Spotify Premium Plan

Due Dates:

1. **Due October 9 on Blackboard (zip file) at 11:59pm – Lastname_Firstname_CL1_FA20.zip**
    a. **Only submit .java files**
2. **Meet with TA/IA by September 28, 2020**
    a. **Review pseudocode/algorithm during lab time or office hours**
    b. **Briefly describe your plan to code this lab**
    c. **Pseudocode is not code – general structure and logic of how you plan to solve the problems**

Objective: Students will implement a simple user interface using scanner and handle user input with conditional and iteration statements.

Description: Spotify has asked you to store their customers in a database (file). This way, when a user attempts to log into the system, your program will verify their log-in by checking the "database". If found, the user has the option to view their current plan (which will display their monthly cost as well as their yearly cost, with tax included (8.25%)) or change their plan.

If the user would like to change their plan to **student**, the system will ask for an email address. If it contains "**.edu**" the change will be successful, else, it will not.

Premium Plan Table

The following premium plans and their benefits can be seen below:

STUDENT	INDIVIDUAL	FAMILY
$4.99/mo	$9.99/mo	$14.99/mo
> Listen to music ad-free > Play anywhere – even offline > On-demand playback	> 6 premium accounts for family members living under one roof > Family Mix: a playlist for your family, regularly updated with music you all enjoy > Can block explicit music > Ad-free music listening, play offline, on-demand playback	> Hulu (ad-supported) plan > SHOWTIME > Listen to music ad-free offline > on-demand playback

Your program should do the following:

1. Hold account information in a file (a file we will provide)
2. Verify log-in by reading the file provided
    a. PlanUsername (Pdaniel) – Plan: Premium, Username: daniel
    b. Ask the user for a username and password - Password

HINT: https://docs.oracle.com/javase/7/docs/api/java/lang/String.html

i. If the username and password match the username in the file and password given, the log-in will be successful – Print "Welcome [username]"
ii. If the user's log-in credentials do not match any of the accounts in the file (incorrect username), allow the user to try again (they have 3 tries in total). If they are unable to log-in by the **third** time, close the program.

3. Once verified, the user will be able to either:
    a. View current premium plan
        i. Display the current monthly/yearly cost (including task)
        ii. Ask the user how much they would like to spend that month.
            1. If the amount is greater than their current monthly plan, the program will say the following: **Awesome! You can jam this month. Enjoy!**
            2. If the amount is less than their current monthly plan, the program will say the following: **Hm… seems like we will have to put your subscription on hold.**
    b. Change plan (you do **not** need to re-write into a file if this option is chosen).
        i. Ask if they want to change to a "student," "individual," or "family" plan.
            1. If they enter a plan they **currently** have, say: You already have this plan.
            2. If they choose the "student" plan, ask the user for their e-mail address.
                a. If the email contains ".edu" at the end of their email say: **Welcome to Premium Student**.
                b. If the email address does not contain ".edu" - the user can try again (only once). If the e-mail is still not accepted, say: **You are not eligible for the premium Student plan.**
            3. **If they choose a plan that is different than their current plan and is not the 'student' plan, display the informative message confirming the change: Welcome to the XX plan.**
            Replace XX with the newly selected plan.

Terminal User-Interface Example for viewing current plan:

Red text = user input
Green text = system output
Bold = values from variables

Welcome to Spotify! Please log-in to view your personal account:

Username: daniel

Hi **daniel** What would you like to do today?

1. View Current Plan
2. Change/Upgrade Plan

> 1

daniel, you currently have access to the Family plan. You have access to 6 premium accounts, a playlist for your family, ad-free music, listen offline, on-demand playback, and the control to block explicit music!

Your premium for **Family** receipt

Monthly cost: $**10.70**

Yearly cost: $**128.4**

How much would you like to spend on music this month?

> $5

Mm, seems like we will have to put your subscription on hold...

Terminal User-Interface Example for giving user 3 attempts to log-in:

Welcome to Spotify! Please log-in to view your personal account:

Username: cynthiaaa

Sorry, either your username/password is incorrect. Please try again.

Username: cynthia

cynthia, you currently have access to the Family plan. You have access to 6 premium accounts, a playlist for your family, ad-free music, listen offline, on-demand playback, and the control to block explicit music!

...

Terminal User-Interface Example when changing Premium plan to student:

Hi **paola**, you asked to change your plan. Please choose an option below:

1. Individual: $9.99/mo
2. Family: $14.99/mo
3. Student: $4.99/mo

> 3

It seems you have chosen the Student Payment Plan. Please enter your student e-mail address so we can verify you:

> paola@miners.utep.edu

paola, welcome to Premium **Student**! You now have access to: **Hulu, SHOWTIME, ad-free music offline, and on-demand playback!**

Here is your receipt - Total billed: $**5.35**

Terminal user-interface example when the user is not accepted into the student premium plan:

Hi **ali**, you asked to change your plan. Please choose an option below:

1. Individual: $9.99/mo
2. Family: $14.99/mo
3. Student: $4.99/mo

> 3

* It seems you have chosen the Student Payment Plan. Please enter your student e-mail address so we can verify you:

> ali@gmail.com

I am sorry. That email address is not valid for the Student Payment Plan. Would you like to try again?

Enter Y for yes, N for no:

> N

Thank you for listening on Spotify! Good-bye.

If the user chooses yes, simply repeat the step with the asterisk (*).

Grade percentage breakdown (needs to be updated)

- 15% - Pseudocode
- 10% - Appropriate use of input/output operations (in Java)
- 20% - Appropriate use of conditional (i.e., if-then) statements (in Java)
- 15% - Appropriate use of iterations (i.e., for-loop, while-loop) statements (in Java)
- 10% - Appropriate documentation (in Java)
- 10% - Appropriate notation and indentation (in Java)
- 15% - Program compiles, runs, and contains the functionality required
- 5% - Student answers all questions during demo

Tips

Start early.
Plan to work 3 to 5 additional hours outside the lab to complete this assignment
Ask clarifying questions to the instruction team if something is not clear
Plan to submit at least 1 hr. before the deadline to deal with potential Blackboard bugs
Have fun and keep it simple!

You got this!