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<https://github.com/cef39/CS1632Deliverable3>

CS 1632 – DELIVERABLE 3: Unit Testing

Some complications arose when attempting to test the text for a requirement. For example, the first requirement states that the homepage should display “Welcome, friend, to a land of pure calculation”. This was difficult to test because that text did appear on the homepage, but the text was split over two lines. Other issues were trying to find an identifier that would return the exact element we wanted. For example, the dangers of grabbing an element by class or tag could possibly result in a different object with the same class or tag.

FibTest\_2 fails because the requirements state that the Fibonacci page should produce a results for values 1 – 100, but Fib(100) results in the incorrect result.

FibTest\_6 fails because ‘a’ is entered as an input and “Fibonacci of a is 1!” is expected as a result, however an internal server error appears.

FibTest\_7 fails because entering nothing as an input should result with “Fibonacci of null is 1!”, but an internal server error appears instead.

HelloTest\_4 fails because “/Jazzy#123” is entered as the trailing value, so “Hello CS1632, from Jazzy#123!” is expected, but “Hello CS1632, from Jazzy” is returned instead.

HelloTest\_5 fails because “/Jazzy/123” is entered as the trailing value, so “Hello CS1632, from Jazzy/123!” is expected, but “page not found” is returned instead. Should redirect instead of displaying error to user.

FactTest\_5 fails because ‘a’ is entered as an input and “Fibonacci of a is 1!” is expected as a result, however an internal server error appears.

FactTest\_6 fails because entering nothing as an input should result with “Factorial of null is 1!”, but an internal server error appears instead.

# DEFECTS

Summary: Fibonacci of 100 incorrect

Description: When entering 100 as the value for Fibonacci, the result isn’t correct

Reproduction Steps: Go to <https://cs1632ex.herokuapp.com/fib>. Enter 100 into the text box and hit Submit. Observe the result.

Expected Behavior: Result is "Fibonacci of 100 is 354224848179261915075!"

Observed Behavior: Result is “Fibonacci of 100 is 1!”

Summary: Fibonacci of ‘a’ is incorrect

Description: When entering ‘a’ as the value for the Fibonacci, the result isn’t correct.

Reproduction Steps: Go to <https://cs1632ex.herokuapp.com/fib>. Enter ‘a’ into the text box and hit Submit. Observe the result.

Expected Behavior: Result is “Fibonacci of a is 1!”

Observed Behavior: Internal server error

Summary: Fibonacci of “” is incorrect

Description: When entering “” as the value for Fibonacci, the result isn’t correct

Reproduction Steps: Go to <https://cs1632ex.herokuapp.com/fib>. Enter “” into the text box and hit Submit. Observe the result.

Expected Behavior: Result is “Fibonacci of null is 1!”

Observed Behavior: Internal server error

Summary: hello page not displaying “/Jazzy#123” correctly

Description: When using “/Jazzy#123” as the trailing url for the Hello page, the result is not correct

Reproduction Steps: Go to [https://cs1632ex.herokuapp.com/hello/Jazzy#123](https://cs1632ex.herokuapp.com/hello/Jazzy" \l "123). Observe the message displayed.

Expected Behavior: Message displayed should be “Hello CS1632, from Jazzy#123”

Observed Behavior: Message displayed is “ Hello CS1632, from Jazzy”

FactTest\_6 fails because entering nothing as an input should result with “Factorial of null is 1!”, but an internal server error appears instead.

Summary: hello page not displaying “/Jazzy/123” correctly

Description: When using “/Jazzy/123” as the trailing url for the Hello page, the result is not correct

Reproduction Steps: Go to [https://cs1632ex.herokuapp.com/hello/Jazzy/123](https://cs1632ex.herokuapp.com/hello/Jazzy" \l "123). Observe the message displayed.

Expected Behavior: Message displayed should be “Hello CS1632, from Jazzy/123”

Observed Behavior: page redirects to “page not found”. This error should not be visible to user.

Summary: Factorial of “” incorrect

Description: When entering “” as the value for Factorial, the result isn’t correct

Reproduction Steps: Go to <https://cs1632ex.herokuapp.com/fact>. Enter “” into the text box and hit Submit. Observe the result.

Expected Behavior: Result is "Factorial of “” is 1!"

Observed Behavior: Result is “Internal server error”

Summary: Factorial of ‘a’ incorrect

Description: When entering ‘a’ as the value for Factorial, the result isn’t correct

Reproduction Steps: Go to <https://cs1632ex.herokuapp.com/fact>. Enter ‘a’ into the text box and hit Submit. Observe the result.

Expected Behavior: Result is "Factorial of 100 is 1!"

Observed Behavior: Result is “Internal server error”

# Traceability Matrix

Requirement 1: homepageWelcomeMessage

Requirement 2: linkTextTest, linkTest

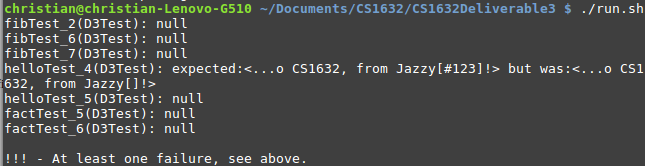
Requirement 3: factTest\_1, factTest\_3, factTest\_7

Requirement 4: fibTest\_1, fibTest\_2

Requirement 5: factTest\_2, factTest\_4, fibTest\_3, fibTest\_4, fibTest\_5, fibTest\_6, factTest\_5, factTest\_6, fibTest\_7

Requirement 6: helloTest\_1

Requirement 7: helloTest\_2, helloTest\_3, helloTest\_4, helloTest\_5

Requirement 8: cathyTest