Sherwin Williams Text Box

**Purpose:** A small java program that allows a user to manipulate text in a textbox using a variety of methods via several buttons in the GUI, also designed to help interview candidates.

**Usage**

* Text Box: users are allowed to input only alphabetic characters, real time verification ensures every key stroke is tested. Users can also click the text box to clear it out. Size is limited to 10 characters.
* Switch Case: This button will change vowels to upper case and consonants to lower case. There is a Boolean flag in the code as to whether ‘Y’ is considered a vowel. Multiple key presses of this button will not modify content.
* Reverse Text: This button will flip the contents of the text box, reversing the order of the letters but retaining their case values (upper or lower). Multiple key presses of this will continue to flip the contents.
* ‘A’ Padding Button: This button adds padding to the string in the form of the character ‘A’. The initial press of the button fills the front of the string with ‘A’ until the string is length 10. A second press of the key will remove all ‘A’ characters and then pad the back of the string with ‘A’ until size is 10.
  + Further key presses have not been defined at this time and will result in ambiguous behavior.
  + Also if there is an ‘A’ at the front or end of the initial string, this will be affected while using this button. This could be remedied by storing the initial value in a persistent variable but at this time is not in scope.

**Testing**

* When testing the application there is a Boolean flag named Debug, when true this will enable extensive print line statements to trace the program with. Future enhancements could upgrade this to full logging capability.

**Simplified Test Cases**

* Test each button with an empty text box
* Test each button with a full text box
  + Verify “full” is the correct 10 characters, and that only alphabetic numbers are allowed
* Test duplicate letters, ensure program is coded to handle multiple repeating case changes with button 1 and not just first occurrence
* Test case logic with Y Boolean true, and false.
* Verify clicking text box truly clears information
  + When cleared, and re-entered, ensure results are consistent and variables are reset/cleared
  + When cleared, ensure buttons do not repopulate with old data when clicked before new data is added
* Test for ‘A’ in beginning of text box code, ensure entire contents are not overwritten with second press of the ‘A’ padding button.
* Verify hover text functions for buttons and text box