Final Submission Write Up CSCI 2270

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Data Structures Used:

-Used a graph to keep track of each individual person and see who each person is connected (to simulate an actual dating app). This was probably the bulk of how are code was connected and kept everything really short in terms of efficiency. The graph was made up of person vertices which basically held a human class, an id number and few other things but allowed us to freely use any of these variables defined in it to create the Dating App

-Used a priority queue to suggest the top match with in that individuals parameters this kept it nice and short
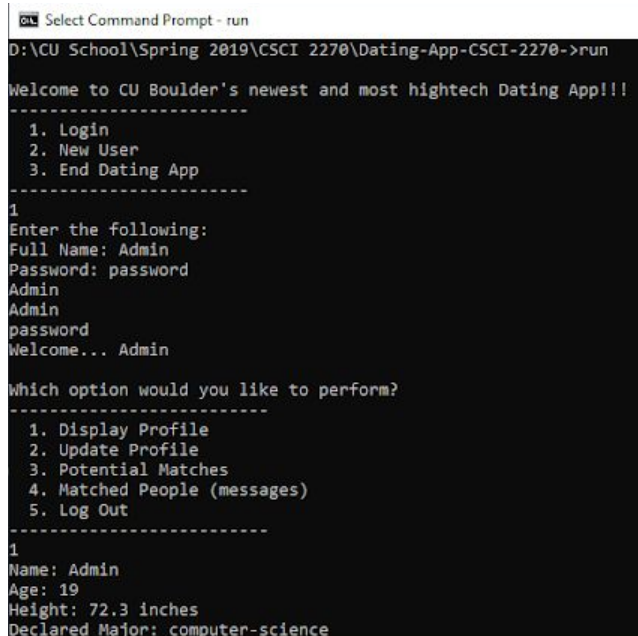
-Used already implement vectors so we could have an infinite amount of user, we agreed we did not think it was necessary to use a hashtable b/c the way were writing this everyone needed their own index and a hashtable would actually make it harder to access some of the values we needed

Methodology:

So overarching all the created stuff was the main that contained/connected the priority queue as well as the graph(we called it a "connectivity graph" because it connects people :)). The main had a few display menus and is pretty complicated in terms of the amount of while loops we had to use to print out all the different options for the user. The human class was connected within a person vertex, hence in the connectivity graph. The only other process we use in this is reading in 15 simulated users to already be included in the graph.

Results:

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Command Prompt - run

Chad
Danielle
Edison
Barry
Sean
Juliet
Joe
Zoey

Here is your recommended match:
Name: Julia
Age: 19
Height: 58.8 inches
Declared Major: psychology
Gender(biologically): Female
Sexually attracted to: Males
For the following questions you answered on a scale of 1(strongly disagree) to 5(strongly agree)...
You are very active. Answered: 5
You are very organized. Answered: 4
On a Friday Night, you would rather stay in and watch Netflix than go out and party. Answered: 3
You love all types of sports. Answered: 2
You are a nightowl. Answered: 1
You are looking for a long term relationship. Answered: 2
You are a good communicator. Answered: 3
You like to be the center of attention. Answered: 4
You are open to new ideas. Answered: 5
There is nothing better in a partner than the ability to make you laugh. Answered: 4

Would you be interested in talking with this person? (yes or no)
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Below will be a basic representation of the structure of our app...

Account Ownership Diagram Template

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