Bradford Witt

November 10, 2019

CS362-400

Random Testing Quiz

Here are the steps taken to build the random tester for the Random Testing Quiz:

1. I opened up the code base to determine what the purpose of the test was. It was determined that the test would take in a random character and a random string and compare against set values. Based on the outcome of the comparison, there would either be a statement printed to the terminal showing the iteration, random character, random string, and the state, or an error would be raised.
2. Based on the comparisons shown in the test, I needed to know what would raise the error flag, which was determined to be a random string containing the phrase "reset". This set the parameters for the random string generator. I needed to ensure that the random string generator created strings using at least lower case letters from the ASCII table. This led to creating an inputString() function that would create an array of 6 characters (5 random characters + Null). The array would then be filled with a random character from the ASCII table subset of the lowercase alphabet (a – z).
3. Finally, based on the comparisons shown in the test I needed to know what the range of random individual characters needed to be. Since the comparisons included a combination of symbols, spaces, and letters, I determined that the best set of characters would be the entire ASCII table of 127 characters. This would ensure that all comparisons could be checked during the run of thr test function.