

Computer Science AP

File Reading and Writing

Have the code from the files `FileReaderFrame` and `FileWriterFrame` available to peek at when doing these problems. Remember, don't memorize the code! Just know how to make use of it when you need to implement it in your own programs.

Select a challenge that involves file reading and a challenge that involves file writing (so pick 2 or the 4 tasks below, don't do all 4 unless you want to)

[01 – Name and Password Please]

Create a new project.

Add a textfile in the project folder that contains data like the following

```
bob  
firetruck
```

This represents a user name and that user's password.

Create a program that asks the user to enter their name and password. Read the file and check to see if the name and password in the file match the name and password the user entered. If it does, respond with "You May Pass!", if not, tell them, "Bad user name or password".

[02 – Set Name and Password]

Create a new project.

Write a program that will allow a user to enter a username and a password. Save this name and password to a file. The file should look like the file listed in problem 01.

[03 – Word Manager Enhanced]

Remember `WordManager` from the `ArrayList` unit? Perfect. Open up that project and modify the `WordManager` class so that the `WordManager` reads it's words in from a text file (instead of you manually adding the words in using code like you probably did). This way users can just swap text files to change the word list instead of changing code! The tester program should still work like before, so create a short text file of words and test it out.

[04 – List Maker]

Write a program that will allow the user to enter as many names as they want into an `ArrayList`. When they are done entering names in to the list, the contents of the list will be written to a text file. Check your text file after running to see if it is working.

Notice that two of these problems involve writing, and two involve reading. Pick one reading and one writing problem!

If you want to make your program a GUI (using a `JFrame`), that's fine. If you want to use a void main method and `UserInput`, that's fine too. This is about practising some basic file reading/writing.