# Project Title: Dewey Decimal: Finding Call Numbers(FINAL POE)

## **Project Description**

A head librarian is in need of a fun software application to teach other librarians how to use the Dewey Decimal System. The head librarian now wants to teach the other librarians using a match the column type of game.

## **Technologies Used**

- A class library was used for the timer and its respective methods for the timer.
- Visual Studio 2022
- C#
- WMPLib was downloaded and used in order to make use of Windows Media Player.

#### Important to Note

- The project title is still AngeloTraverso\_ST10081927\_PROG7312\_POE\_PART1, due to the complication I would have had changing that name, it will remain the same, however this submission is for the Final POE (Part 3).
- DeweyDecimalValues.csv is stored in Bin\Debug\DDResources

#### Installation

#### Option 1

- 1. Unzip folder "AngeloTraverso\_ST10081927\_PROG7312\_POE\_PART1"
- 2. Open folder "AngeloTraverso ST10081927 PROG7312 POE PART1"
- 3. Double click the visual studio solution "DeweyDecimal Latest.sln"
- 4. This should open Visual Studio with the current project open
- 5. None of the files should be by default open, if not, then double click any class to view code
- 6. Click the big "play" button at the top of your IDE OR Click F5 to run the prototype.

#### Option 2

- 1. Unzip folder "AngeloTraverso\_ST10081927\_PROG7312\_POE\_PART1"
- 2. Open Visual Studio
- 3. Choose "Open a project or solution"
- Locate folder "AngeloTraverso\_ST10081927\_PROG7312\_POE\_PART1" from the unzipped folder
- 5. In "AngeloTraverso\_ST10081927\_PROG7312\_POE\_PART1" folder, select "DeweyDecimal Latest.sln" file to launch the code into your IDE
- 6. None of the files should be by default open, if not, then double click any class to view code
- 7. Click the big "play" button at the top of your IDE OR Click "Ctrl + F5" to run the prototype.

#### Option 3 (Github)

- Open this link in your browser -<a href="https://github.com/Angelo-Traverso/AngeloTraverso\_ST10081927\_PROG7312\_PART1.git">https://github.com/Angelo-Traverso/AngeloTraverso\_ST10081927\_PROG7312\_PART1.git</a>
- 2. Choose the green button "Code"
- 3. Copy the url displayed
- 4. In your command prompt, use "cd" command to change directories to where you want to store this application.
- 5. Once your in your desired file, type "git clone <a href="https://github.com/Angelo-Traverso/AngeloTraverso\_ST10081927\_PROG7312\_PART1.git">https://github.com/Angelo-Traverso/AngeloTraverso\_ST10081927\_PROG7312\_PART1.git</a> followed by the "Enter" key.
- 6. From here you can follow Option 1 step 2.

## Usage Guide

- 1. When launching the game, you will be presented with a menu screen to select your game, for now you only have 2 options available, Replace Books, and Identify areas.
- 2. Once you launch the new game "Identify Areas", you will be presented with 2 columns, one with 4 options, and one with 7 columns.
- 3. You need to match the left column items with the right column items.
- 4. Keep in mind that only 4 of the 7 are correct answers, and 3 are incorrect.
- 5. If you are ready to play, you can simply click the "Play" button in the middle of the screen.
- 6. Once you have finished a game, you can click the "Restart" button presented in the middle of the screen.
- 7. Try to beat your best time by completing the game quicker than your previous time!
- 8. Note: You can only "Win" a game by matching all 4 questions correctly.

## Usage Guide (Finding Call Numbers game)

- 1. When you first launch, you will notice your lives at the top left, with the levels and their depiction in the bottom left of the screen.
- 2. When the game launches, you will need to click "Ready" to start your game.
- 3. Each game has 3 rounds, each round delves deeper and deeper into the dewey decimal system.
- 4. Round 1 is blue and displays the top level as options such as (100, 200 etc)
- 5. Round 2 is orange and displays the second levels as options (110, 120 etc)
- 6. Round 3 is pink and shows all lowest levels as options such as (111, 112 etc)
- 7. If you get something wrong, you will lose a life and get a message saying you got it incorrect.
- 8. Each game gives you only 3 lives, if you die within those lives, you will have to restart and try again.

## **Issues Running?**

Error: "Couldn't process file 'path' due to its being in the Internet or Restricted zone or having the mark of the web on the file"

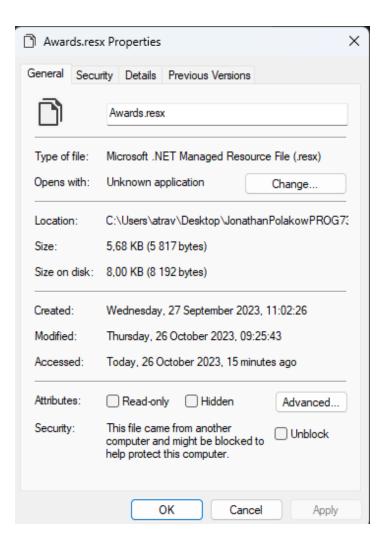
According to Microsoft documents "This error occurs when MSBuild attempts to process a file downloaded from the web with security restrictions.

When you download web assets such as HTML pages to a Windows device using a browser, the browser inserts a marker called the mark of the web, which records the security zone of the site from which the page originated. This is intended to protect from potentially malicious pages and enforce the security level on the original site, even after a page from the site is downloaded. This security check is required due to this security issue: Visual Studio Remote Code Execution Vulnerability CVE-2018-8172.

In order to fix this issue, you will have to navigate to DeweyDecimal\_Latest\Forms **AND** \UserControls, for every file extension ending with ".resx", you will have to right click the file, and go to properties. From there, you will find a small check box at the bottom that says "Unblock". You can then proceed to run again.

#### Link to known issue:

https://learn.microsoft.com/en-us/visualstudio/msbuild/errors/msb3821?view=vs-2022&f1url=%3 Fappld%3DDev16IDEF1%26l%3DEN-US%26k%3Dk(MSBuild.GenerateResource.MOTW)%3Bk(TargetFrameworkMoniker-.NETFramework%2CVersion%253Dv4.8)%26rd%3Dtrue



#### File Structure

- All files will be found under "Solution Explorer"
- All images are stored in bin/debug/Images
- All models are stored under /Models
- All sound effects are stored in bin/debug/Sound\_Effects

#### **Predefined Value**

In order to make testing easier, a predefined value of 35 seconds is made for your personal best time. This is so that testing a quicker score is much quicker and easier.

# **Class Library**

A class library was created to handle the timer and its ticks for the game

# Github Repo Link

https://github.com/Angelo-Traverso/AngeloTraverso\_ST10081927\_PROG7312\_PART1.git

## **Student Information**

Name: Angelo Surname: Traverso

Student Number: ST10081927 Subject: Programming 3B Subject Code: PROG7312

Part: 2

## **REFERENCES**

- I made use of an external library called Control.Draggable()
  - https://github.com/intrueder/Control.Draggable
- I also made use of ChatGPT to help refine some of my code and UI.
- Csv file of dewey decimal was used form (OCLC, 2005).
- OCLC (2005) *Terms*, *OCLC*. Available at: https://www.oclc.org/research/activities/browser/terms.html (Accessed: 20 November 2023).