cView App – Phase 1

Instructor: Dr. Raman Adaikkalavan

Points: 30 Assigned: 5/27/15 @ 8 a.m. Due: 6/3/15 @ 8 a.m.

PROJECT DESCRIPTION

Open source software spurs innovation and competition. Open data allows citizens to learn more about their city, state, country, and even more. It allows them to explore all services offered, status of various items, financial health, and much more. Currently, many government entities have made their data open (see http://www.data.gov), so that citizens can use them. As software developers, one of the main goal is to convert data to meaningful information and make them easily accessible to general public. For instance, look at some of the current apps that process open data @ http://www.data.gov/applications

Fortunately, City of South Bend has made its data open https://data.southbendin.gov/

This semester, we will build an app that allows us to explore some of this data, and present them in a meaningful way. Our main goal is to explore C# programming and we will use this app building experience to learn C# and many of its features. This app will be built via multiple phases throughout the semester.

PHASE 1 DESCRIPTION

Go to South Bend Open Data website and explore various data sets available. We are interested in the following three data sets:

1) Business Licenses: https://data.southbendin.gov/Business/Business-Licenses/imxu-7m5i
2) Parks and locations: https://data.southbendin.gov/Parks-Recreation/Parks-Locations-and-Features/yf5x-7tkb
3) Public facilities: https://data.southbendin.gov/Health-Human-Services/Public-Facilities/jeef-dsq9

Explore these data sets carefully and think what kind of simple app you can create that will allows users to navigate some of the data easily. Remember, our ultimate goal is to present the entire data to users in a meaningful fashion. For this phase, choose one of the dataset and at least 6 fields that are most important from that data set. Create a C# app with the following:

- Your Main() should be as simple as possible and your code should be modularized to use functions.
- You app should be able to do the following and also use the specified C# components
    - Menu with options
    - Option 1) add an item through user input
    - Option 2) modify an item through user input
    - Option 3) search based on user input and display the matched results
    - Option 4) delete an item through user input
    - Option 5) display all the stored items
    - Option 6) exit

CHECKLIST

- Include program (Name, Assignment Info, Date, Your Info, Language Used, etc.) and function (input, output, purpose) headers
- Include comments for each logical block
- Use constants where required. Avoid using literals.
- Check for valid inputs
- You application must use only the C# components (or things closely related) discussed so far in this course. If you are not sure, send me a message well ahead of time for my inputs. The following are the minimal requirements.
    - Use of Jagged arrays or List collection
    - Basic Try catch
    - Use of foreach

SUBMISSION

- Name the project as cView-P#-yourName (where # is the phase number)
- Run your program. Capture the screen shots to demonstrate the program's execution using Sniptool or other software and store the screen shots in a word document. Convert the word document to a PDF and name the PDF as cView-P#-yourName.pdf Submit the PDF file with screen shots.
- Zip the entire cView-P#-yourName Visual Studio folder and upload the zip file cView-P#-yourName.zip to Oncourse
- Upload cView-P#-yourName.pdf to Oncourse

- Submit printouts of the source (.cs) and snapshot (.pdf) files