CS 1632 - DELIVERABLE 3:

Automated System Testing of a Web Application

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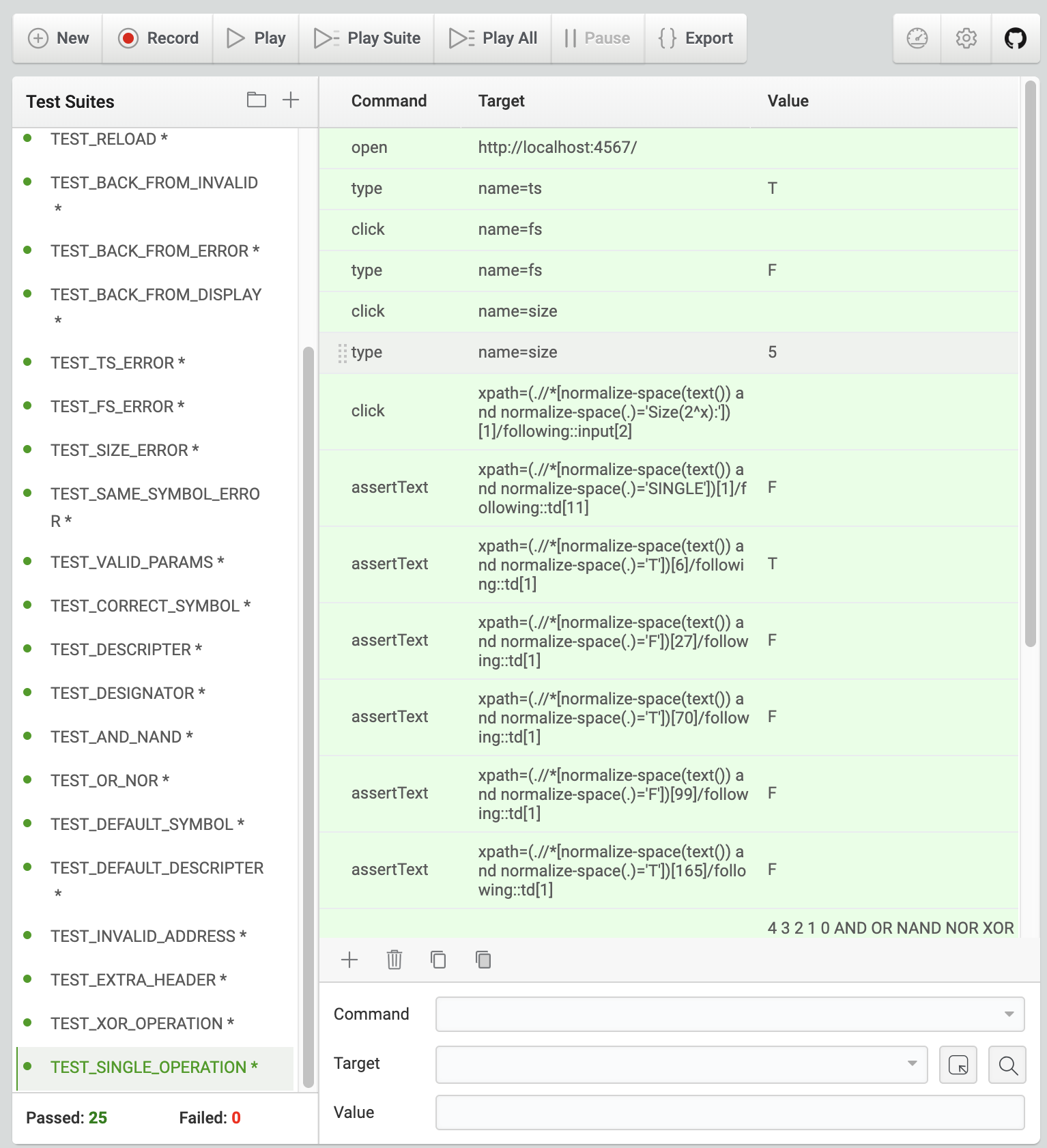
https://github.com/jayzhou125/D3

with Extra Credit 1

**Writeup:**

For D3, the most challenging part for me is to print the table using erb. First of all, I never learned any html before. So I have to learn the syntax and functions at first. What I did is I looked up some quick tutorials online. Then I tried out some things that I learned using the sample that was on the 1632 repo. Especially the table part.   
 I think for beginners like me. The code base of a erb seems way scarier than what it actual does. Once learned the syntax and everything, things becoming natural, and it is fairly easy. Another part that I struggle the most is the interaction between the ruby driver and the actual erb. Things like how pass in a value into the erb and how to get a value from the erb into the ruby file. I spend quite a lot time figuring out the actual means to do so. Once that part is done, the main program itself is not hard to implement, except I spend some time thinking about how to implement the table. I thought about creating a table class and several other solutions like split the table into a static part and a calculation part. But most of them seems complicate the problem. So, in the end, I just implement the table as a 2-D array. Which is a fairly simpler way to implement. For the decision part, I think is quite useful in future references.

S**creen shots:**

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**Traceability table:**

|  |  |
| --- | --- |
| **REQUIREMENTS** | **TEST\_CASES** |
| MAIN\_PAGE | TEST\_TS\_LABEL  TEST\_FS\_LABEL  TEST\_SIZE\_LABEL  TEST\_TEXTBOX  TEST\_BUTTON |
| BACK\_TO\_MAIN | TEST\_RELOAD  TEST\_BACK\_FROM\_INVALID  TEST\_BACK\_FROM\_ERROR  TEST\_BACK\_FROM\_DISPLAY |
| ERROR\_PAGE | TEST\_TS\_INVALID  TEST\_FS\_INVALID  TEST\_SIZE\_INVALID  TEST\_SAME\_SYMBOL\_ERROR |
| VALID\_PARAMS | TEST\_VALID\_PARAMS |
| DISPLAY\_TABLE | TEST\_CORRECT\_SYMBOL  TEST\_DESCRIPTER  TEST\_DESIGNATOR |
| OPERATION\_CORRECTNESS | TEST\_AND\_NAND  TEST\_OR\_NOR |
| DEFAULT\_TABLE | TEST\_DEFAULT\_SYMBOL  TEST\_DEFAULT\_DESCRIPTER |
| INVALID\_ADDRESS | TEST\_INVALID\_ADDRESS |
| EXTRA\_OPRERATION | TEST\_EXTRA\_HEADER  TEST\_XOR\_OPERATION  TEST\_SINGLE\_OPERATION |