## **SE 6367 Software Testing**

## Project 1: Functional Testing Total points: 100

In this project, you are required to generate a test set for testing the Unix "spell" command. The objective is to conduct good functional testing to conform to all the functional specifications. You can review the man page of "spell" by "man spell" or "info spell." You are also encouraged to read other sources to help you better understand how the "spell" command works.

- Download the files
  - logon to your Unix account using NetID on cs4.utdallas.edu
  - create a working directory
  - download the following file http://www.utdallas.edu/~ewong/SE6367/01-Project/spell.tar
  - compile the *spell* program using the following commands
    \* make clean (whenever appropriate)
    \* make
  - run "spell" against a *sample* test case by the command \$ ./spell sample
  - run "./spell" against test cases you create
- Submit a tar file (*Project-1-FirstName-LastName.tar*) with the following
  - A functionality table (in Excel) with two columns
    - o the first column is a functionality ID starting from F01
    - o the second column is a description of the functionality
  - A test case table (in Excel) with four columns
    - o the first column is a test case ID starting from T001
    - o the second column is a description of this test case (i.e., its objective)
    - o the third column indicates which functionalities are tested by this test case (i.e., listing the corresponding *functionality* IDs)
    - the fourth column explains the technique used for generating this test case
      (e.g., reading the man page, equivalence class partitioning, boundary value analysis, predicate testing, etc.)
  - A set of test cases (including all the input/data "files" used by your test cases).
    If a special setup is required for some of your test cases, you need to schedule an appointment with the TA to do this before the deadline.
  - A shell-script "Your-LastName-Test-Execution.sh" which can be used to automatically execute all the test cases you submitted. The output of each execution should be saved in Your-LastName-Test.Output and the errors, if any, should be saved in Your-LastName-Test.Error.
- If you have any questions, please contact the TA, Mr. Ruizhi Gao at <a href="mailto:gxr116020@utdallas.edu">gxr116020@utdallas.edu</a>