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

Gerard Mcglone

Github: jmcglone75

https://github.com/jmcglone75/D3

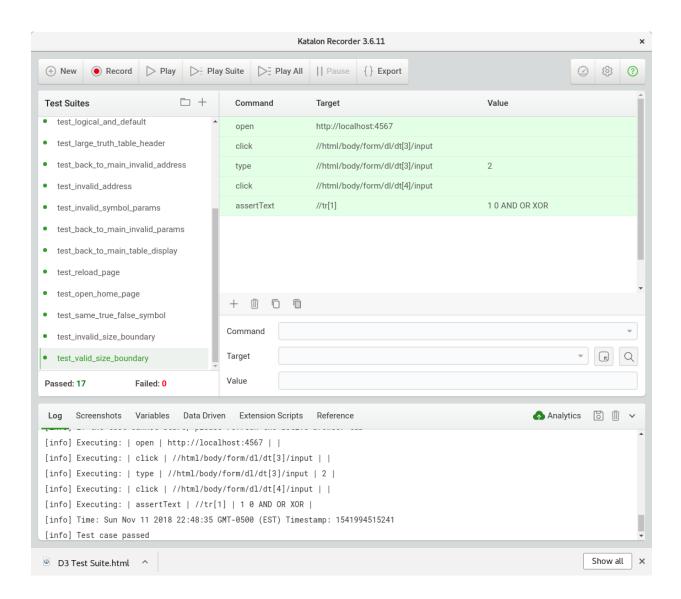
## Issues and Concerns:

When first starting this project, I was faced with the issue of figuring out how to properly link up the clicking of the 'Show truth table' button with the various associated views that can appear based on the format of the parameters. I determined that the best way to go about doing this was to set the action of the button to '/display', and then to return the error/invalid page if need be (otherwise, it shall proceed into the typical view that displays the table).

One issue that I initially faced with regards to the parameters was when they were empty in the specified URL (<a href="http://localhost:4567/display?true=&false=&size=">http://localhost:4567/display?true=&false=&size=</a>). I didn't account for this case when I was checking parameters, and typing in that URL was resulting in an unwanted sinatra error page. To fix this, I simply handled this case as I do the default case.

Another issue that I faced was figuring out how to properly test the 'existence' and format of the home page. I knew that I would need to open the page, but I didn't initially have a good idea of what I would need to assert in order to claim the validity of my implementation. I then realized that asserting the text of the labels and the attributes of the types of the inputs would suffice. To this end, we can claim to know that our home page does meet the requirements specified.

## Screenshot:



## Traceability Matrix:

```
Req 1: test_open_home_page
Req 2: test_reload_page, test_back_to_main_table_display,

test_back_to_main_invalid_params,

test_back_to_main_invalid_address
Req 3: test_same_true_false_symbol,

test_invalid_size_boundary, test_invalid_symbol_params,

test_invalid_page
Req 4: test_valid_size_boundary
Req 5: test_large_truth_table_header
Req 6: test_logical_and_default, test_logical_or_default,

test_logical_xor_default, test_logical_ops_smallest
Req 7: test_default_truth_table
Req 8: test_invalid_address
```