CS 2412 - Assignment #10: File Explorer (60 points)

Overview

In this assignment, you are asked to build a file explorer application. The application must display the tree view and list view of all files and directories in a specified path. The user must be able to list, search for, and delete a specified file or directory.

You are asked to

1. Build an **SDI windows form application**. It is totally fine if you'd prefer to build an MDI application.
2. Use `ListView`, `TreeView` controls. Use other controls as needed (i.e. `Button`s, `TextBox`es, `Label`s, etc.).
3. Use **Collections**. It is expected to use at least one collection of your choice.
4. Use **LINQ queries**, for searching purposes.
5. Perform the following operations **asynchronously**:
    a. List the content of a directory
    b. Search for a file, directory, or file type
    c. Delete a file or directory

Introduction

Write an app that the user can

1. *Enter a path (directory) and browse it*.
    This operation must be done asynchronously. The app must update the list view and the tree view.

2. *Click on a directory on the tree view and see the listed content of the directory on the list view*.
    This operation must be done asynchronously. The app must update the path as well.

3. *Click on a directory on the list view and see the listed content of the directory on the list view.*
    This operation must be done asynchronously. The app must update the path as well.

4. *Search for a specified directory, file, or file type.*
    This operation must be done asynchronously. The result must be listed on the list view.

5. *Select multiple items on the list view using check boxes.*
6. *Delete the selected items on the list view.*
    This operation must be done asynchronously. The list view must be update after the operation is completed.

It is totally up to you to design your app, although it is recommended to put the tree view on the left side and the list view on the right side of the window. You can reuse any example discussed in the class. It is easily extendable to a complicated app. Your app just needs to perform all the described functionalities. But try to keep it as simple as possible.

Notes

- Due: Thursday April 30th at 11:59pm
- Submit your document and entire Visual Studio solution directory as a .zip file called hw10_<yourFullname>.zip.