

Test Objectives:

- Test functionality of the four string operation methods in the StringUtils class. This includes concatenation, reversal, capitalization, and trimming the leading and trailing whitespace of the strings.

Test Scenarios

- Testing each method with input of empty strings, single character strings, alphanumeric strings, and strings with whitespace

Test data

- { "alrighty ", "then", "alrighty then", " ythgira", "ALRIGHTY ", "alrighty" },
- { "", "", "", "", "", "" }
- { "a", "b", "ab", "a", "A", "a" },
- { "alr1ghty ", "th3n!", "alr1ghty th3n!", " ythg1rla", "ALR1GHTY ", "alr1ghty" },
- { " alrighty ", "then ", " alrighty then ", " ythgira ", " ALRIGHTY ", "alrighty" }

Test Results

- All tests successful
- Originally had issues with incorrect expected results but they were corrected

Test Report

- Test Coverage
 - Each method test covered empty, single character, alphanumeric strings, and strings with whitespace.
- Test Execution Results
 - Runs: 20
 - Passed Tests: 20
- Quality Assessment
 - All methods pass with no errors or fails