Assignment 4

Team Name: 5 Guis

Dallas Wendt, Nick Sidaris, Chris Bassar, Josh Yolles, Dustin Vuong

1. As a user I would like to keep track of my membership expiration date so I know when my membership will expire.

Description: Create a date class that keeps track of a member’s expiration date.

Tasks:

Create a constructor for date

Test:

Validate the date

Check if it is a leap year, validate days in month, validate months in year ,etc by outputting the class object in console.

Assignee: Nick

Priority: 4

Estimation: 2

Done: Once the date can be set, validated and printed.

1. As a user I would like to be able to see all the information related to my membership account.

Description: Create a class that represents a member with these attributes: name, number, type, expiration date, total spent, and membership cost.

Tasks:

Write constructors for the class.

Write methods for the class.

Add virtual function for paying membership costs.

Test:

Initialize the constructor, and output the class

Implement methods and output the result of methods

Make a list of pointers and make sure the original function is called correctly in the output through the use of virtual function

Assignee: Josh

Priority: 7

Estimation: 5

Done: Once a member has been successfully created and can be printed.

1. As a user with an executive account I would like to be able to see all the information related to my membership account.

Description: Create a class that represents an executive member. This will be derived from the member class.

Tasks:

Write the constructors for the class.

Write the methods for the class.

Test:

Output the constructor of the class

Output the result of the methods of the class object

Assignee: Dallas

Priority: 3

Estimation: 3

Done: Once an executive member has been successfully created.

1. As a user I would like to be able to use the program through a graphical user interface.

Description: Use Qt Creator to make a GUI for the program.

Tasks:

Learn how to effectively use Qt.

Create buttons and a text window to show the attributes the user wants to see

Test:

Run QT Window and make sure the GUI functions accordingly

Assignee: Dustin/Chris

Priority: 10

Estimation: 8

Done: Once the user can utilize all parts of the program through the GUI successfully.

1. As a user I would like to be able to keep track of all of the members of the store.

Description: Create a class called store that will keep track of the members and purchases

Tasks:

Create lists (linked list or vector) to hold each list of specific information.

Test:

Prints all purchases related to a membership.

Assignee: Nick

Priority: 9

Estimation: 7

Done: Once the user can properly add and remove members from the list and print the total purchases through the UI

1. As a user I would like to keep track of all of the purchases made in the store.

Description: Add to the store class a list of all of the purchases.

Task:

Create another list for the purchases.

Test:

Print all purchases from a specific day or a specific person.

Assignee: Chris

Priority: 4

Estimation: 5

Done: Once the user can view all of the purchases from a specific day or person.

1. As a user I would like to be able to see if it is worth it to upgrade to an executive account.

Description: Calculate whether or not a regular member would save money with an executive account.

Task:

Write an algorithm to find out how money they would save with an executive account.

Test:

Output the algorithm solutions to the console, in order to ensure we catch every error and use efficient loops as such

Assignee: Dustin

Priority: 5

Estimation: 4

Done: Once the user can see whether or not they should upgrade to an executive account.

1. As a user I would like to be able to see whether I should downgrade to a normal account.

Description: Calculate whether or not an executive member should downgrade to an executive account.

Task:

Write an algorithm to find out how much money they would save with a normal account.

Test:

Compute the money that would save a normal account through outputting it through the console

Assignee: Dallas

Priority: 5

Estimation: 4

Done: Once the user can see whether or not they should downgrade to a normal account.

1. As a user I would like to be able to add or delete items on the list of items I have bought.

Description: Allow the user to change the list of items that they have purchased.

Task: Allow the user to see a list of everything they have purchased by creating a list

Allow the user to change the list.

Test:

Output list of items repeatedly through command lines

Assignee: Josh

Priority: 6

Estimation: 5

Done: Once the user can view, add, and delete items from the list of items purchased.

1. As a user I would like to be able to enter the name of an item and view all of the statistics about that item.

Description: Allow the user to search for an item name and view the quantity sold, price, and total revenue.

Tasks:

Allow the user to search for an item through methods and loops within our algorithm

Test:

Print the quantity sold, price, and total revenue related to the item searched

Assignee: Chris

Priority: 5

Estimation: 6

Done: Once the user can search for an item and view all of the information related to that item.