

Assignment 1 (100)  
CSE 427: Software Testing & Quality Assurance  
Spring 2019  
North South University

For this assignment, your code segment must be committed in Github using Commits and Push.

Steps:

- 1) Create an account in Github using your personal email (if you haven't already).
- 2) Add your [abcxyz@northsouth.edu](mailto:abcxyz@northsouth.edu) (northsouth specific email) to your existing github account.
- 3) Create a Folder in your Github Account called "North South University".
- 4) Inside "North South University" folder, create another folder called "Spring2019".
- 5) Inside "Spring 2019" folder, create another folder called "CSE427".
- 6) Inside "CSE427" folder, create another folder called "Assignment1".

Resulting folder structure in your Github should look like the following:  
North South University/Spring2019/CSE427/Assignment1/

Then, complete the following tasks using Java and Junit5:

- 1) Go to Section 6.1, Question 4 in your book. The class `GenericStack` has the following methods signatures:

```
public GenericStack ();  
public void push (Object x);  
public Object pop ();  
public boolean isEmpty ();
```

- a) Implement the `GenericStack` class using **Java Generics** (50)
  - I. Commit the empty class with only the function signatures at first (25).
  - II. Use Test-driven development (TDD) to develop the `GenericStack` class. Commit intermediate steps. (25)
- b) Answer Questions a) to e) in both Junit test code for a) and describe the answer in a PDF document\*. (50)

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\* This means that you are going to add input space partitioning code in the test code for GenericStack class and add comments. See the uploaded code by the instructor for answering this question.

**Possible bonus points:**

1) Use of @Theory and @Parameters in JUnit tests.