CS 1632 – DELIVERABLE 3: Unit Testing

URL: <https://github.com/jkellyjr/CS1632_Deliverable3>

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**Summary and Testing Concerns**

**Screen Shots**

**Traceability Matrix**

1. HOMEPAGE\_TEXT: testHomepageUsageText (1.2), testHomepageWelcomeText (1.2)
2. LINKS\_URL: testNumLinks (2.1), testLinkRoutes (2.2), testLinkRoutesReverse (2.3)
3. FACTORIAL\_PAGE: testFactorialValid (3.1), testFactorialMin (3.2)
4. FIBONACCI\_PAGE: testFibonacci (4.1), testFibonacciMin (4.2), testFibonacciMax (4.3)
5. FACT\_FIB\_INVALID: testFactorialInvalidInteger (5.1), testFactorialInvalidNonInteger (5.2), testFibonacciInvalidInteger (5.3), testFibonacciInvalidNonInteger (5.4)
6. HELLO\_NO\_TRAIL: testHelloNoTrail (6.1)
7. HELLO\_TRAIL: testHelloTrailString (7.1), testHelloEmptyTrail (7.2), testHelloTrailInteger (7.3)
8. CATHEDRAL\_PAGE: testNumCathyPics (8.1), testNumCathyList(8.2)

**Defects**

SUMMARY: The page displays 1 instead of 3.54 \* 10­20.

DESCRIPTION: The page displays the default value of 1 on input 100, instead of computing and displaying the correct value, 3.54 \* 10­20.

REPRODUCTION STEPS: Open <https://cs1632ex.herokuapp.com> in Mozilla Firefox. Navigate to the Fibonacci page, and enter 100 in the text box under “Enter number to calculate Fibonacci of:” then click the submit button that is adjacent to the text box.

EXPECTED BEHAVIOR: The page shall display “Fibonacci of 100 is 3.54 \* 10­20”.

OBSERVED BEHAVIOR: The page displays “Fibonacci of 100 is 1.”

SEVERITY: Normal

SUMMARY: The Fibonacci pages crashes when a string is given as input.

DESCRIPTION: The Fibonacci page should return “Fibonacci of hello is 1,” because a string is not a valid input (i.e. a number from 1 to 100). The page instead crashes with an “Internal server error” disaplyed.

REPRODUCTION STEPS: Open <https://cs1632ex.herokuapp.com> in Mozilla Firefox. Navigate to the Fibonacci page, and enter “hello” in the text box under “Enter number to calculate Fibonacci of:” then click the submit button that is adjacent to the text box.

EXPECTED BEHAVIOR: The page shall display “Fibonacci of hello is 1.”

OBSERVED BEHAVIOR: The page crashes with an error message “Invalid server error.”

SEVERITY: Minor

SUMMARY: Default greeting for empty trail.

DESCRIPTION: When a trail is provided, the greeting message should be personalized to that trail. However, if the trail provided is empty, the default greeting is used.

REPRODUCTION STEPS: Open <https://cs1632ex.herokuapp.com/hello//>.

EXPECTED BEHAVIOR: The page should display "Hello CS1632, from !".

OBSERVED BEHAVIOR: The page instead displays "Hello CS1632, from Prof. Laboon!"

SEVERITY: Trivial.