Assignment 3

Windows Presentation Foundation

# Purpose

* Create a basic media player using Windows Presentation Foundation

# Due Date/Course Weight

This assignment must be demonstrated by: **5:59:59pm April 18th 2012**

* NOTE: Late assignments will not be accepted.

This assignment is wroth: **10% of your total course mark**

# Assessment

When you are ready to demo your results please print off the Assignment Assessment page provided on Blackboard. Provide your Name and Student Number.

# Summary of Tasks

Listed below are the sections of the assignment which will need to be completed:

1. Read every word in the assignment
2. Create a new WPF project
3. Modify the Grid
4. Add Controls
5. How it will work
6. Play that sweet music

# Create a new WPF Project

Follow the instructions below to create a new Windows Presentation Foundation project:

* Open Visual Studio 2010
* File -> New Project. The New Project window will appear.
* Select ‘Visual C#’ from the Install Templates list
* Select ‘Windows’ from the ‘Visual C#’ list.
* Select the ‘WPF Application’ template
* Name the application Assignment3
* Choose the location (path) where you want to save the new project.
* Click ‘OK’

# Modify the Grid

When the project was created it automatically generated two XAML files for you; App.xaml and MainWindow.xaml.   
  
Modify the Grid control MainWindow.xaml by adding Row and Column definitions. Divide the grid into two rows and two columns.

# Add Media Player Controls

Add media player controls to your new grid.

* In the top left add a vertical StackPanel
  + Add a Button to the StackPanel, the text should read ‘Open Files’
  + Add a ListView control to the StackPanel
* In the top right add a MediaElement control
* In the bottom left add a Label
* In the bottom right add a horizontal StackPanel
  + Add a Button to the StackPanel, the text should read ‘Stop’
  + Add a Button to the StackPanel, the text should read ‘Play’

# How it will work

The following section describes how the application will function:

* Button “Open Files”
  + This button will employ the use of the “OpenFileDialog” to add media files to your media player
  + The OpenFileDialog will only be allowed to select media files such as MP3s or AVIs
* ListView
  + The list view will contain all of the files selected by the OpenFileDialog and will act as the current playlist you are viewing
  + Have the list view display the path information of the selected file
  + If the user double clicks on an object in the list have the media player open that file
* The MediaElement will play a selected media file from your current playlist
* The Label in the bottom right corner will display the filename of the current file being played by the MediaElement
* Button “Stop”
  + Causes the MediaElement to stop playing
* Button “Play”
  + Causes the MediaElement to play the selected media file from the ListView. If nothing is selected it will play the first media file it finds in the list.

# Play that sweet music

Demo the assignment to your lab professor.

# Optional Assignment

Instead using WPF on your Windows Desktop use WPF (Silverlight) on the Windows Phone to create the Media Player.

The phone functions significantly different from programming for Windows so this assignment is not for everyone.

Those who complete this assignment will be given an extra 3% added to their total overall grade.

# Optional Assignment 2

Instead using WPF on your Windows Desktop or WPF (Silverlight) on the Windows Phone create the Media Player using the Windows 8 WPF Metro runtime (WinRT).

WinRT is also significantly different from traditional Windows application programming… this assignment is also not for everyone.

Those who complete this assignment will be given an extra 5% added to their total overall grade.