Individual assignemnt 1

Charles Agyebeng Yebuah

Ashesi University

Intermediate computer programming

Dr Ebo Adjepon-Yamoah

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The assignment proved more difficult than I could have ever expected. I assumed the bulk of the work would come from utilising Try and Catch blocks for reading and writing to files. Still, it was only when was done processing the file that Banahene's foreboding words came to light(In one lab he insinuated that the bulk of the work would be the search algorithm).

I broke the work into 3 simple steps: read the file and get the necessary data, use that data to find the correct information from the CSV files, and print the required output. I was able to do all these with a few extra functions and classes.

For the first step, I used a buffered reader to access the imputed file, and saved the start and stop information. I then returned them together for processing in the second step.

For the second step, I used a buffered reader for all 3 files and turned each record into a Hashmap, with keys that uniquely identify them, and values that are just the rows from their corresponding tables. The function takes the start-stop from step one as a parameter, and then processes it later to retrieve the necessary information. I used streams with some help from stack overflow to create an effective loop. I then used a breadth-first search to get the solution and returned that.

The final step then formatted and printed the solution path unto a new file, with a name similar to the input.

References:

provista. (1963, March 1). *Collect stream into a HashMap with lambda in java 8*. Stack Overflow. Retrieved September 30, 2022, from https://stackoverflow.com/questions/33606014/collect-stream-into-a-hashmap-with-lambda-in-java-8