Aamir Rahman

CS 405 Secure Coding

3/25/2023

4-2 Milestone: Unit Testing

This was my first-time using Google testing. I never used Google testing and I wasn’t aware it existed. After looking into Google testing online, I was able to get the results below.

A screenshot of a computer

Description automatically generated with medium confidence

I initially created a test to verify addition of a single value to an empty collection. I did this by testing if the collection was empty using ASSERT\_TRUE, then if it was empty the size must be zero using ASSERT\_EQ. EQ is for equal. I modified and did the same for the remainder of the tests to tweak here and there to test the appropriate data. I added necessary entries and tested those.

I verified out of range exception when calling at() with an index out of bounds. I used EXPECT\_THROW to throw an error and process the elements as out of range. Otherwise, the code was mainly reusable for the rest of the tests. In the end I created 2 separate unit tests. One of the tests was to test the collection swaps and the other test was to test pop back.