Prosad Shaha

CS2 Final Project

**HOW TO COMPILE**

g++ ID.cpp Name.cpp UnivMember.cpp UnivMemberDriver.cpp -o ProsadFinalProject.out

**What does this program do?**

This program takes in names from files and adds them to a class called University Member.

The name should be in this format: LastName,FirstName

An example is:

Al Hayajneh,Abdullah

Alpert,Robert

Aly,Tamer

Upon reading in the names from either a “CSProfNames.txt” file or a “StudentsLastFirst.txt” file it will generate an ID number for them

After this, it creates a new file that contains the names of different professors and their ID numbers

Then we generate unique usernames for everyone.

If your name is Shaha,Prosad then your username is pshaha1.

Notice how there is a number at the end, if there were to be a second pshaha then they would be given the username pshaha2.

Also if the university happens to have positions that haven’t been determined yet then they will be given the name TBD and an ID will be generated for them as well indicating that the position will be filled.

**What is different from the original code?**

Well, the first time we made university member we just made a name, ID, and role and then we output this onto the screen. However, this time we have stored all of that information into a file which means it could be used in other programs if one wishes to do so. Also, we’ve created unique usernames for each person. This is the biggest feature of the program as it would technically mean we can generate an email address by reading the file that contains the usernames into the email program. Besides the simple functionality of the program, the code is a lot more advanced this time around as I used friend functions as well as function overloading to make things easier for myself. If one were to tweak the code themselves and wanted to generate new files with names, IDs, and usernames they can take advantage of the already created functions instead of rewriting most of the code themselves.

**What points have I earned?**

The **first** point that I earned is from outputting the names of professors and their ID numbers into a file. **[2a]**

The **second** point that I earned is from creating an overloaded << function. I use this function to help me output the names of professors and their ID numbers into a file, as mentioned in the first point. **[3a]**

The next **two** points I earned from creating unique usernames for all the university members. **[4a]**

My **fifth** point is from creating an overloaded == function to check if two usernames are equal. This helped a lot since I didn’t want to create unique usernames within students or professors but instead, I wanted to create unique names throughout the entire university that way there wouldn’t be any overlap. **[beginning of directions state that any overloaded functions count as +1].**