Issue #7869:

Take text objects into account in legend auto positioning

Branch with fix: https://github.com/RiazCharania/matplotlib/commits/issue_7869

System testing:

Check status at: https://travis-ci.com/github/RiazCharania/matplotlib/branches

For this phase, all the system tests pass. The build is successful.

Acceptance testing:

- 1. If you haven't already, follow the instructions in the Deliverable 2 README
- 2. cd to directory dir
- 3. Checkout and build branch issue_7869 by running
 - a. cd matplotlib
 - b. git checkout issue_7869
 - c. python setup.py build
 - d. cd ..
- 4. Download Issue 7869 Acceptance Test.py to dir
 - a. There are three test cases included in the file (1 test per window)
 - i. Test legend doesn't show errors with no text
 - ii. Test legend doesn't overlap with one text
 - iii. Test legend doesn't overlap with two texts
- 5. run Issue_7869_Acceptance_Test.py
 - a. python Issue_7869_Acceptance_Test.py
- 6. Verify that
 - a. In the window titled, No Text, verify that there is a graph with a line and a legend. (Figure 1)
 - b. In the window titled, One Text, verify that there is a graph with a legend, a line and a textbox and that the legend has been moved to a different location to not overlap with the text. (Figure 2)

c. In the window titled, Two Texts, verify that there is a graph with a legend, a line and 2 textboxes and that the legend has been moved to a different location to not overlap with either of the texts. (Figure 3)

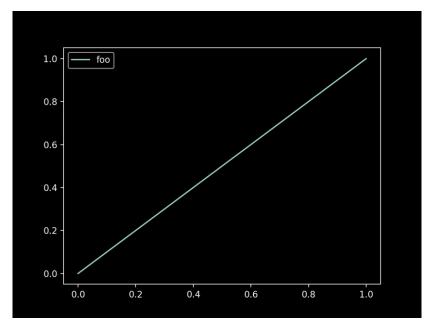


Figure 1

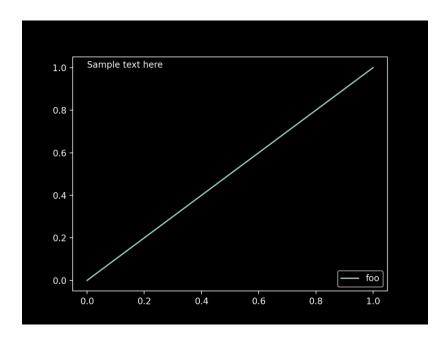


Figure 2

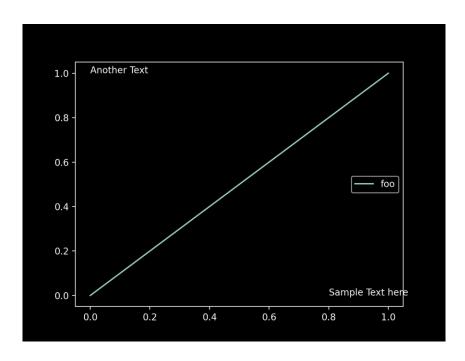


Figure 3