

UNIT 5: JAVASCRIPT

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What Work Was Done:

JavaScript is one of the most complicated sections of the website. This is basically the back-end portion of the entire website. There are many features on the website, and they mainly calculate numbers. The first index.HTML does not have any JavaScript now because there's no functionality.

The budget site uses objects and classes to create a monthly expense sheet and to produce a final cashflow amount. It takes inputs from the user taking information like Projected Appreciation, Closing costs and monthly revenues/expenses. The Rental Revenue, Property Tax, Insurance, and Repairs and Utilities become attributes to the Class RealEstate. Every saved Month will append to a list of objects. This list will then go through a for loop and will total the revenue and expenses for the year. The Capital Gain after 5 years will just use the input numbers and a simple calculation. The '.HTML' method is used to change the HTML and display the numbers

For Mortgage is similar but instead of objects I wanted to exercise the JS ability to change CSS using buttons. In this case we can see a comparative of between 1 or 2 property purchases. When you click '2 Properties' another set of inputs are displayed and each properties values are used to make 2 separate objects. With these numbers we can calculate the Mortgage and have two numbers to output from.

The Travel Cost will be discussed in Unit 7.

Relating to Personas:

Going back to our personas I made sure that the math was correct, and the site was versatile with different options. Since we are considering a potential customer to be an investor, home buyer or real estate agent, each person will use the site different. Therefore, it was important to have options where the user can change the site and options to cater to their own needs. Whether they want a comparative or submit 1 month of cashflow or 8 months all of them are possible.

What Went Well and What Didn't:

I understood for-loops and data structures when I had an introduction to Python course at my university however this is still more complicated than anything I've created in the past. Working with HTML was very different and was fun to learn about. The most challenging part of this was to create a dynamic page that changes the CSS from a click. This was tricky and took me many hours to finally figure out. In addition, creating a list of objects was very cool. Initially any object I made in Python was done manually on the back end but to append objects to a list as the user adds with a button was tricky to do. I did eventually figure it out and both a great learning asset for my future projects.

Mapping Activities to Learning Outcomes:

Learning outcome: Apply a structured approach to identifying needs, interests, and functionality of a website. Design dynamic websites that meet specified needs and interests. Write well-structured, easily maintained JavaScript code following accepted good practice. Write JavaScript code that works in all major browsers. Effectively debug JavaScript code, making use of good practice and debugging tools.

- **Evidence:** I had many functionalities and use of objects, classes, inputs, css manipulation and etc. it works on all browsers as well, and made use of neat code and debugging tools like Console Log on the webpage.
- **Self-Grade:** A