3-2 Milestone Two: Enhancement One: Software Design and Engineering

CS 499

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The artifact for this milestone is a rewrite of a Java program I had written for IT 145. I converted it to C++ with some minor enhancements to make it more secure, such as checking if the text files are present and re-doing the messages displayed if a login failed. This rewritten program can be compared to the original to show growth over time in my skills. The old file was one of the first programs I wrote for a class and needed considerable fixes. Going forward I’m planning to use this same program to add data structures such as functions to make it better follow best practices. I would also like to include the MD5 hash conversions for passwords that were included in the original, but that isn’t currently present. I have them stored from the credentials.txt file in the program so that if that functionality is eventually added the matches are already present.

The most challenging aspect of the conversion was getting the credentials.txt file read into the program so that different elements could be matches with user input. The single array split into separate arrays will probably be changed in future versions too, but for now it’s rewritten to reflect the original design. Printing the text files for the individual jobs after a successful login was also difficult because that’s something I had never attempted before in C++. It works except for it displays the file name at the end of printing out the file. I haven’t found a solution for that yet.