

Day 9

The one link you need to recall

<https://ddls.to/20483>

Ready?

Do this every day BEFORE the class starts (takes about 15 minutes)
(<http://ddls.to/everyday>)

1. Launch Lab01.
2. Login to Lab01 as **Admin**.
3. While in the Lab01 environment,
 - i. run **cmd.exe** from the Windows Start button.
 - ii. Run the command **git clone --depth 1 <https://github.com/Mark-AIICT/CAD-2.git> C:\Users\Admin\Desktop\MarksFiles**
 - iii. Navigate to **C:\Users\Admin\Desktop\MarksFiles\setups**, then right-mouse click **bootstrap.cmd** and run as administrator
 - iv. While it's running, Sign in to Visual Studio on the Lab Environment. You can use any Microsoft account.
 - v. When the script end it reboots the Virtual Machine. That's necessary.
 - vi. Save the lab. (the save link is at the top right of the screen in the dropdown menu)

Course Outline

- Module 1: Review of Visual C# Syntax
- Module 2: Creating Methods, Handling Exceptions, and Monitoring Applications
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- Module 4: Creating Classes and Implementing Type-Safe Collections
- Module 5: Creating a Class Hierarchy by Using Inheritance
- Module 6: Reading and Writing Local Data
- Module 7: Accessing a Database
- Module 8: Accessing Remote Data (I'm replacing this with a better module)
- Module 9: Designing the User Interface for a Graphical Application
- Module 10: Improving Application Performance and Responsiveness
- Module 11: Integrating with Unmanaged Code
- Module 12: Creating Reusable Types and Assemblies
- Module 13: Encrypting and Decrypting Data



Hello

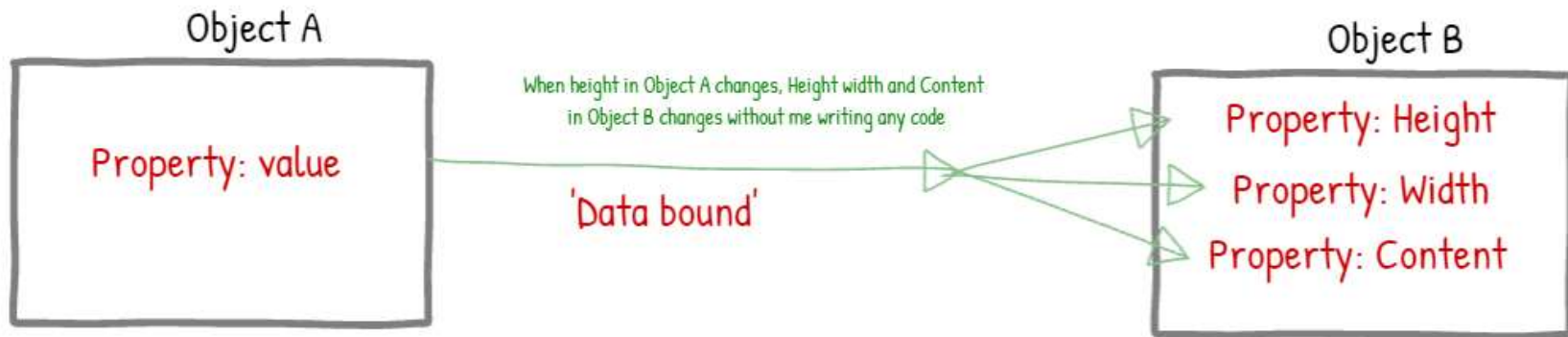
last time message was displayed: 11:10:22 PM

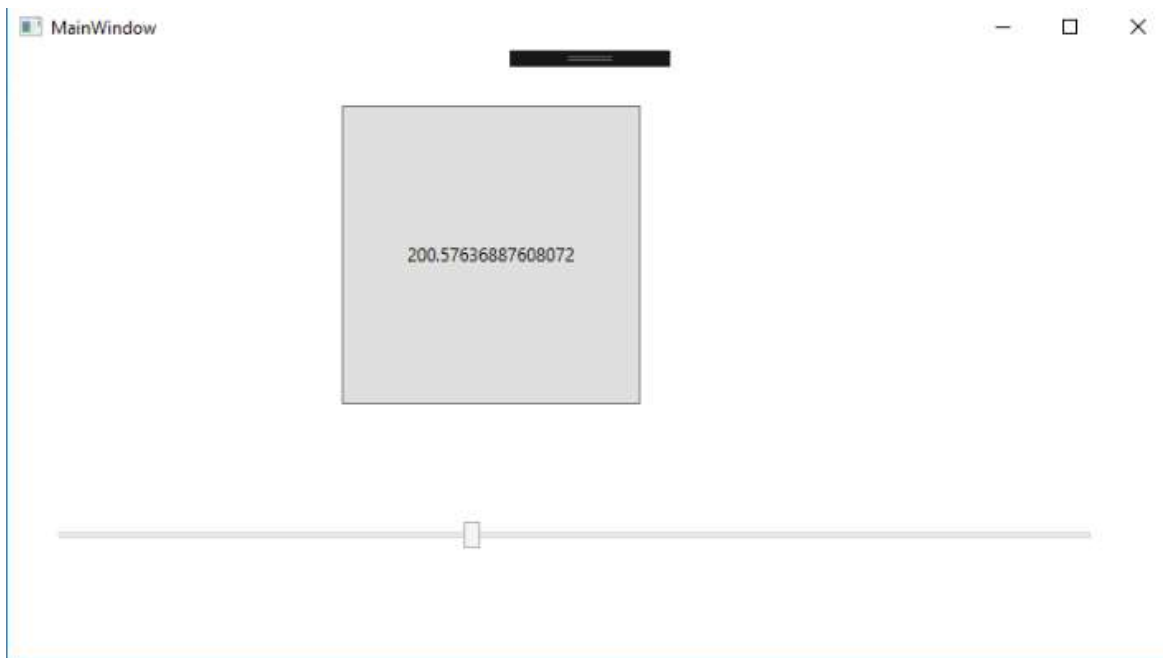
Files: c:\windows\bfsvc.exe
c:\windows\bootstat.dat
c:\windows\Enterprise.xml
c:\windows\explorer.exe
c:\windows\HelpPane.exe



Lesson 1: Using XAML to Design a User Interface

- Introducing XAML
- Common Controls
- Setting Control Properties
- Handling Events
- Using Layout Controls
- Creating User Controls





Lesson 2: Binding Controls to Data

- Introduction to Data Binding
- Binding Controls to Data in XAML
- Binding Controls to Data in Code
- Binding Controls to Collections
- Creating Data Templates

Creates an instance of a
Coffee object

MainWindow.XAML

```
<Window.Resources>
  <local:Coffee x:Key="coffee1" Name="Fourth Coffee Quencher"
    Bean="Arabica"
    CountryOfOrigin="Brazil"
    Strength="3" ></local:Coffee>
</Window.Resources>

<Grid>
  <TextBlock Background="Yellow" Text="{Binding Source={StaticResource coffee1}, Path=Name}" Margin="0,0,0,0" />
  <StackPanel Background="Gray" Margin="0,53,0,194" />
  <StackPanel.DataContext>
    <Binding Source="{StaticResource coffee1}" />
  </StackPanel.DataContext>
  <TextBlock Text="{Binding Path=Name}" />
  <TextBlock Text="{Binding Path=Bean}" />
  <TextBlock Text="{Binding Path=CountryOfOrigin}" />
  <TextBlock Text="{Binding Path=Strength}" />
</StackPanel>

  <StackPanel Background="LightGreen" x:Name="SPH" Margin="0,148,0,99" Orientation="Horizontal">
    <TextBlock Text="{Binding Path=Name}" />
    <TextBlock Text="|"/>
    <TextBlock Text="{Binding Path=Bean}" />
    <TextBlock Text="|"/>
    <TextBlock Text="{Binding Path=CountryOfOrigin}" />
    <TextBlock Text="|"/>
    <TextBlock Text="{Binding Path=Strength}" />
  </StackPanel>

  <TextBlock Background="Coral" x:Name="TB" Margin="0,246,0,32" />
</Grid>
```

MainWindow

Fourth Coffee Quencher

Fourth Coffee Quencher

Arabica

Brazil

3

Rocket|Rifle|PNG|5

Rocket

Classes.cs

```
public class Coffee
{
  public string Name { get; set; }
  public string Bean { get; set; }
  public string CountryOfOrigin { get; set; }
  public string Strength { get; set; }
}
```

```

<Grid>

<ListBox x:Name="cfList" Margin="30,29,144,43">
  <ListBox.ItemTemplate>
    <DataTemplate>
      <Grid>
        <Grid.RowDefinitions>
          <RowDefinition Height="2*" />
          <RowDefinition Height="*" />
          <RowDefinition Height="*" />
          <RowDefinition Height="*" />
        </Grid.RowDefinitions>
        <TextBlock Text="{Binding Path=Name}" Grid.Row="0" FontSize="22" Background="Black" Foreground="White" />
        <TextBlock Text="{Binding Path=Bean}" Grid.Row="1" />
        <TextBlock Text="{Binding Path=CountryOfOrigin}" Grid.Row="2" />
        <TextBlock Text="{Binding Path=Strength}" Grid.Row="3" />
      </Grid>
    </DataTemplate>
  </ListBox.ItemTemplate>
</ListBox>

</Grid>
</Window>

```

Each item in the
listbox will be a grid

Grid has 4 rows

This is the format
for each item in the
listbox

Diagnostics session: 35 second

20s

Events

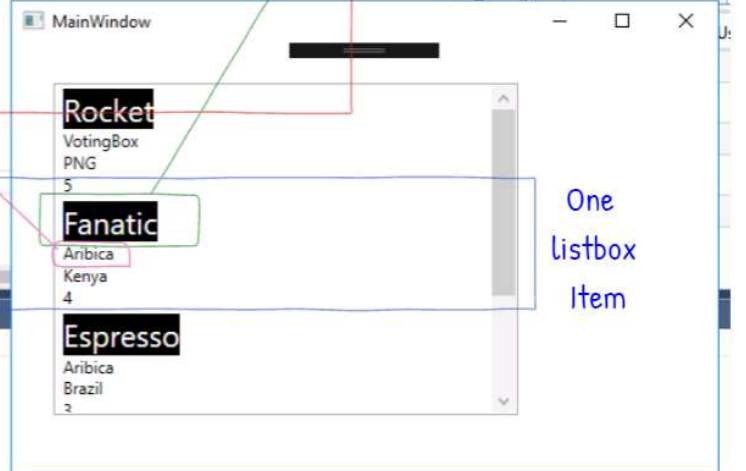
Process Memory (MB)

64

CPU (% of all processors)

100

0

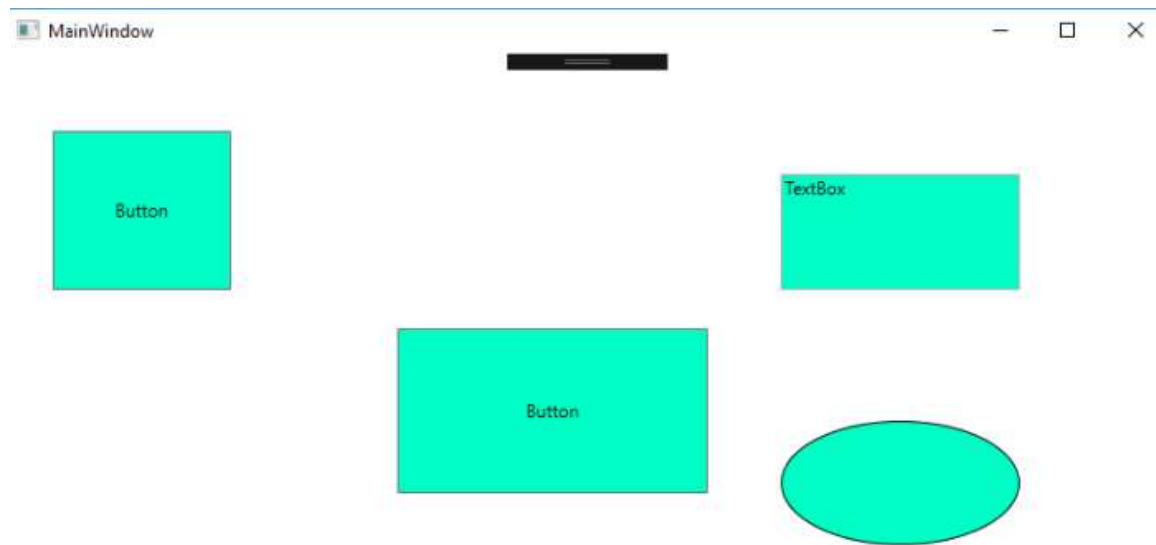


One
listbox
item

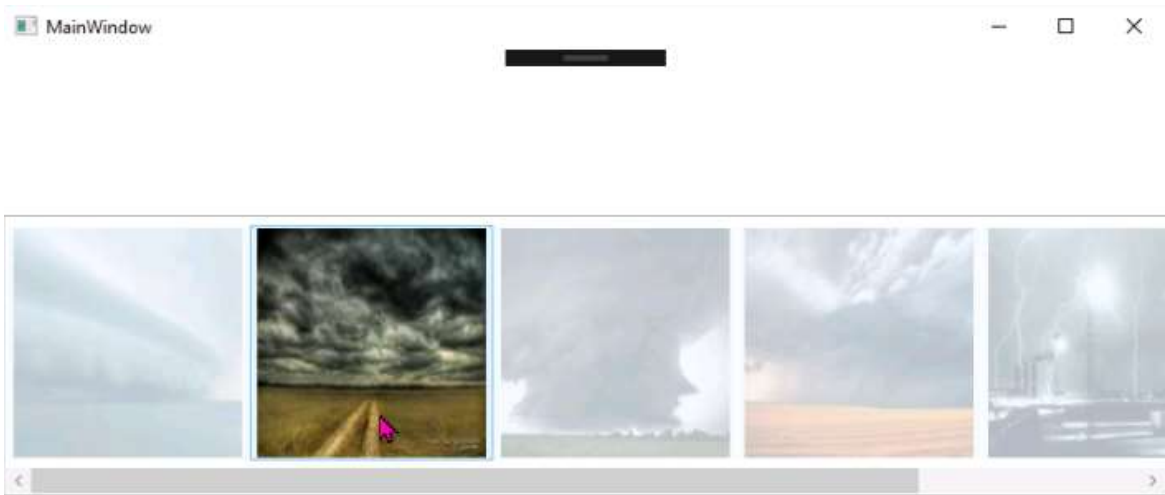
Value	Type	Call Stack

Lesson 3: Styling a UI

- Creating Reusable Resources in XAML
- Defining Styles as Resources
- Using Property Triggers
- Creating Dynamic Transformations



```
<Window x:Class="_00f_SolidColorBrushRes.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
        xmlns:local="clr-namespace:_00f_SolidColorBrushRes"
        mc:Ignorable="d"
        Title="MainWindow" Height="450" Width="800">
    <Window.Resources>
        <SolidColorBrush x:Key="MyBrush" Color="#FF00FFC5"/>
    </Window.Resources>
```



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