CS 1632 - DELIVERABLE 3: Automated System Testing of a Web Application

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<https://github.com/Derguns/D3>

I think one of the hardest issues when writing tests for this project was deciding which parts of the page were best suited to test. If I were to copy the entire HTML of the whole page as validation, that would not give me a good enough security that the actual values on the page were correct, but if I stayed with just one text element then the same could be said. To combat this, for most of my validation tests I ensured that certain key elements of a page were present, such as in error pages we had an H1 that displayed error with text below it, although I was unable to find a way to get Katalon to properly verify the exact text in the box as what was supposed to be present per requirements. This was the hardest to do when validating that the actual truth table was correct- so I looked at reference truth tables and compared the elements of a 2^2 table and a 2^3 table with those values for all results in the AND, OR, NAND, and NOR, however, verifying further up with a larger table using Katalon would start to rely more on larger blocks of verification and make it harder for me to self-verify within the test itself, meaning that the tests may be lacking in scope.

Another issue was initially coming up with what should be tested, as there are many minute features on a webpage that could be verified but at the same time, can be just as insignificant. This was the case with the text within my return back to the home buttons- as the requirements stated that the text didn’t matter, I instead checked that the URL was present instead of relying on verifying the element itself was present. This allowed for flexibility within the tests so that you could change a value without having to write a new test, but also some uncertainty as to if it was placed in the proper location.

