Intro CS Exam Project – Zac C

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| What Makes a Good Keyboard? – Quad Chart  Zac C | |
| The goal of the project was to determine which characteristics of a keyboard make it better for typing. | I wrote a program to collect data of a user’s typing while they used multiple mechanical keyboards.  Multiple versions of the program were made while small parts were added.  Methodology:   * The user plugged in one of six keyboards. * A phrase would be selected randomly and displayed. * The user copied the phrase. * The date, keyboard name, time it took for the phrase to be copied, the gross-words-per-minute, and error count were calculated and written to a text file. * Multiple phrases were selected for each keyboard. * The user plugged in a new keyboard and this process continued until all keyboards were used. * Measurements of each keyboard and its parts were then taken, and the previously collected data was used to find the overall best keyboard. |
| Relevant results of top-performing keyboard vs. average of top 10 keyboards | From the collected results, it was found that the Logitech keyboard was the best to use for typing out of the six being tested. Its measurements mostly align with the average measurements of the other top keyboards, with the exceptions being the board’s low height on the desk (22mm), and a slightly longer distance for each key to travel (an additional 1mm).  A notable problem that arose in the program was that many of the words-per-minute -- which factors the user’s mistakes into calculation – kept being calculated as a negative number. To solve this, I started calculating the gross-words-per-minute instead.  The only application of my work I can think of is allowing a user to see which out of a few options of keyboards would be best for them to use. |