Homework #1

Complete By: Thursday, September 6th @ 11:59pm
Submission: submitted via Gradescope

Readings

Chapters 1 and 2 of Object-Oriented Programming with C++ and Smalltalk. Read the sections from the tutorials posted in today's lecture about objects in C++ and Java to familiarize yourself with the syntax and give us a starting point to talk about the differences.

Programming Exercise

The Human Resources department of a certain company (HumansDefinitelyNotRobots Inc or HDNR Inc) requires software for keeping track of a directory of employees.
It is your task to build a directory application with the following features.

The main screen prompts the user for a choice of numbers, representing the action the user wants to take

Upon entering the character 1, the user is further prompted for the name of a comma separated value file (.csv), and then loads all the names from that file into the directory. The csv contains only rows of the format LastName, FirstName.

Upon entering the character 2, the user is further prompted for a name to enter into the directory. This name should be in the format FirstName LastName. No middle names or other information is entered at this time.

Upon entering the character 3, the user is prompted for a search query. The sequence of characters they enter becomes a substring to be matched against first and last names in the database. If there is a space in the sequence, the program searches for a match among of the first name to the sequence leading up to the space, and the last name to the sequence after the space. All names in the database that match the query should be printed out, in the format FirstName LastName, one per line.

Upon entering the character 0, the application should exit.

This application will be a console application in C++, compiled and run at the command line.
When finished, submit your .cpp source file(s) to Gradescope.

Sample Run with user input in **bold:**

Enter action number [0, 1, 2, or 3]: **1**
Enter name of .csv file: **CSFaculty.csv**
Enter action number [0, 1, 2, or 3]: **2**
Enter name of new employee (FirstName LastName): **Jean Roberts**
Enter action number [0, 1, 2, or 3]: **3**
Enter search query: **obe**
Found users:
Robert Kenyon
Robert Sloan
Jean Roberts
Enter action number [0, 1, 2, or 3]: **0**
Goodbye

Note that the order of the found users is not defined for this assignment. This is to make your design easier, you may find and output the names in any order.