Drew Burns Project Milestone 11/8/16

I look forward to gaining knowledge in my major by completing an application project. At the moment I am also taking a data communications class where our main focus currently Is security. I find cybersecurity to be a very interesting topic, and think I will eventually take it as a minor. Therefore, the idea of a strong password generator really caught my eye. With this generator Ii will make my passwords as well as other people passwords more secure from dictionary attacks and other kind of reusable password attacks from hackers. I can test the use of diverse characters within the password, as well as the use of capitalization, characters, and numbers. As I continue this project I am excited to see how these types of codes are written and what types of flaws I may come across as well as how I could customize the code to defend against certain types of password hacking programs. I think that my strong password generator has a lot of significance in the real world and to everyone's computer. My program will help test multiple passwords at a time and help people to tell if their information is secure against potential hacks. So far my software has 3 classes. These are password check, name check and get name. Password check makes sure the password has 12 characters, that it is comprised of both numbers and letters, and that there is some capitalization used. When returned will tell user what they did successfully and hat needs to be updated. (Name check) checks to make sure first and last name aren't in password. Get name will ask user to input first and last name and potentially other interests and dates that could help make an acronym password, which would help people memorize their new more complex passwords more easily.

Something I am still working on is a unique way to generate passwords for people. I could do this by implementing certain characters that hold meaning to them, but no hacker

would understand. For example, have them input their family member's names and use their first initial within the password so that the user doesn't immediately forget the password I generate for him or her. I also want to add a way to check passwords imported through a simple dictionary attack or other commonly used attacks. Below is a very early draft of my current UML diagram. I look forward to continuing my work.

Strong password class UML diagram
passwordCheck() : string
namecheck(): string
getName(): string