

## **Password Manager**

My proposal for my project is a password manager made in Java. An example of an app like this is 1Password. I will be creating my program to work in the command line and create instances of a password in many types such as logins, emails, IDs, Credit/ Debit Cards or secure Notes. I will encrypt the saved data once it has been recorded and allow the user to run the program through the command line anytime they wish to retrieve the data. Using object oriented programming I will be able to declare multiple types of logins, then create instances of each in order to sort them. A possible addition could be a search ability by name of the account, other wise a list method will be used to view all instances of passwords. A JSON or text file will be used to store the data and then the file will be encrypted. the use of one encrypted file means the passwords can be stored on multiple machines so that the user may login using a single password to access all accounts. A password system will be used and require a large password of numbers, letters and capitals in order to ensure there security of the password. A lockout procedure will need to be implemented so that if a password attempt is failed x amount of times the programs locks and waits x amount of time. A strong password generator will also be added for help in creating password for new accounts. When displaying the password for security only the name of instance will be show, the user will have to request login information of that account, then the information will be printed for them.