the in-class examples before coming to lab. I’ve provided an HTML template to hold your program called fencing_pricing.html.

This program will be used in Project 2. If you don’t get it working completely, there will be a version made available to you to use in your project.

Goal:

Create a program that will calculate the cost with tax of fencing a rectangular yard. The cost of the fencing will depend on the amount of fencing required (the perimeter of the yard), and the type of fencing used. Gates can also be purchased for an additional cost.

Pricing Scheme:

- Wooden fencing costs $35 per foot
- Chainlink fencing costs $25 per foot
- Gates cost $165 each and up to 3 can be purchased
- Tax rate is 9%

Note: The perimeter of a rectangle is twice the length plus twice the width.

Steps:

1. Calculate the cost of fencing a 30 by 40 foot fence using different options. Remember to include the tax. Take note of each step you use to calculate these costs, you will need to use them in your program. Check your calculations with your TA before you start writing code.

2. Write an algorithm for calculating the fencing costs.

3. Begin writing your program in the fence_pricing.html file by declaring different variables you might need, such as, length, width, fencing, price, etc.

4. Use conditional statements to test for the type of fencing, which will affect the price.

5. Use an alert(price); line at the end of your code to display the end price of the fencing to the user.

6. Test your code with the 30 by 40 foot fences used in step 1. Change the values that your variables are initialized to in order to test multiple cases. Make sure your program matches your hand calculations.

7. After your code works properly, publish your web page by saving a copy in your public_html folder and turn in a working URL to Canvas.