Typing Tutor Documentation – K00243015

# Algorithm (Keyboard to virtual keyboard highlighting)

Virtual Keyboard will have an array of JButtons

On keyPress, program will cycle through and compare button text with keyChar+”” entered from keyboard & will highlight virtual keyboard button accordingly.

# Algorithm (String user must type out)

A Pre-generated String will be read into the textArea, all characters in the String will be of an Array Datastructure

Each time a key is pressed the program will check to see if the characters match and highlight that character red for incorrect and green for matching character entered.

The program will then +1 the arrays index and wait for the user to enter the next character to compare with the Array String

# Algorithm (Difficulty)

Using a Combo Box, the program will have 3 difficulties, Easy, Medium & Hard.

Easy will contain standard text

Medium will contain text + numerical values

Hard will contain text + numerical values + alpha numerical special characters (@ ‘ ; : “ ! etc)

# Exception Handling

The textArea component is made non-editable so that the user cannot directly type into the textArea, all keyPresses must pass through a method and through a comparison block first

# Accuracy

Total length of the array will be considered a starting value of 100% and for every wrong character entered this value will decrement by a certain amount based on the number of characters in the typingLesson array, for every correct character entered the value will stay unchanged