

**ST10116374**

**PROG7312 POE**

**Readme**

Here is the GitHub link to the project/POE: <https://github.com/VCDBN/prog7312-poe-KevinBeranrdST10116374>

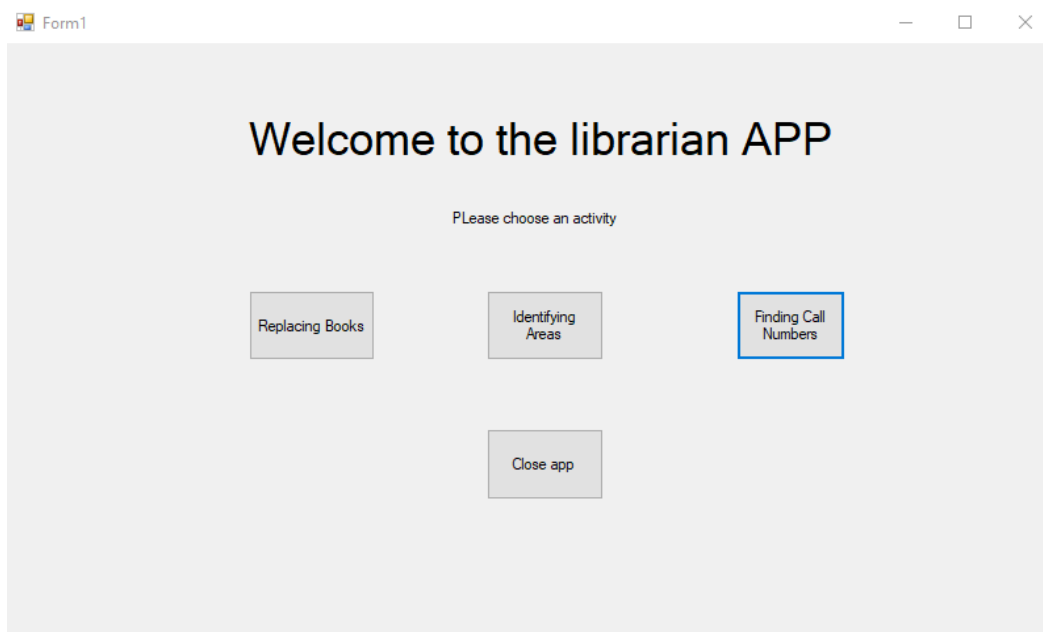
It's in the master2 branch because the first one was giving me errors.

Feedback for part 1: Changed it so that user can see whether they got the correct order or not

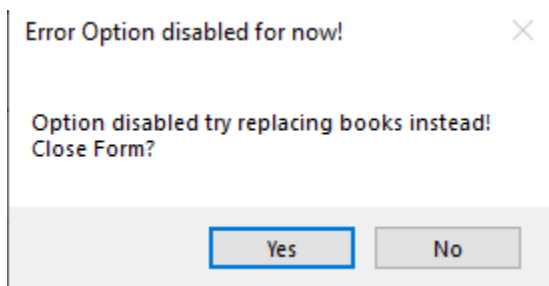
Feedback for part 2: Removed the progress bar in favor of a star that will appear when the user gets the correct answers.

## **Part 1**

To start the application run it in Visual Studio and press the start/ green button on the top you will then be given this first screen when starting the application:



Here you can choose between three activities Replacing Books, Identifying Areas and Finding Call Numbers. The only button that works is the 'Replacing Books' and 'Close app' buttons. The close app button will exit the application and the Replacing Books will take you to the second page.



This is what is shown when you press the other two buttons and here you can choose to close the application or press no and continue

ReplaceBooksFormcs

### Replace Books

Sort call number in ascending order to one box to the next

005.73 JAM  
278.47 NAY  
111.98 DFE  
987.11 QWE  
001.65 MIK  
035.14 JIM  
008.47 NEX  
789.12 QPO  
114.14 BQS  
132.63 KXI

Generate call Numbers

111.98 DFE

Add call

Show Progress

005.73 JAM  
111.98 DFE  
278.47 NAY

Check Order

Clear Items

Use this button to check wether your callnumbers are in the right ascending order

Return/Close

On the second page is where you can sort the call number from the right list box into the left list box by using the text box between them and can click the add call button to add the number. The right list box will only generate the numbers once you have clocked the button under it and the right button check order is used to arrange the left box into the ascending order. The Clear items button will clear the left list box of its items and you can start again. The progress bar will update you on your progre ss each time you click the show progress button. Finally, the return/close button will take you back to the first page or it can close the application instead if you want.

## Part 2

The screenshot shows a window titled "Identifying\_Areas\_Form". Inside, the title "Welcome to Identifying Areas" is centered. Below it, instructions read: "Click one of the Items from both boxes to compare then click check to make sure you have selected the right answer. To do call number to description click the 'Call number to Descriptions' than the other one for the other way around". There are two empty list boxes: "Call Number Listbox" on the left and "Descriptions Listbox" on the right. Below the left listbox is a button labeled "Call number to Descriptions" with the text "This Button will load 4 times in this list box and 7 in the other" below it. Below the right listbox is a button labeled "Descriptions to Call Numbers" with the text "This Button will load 4 times in this list box and 7 in the other" below it. In the center, there is a "Check" button. At the bottom center is a "Return/Close" button.

This is the page you will see when you choose the Identifying areas button. Here we can the list boxes that will hold our data from the dictionary data.

The screenshot shows the same window, but now the list boxes are populated. The "Call Number Listbox" contains the numbers: 500, 600, 200, 000. The "Descriptions Listbox" contains the following text: General Knowledge, Philosophy & Psychology, Religion, Social Sciences, Languages, Science, Technology. The "Call number to Descriptions" button is now highlighted with a blue border. The other buttons and text remain the same as in the previous screenshot.

This is what you will see when you click the Call Number to Description button, that populates the left box with four call numbers and the right box with 7 descriptions. How this works is that you must click on one of each of the text from each box like in the above image. When this is done, you can then click check that will tell you if you have guessed the right call number to the right description, telling you whether you have chosen correctly or incorrectly. Clicking the Call Number to Description button will repopulate the left box with new call numbers.

Identifying\_Areas\_Form

### Welcome to Identifying Areas

Click one of the items from both boxes to compare then click check to make sure you have selected the right answer  
To do call number to description click the "Call number to Descriptions" than the other one for the other way around

Call Number Listbox

- 000
- 100
- 200
- 300
- 400
- 500
- 600

Descriptions Listbox

- Science
- Philosophy & Psychology
- Religion
- Social Sciences

Call number to Descriptions

Check

Descriptions to Call Numbers

This Button will load 4 itmes in this list box and 7 in the other

This Button will load 4 itmes in this list box and 7 in the other

Return/Close

This is what you get when you click the Description to call number button, it's like the first time you chose the other button now the descriptions are only 4 and are randomly chosen.

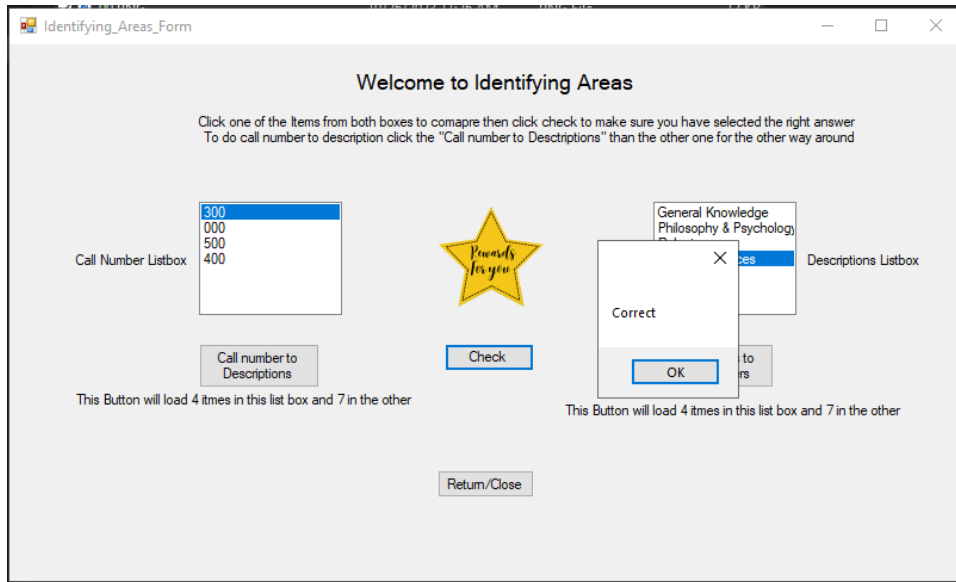
Technology

Incorrect

OK

to rs

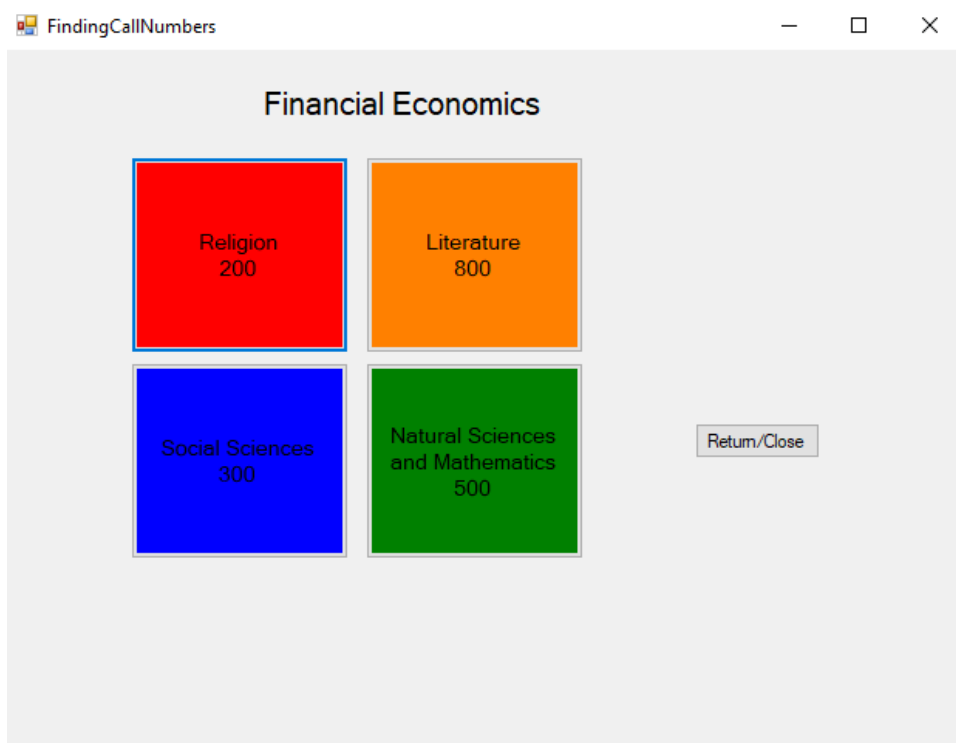
This is what you will get when you chose incorrectly, clicking ok will let you continue with the program.



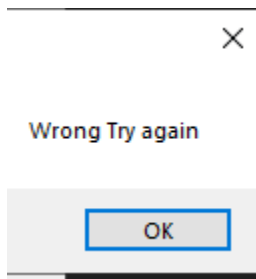
This how is it will look when you get all the correct choices. Notice you will receive a stat for a correct choice made and the star will be removed for a wrong choice made

## Finale POE

The data file is called FindingCallNumbersTreeData.json and the app will create this file if not found but the data in the file is what is used for the quiz should be in ST10116374\_PROG7312\_POE\bin\Debug

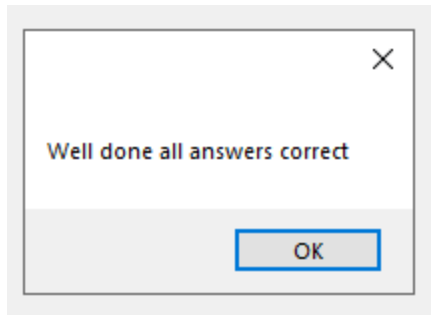


This is what you will find when you click finding call numbers, you will see a quiz the colored blocks are buttons that you can click. One is correct, the others are wrong. You must get the correct answer three times before you can get the right answers.

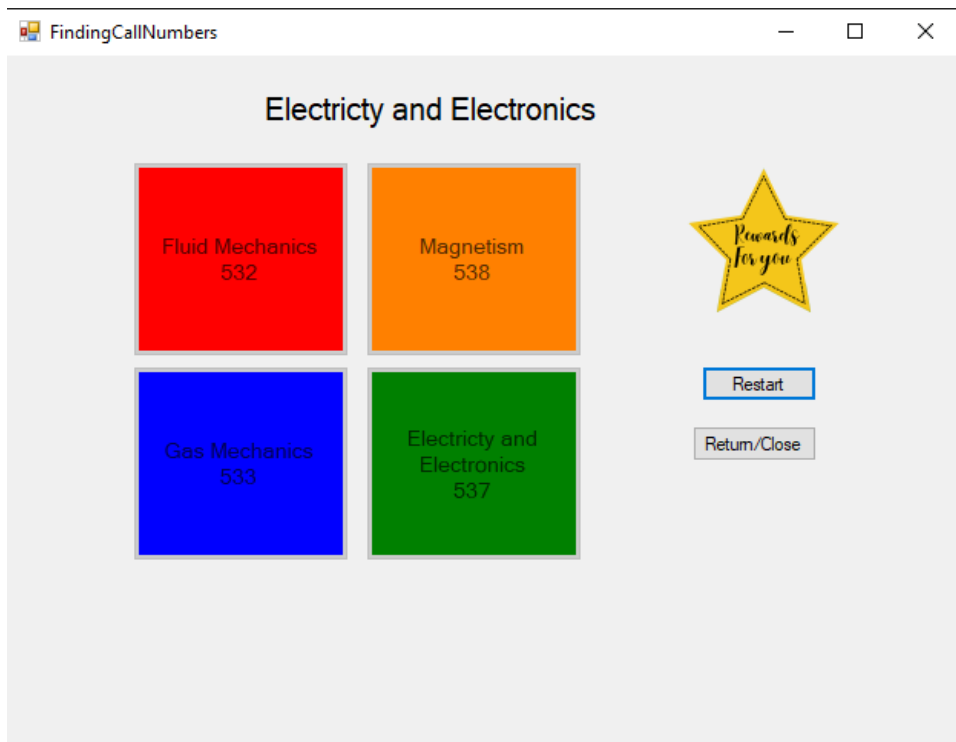


This is the pop-up message for wrong answers.





This is the pop-up message for write answers.



When you get three correct answers you can see a star that you received (this is the gamification feature) for completing the quiz click the restart button that will remove the star and the button to begin again or return/close button to try the other games

## **Reference List for finale POE:**

VectoIllustraStock. 2023. Vecteezy. Reward for hard work badge clipart, badge clipart, recognition award, achievement symbol, success badge, commitment badge, job well done, goal achievement, excellence badge Free PNG. [Online]. Available at: <https://www.vecteezy.com/png/24522385-reward-for-hardwork-badge-clipart-badge-clipart-recognition-award-achievement-symbol-success-badge-commitment-badge-job-well-done-goal-achievement-excellence-badge> [Accessed 20 November 2023].

GeeksforGeeks. 2023. Tree Traversal Techniques – Data Structure and Algorithm Tutorials. [Online]. Available at: <https://www.geeksforgeeks.org/tree-traversals-inorder-preorder-and-postorder/> [Accessed 19 November 2023].

GeeksforGeeks. 2023. Print path between any two nodes in a Binary Tree. [Online]. Available at: <https://www.geeksforgeeks.org/print-path-between-any-two-nodes-in-a-binary-tree/> [Accessed 19 November 2023].

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GeeksforGeeks. 2023. Select a Random Node from a tree with equal probability. [Online]. Available at: <https://www.geeksforgeeks.org/select-random-node-tree-equal-probability/> [Accessed 19 November 2023].

Arora. P. How can i get the Parent in Binary tree. Stack overflow. [Online]. Available at: <https://stackoverflow.com/questions/43774655/how-can-i-get-the-parent-in-binary-tree> [Accessed] [19 November 2023].

How to make a simple multiple choice quiz game in windows form and c# . 2020. YouTube video, added by Moo ICT. [Online]. <https://www.youtube.com/watch?v=hQDjz2ISklw&t=973s> [Accessed 19 November 2023]

Code Walk Through Binary Tree. 2020. YouTube video, added by VCSOIT. [Online]. Available at: <https://www.youtube.com/watch?v=L6Buu-xMINw> [Accessed 19 November 2023]

## **Application requirements**

### **Operating Systems**

Windows 7

Windows 8

Windows 10

Windows 11

### **Hardware Environment**

Processor: x86 or x64

RAM: 512 MB (minimum), 1 GB (recommended)

Hard disk: up to 4 GB of space may be required. However, even if you install it with a different drive, 400 MB of free space is required in the boot drive.

### **Development Environment**

Microsoft Visual Studio 2008/2010/2012/2013/2015/2017/2019/2022

.NET Framework 2.0/3.5/4.0/4.5/4.5.1/4.6

Lower Sync fusion .NET frameworks can be used in applications because they are compatible with .NET 4.7, .NET 4.7.1, .NET 4.7.2, and .NET 4.8. For example, in the application, the Sync fusion 4.6 .NET framework assembly can be referred to as 4.7 or higher target versions.

.NET Core supported from 2019 Volume 1 release (17.1.0.32).