This was a unique assignment as I have never used google testing before (nor did I know it was really a thing). After doing some research, I got the results in the image below.

Text

Description automatically generated

Starting off with creating a test to verify adding a single value to an empty collection. To do this I tested if the collection was empty using ASSERT\_TRUE, then if it is empty the size must be 0 using ASSERT\_EQ (EQ for equal). Then again for is the collection still empty after adding 1 entry, and what that size should be. I did this for the remainder of the tests tweaked here and there to test the appropriate data. I added entries when necessary and tested those entries. Then verifying out of range exceptions when calling at() with an index out of bounds, I used EXPECT\_THROW to kick back an error but keep processing if elements were out of range. Other than that, is was mainly reusable code for the rest of the tests. At the end I created 2 unit tests: one to test the collection swaps values and one to test pop back.