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I'm testing our DoublyLinkedCycle class. This is our implementation of a doubly-linked, circular array. Meaning, if you are currently on the last element, going to the next element will evaluate to the first element.

The test suite consists of an HTML file and and javascript file. The HTML file loads the javascript source, which contains test statements to test the class. A developer can view the browser console output to check the test results.

There are three main test cases. An instance of DoublyLinkedCycle with no elements, one element, and multiple elements. The first test case passed with 100%. We only needed to check that the public members of DoublyLinkedCycle are null. The second test case also passed with 100%. We placed an item into the class and attempted to cycle through the one element repeatedly using the class's public members.

The third test case actually exposed a bug. We added multiple elements to the class and attempted to iterate through them using the class's public members. We successfully iterated through the list repeatedly by using each element's forward link. However, when attempting to cycle through the elements using each element's backward link, eventually one was undefined. So, obviously, we are going to make a bug report on GitHub.