

Wpf

Resource

طريقة انك تحفظ بالاوبيكتس المهمة زى

Brushes, styles or template

علموا ليه الريسورس دى ليه

الفيدة

بعمل اوبيكت واحد فقط عن مثلا الفونت سايز وبعد كده تنزل تقوله البروبرتي بتاعك تساوى الريسورس

طب عيب الطريقة القديمة انه كان كل حاجة يعمالك

New object

والريسورس بقدر استخدمه فى اكتر من مكان

الري سورس بيكون متعرف فى

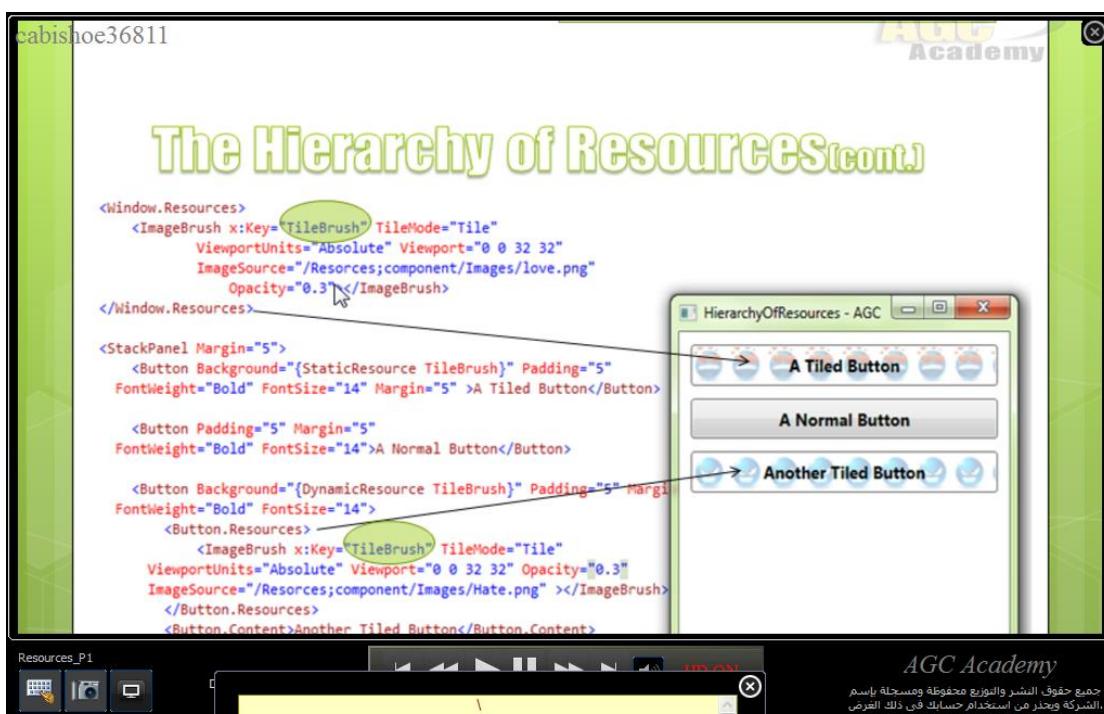
Frame work element

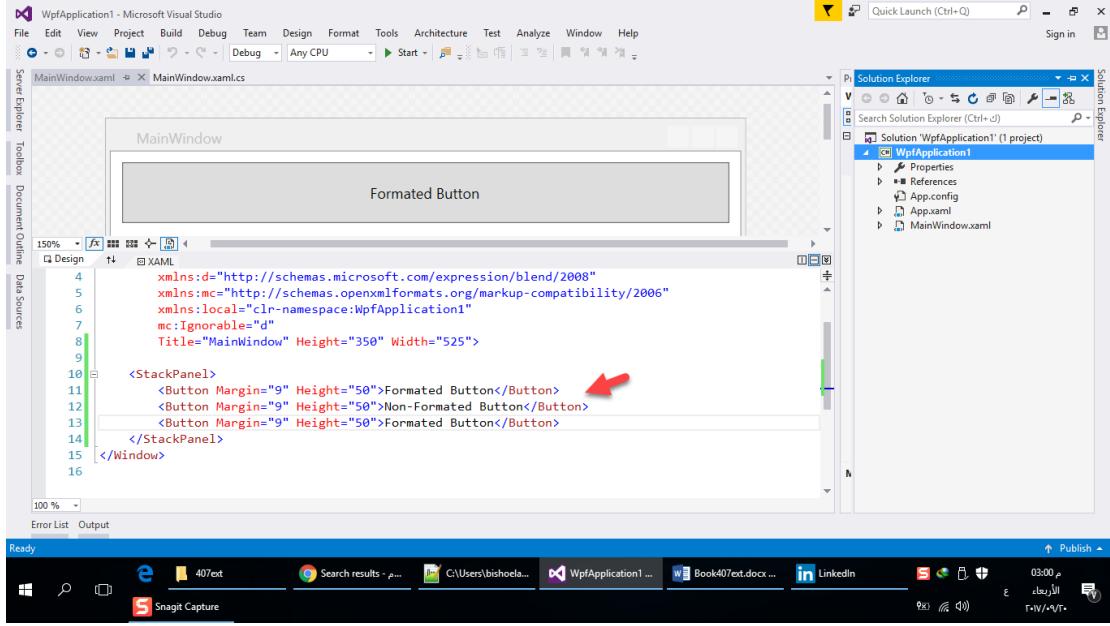
وتقدر تحط مجموعه من

Element

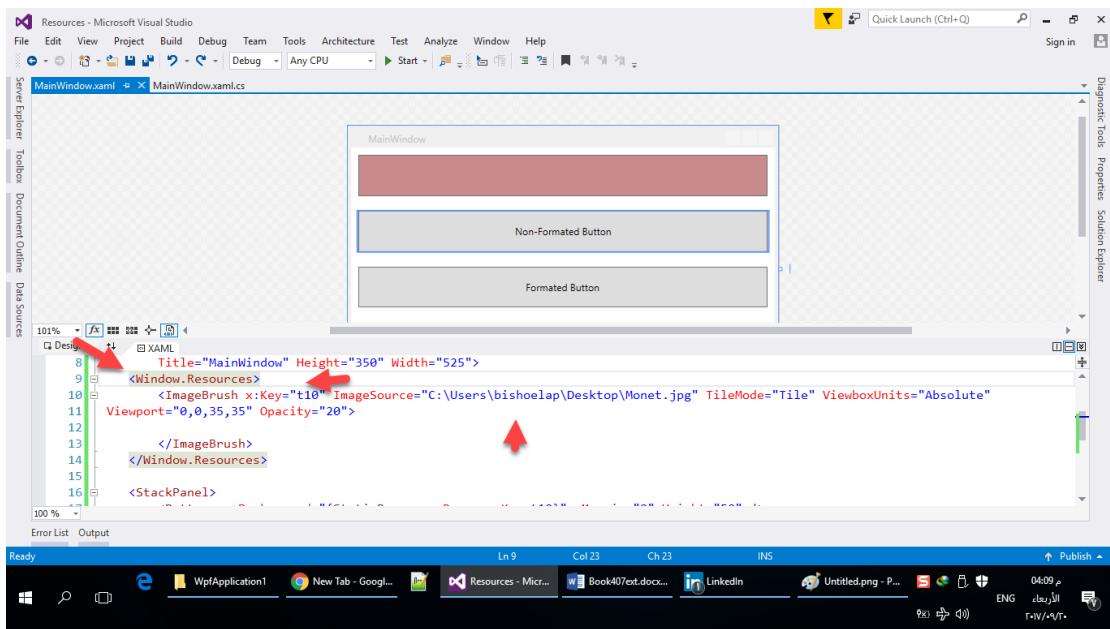
اي نوع لو فونت سايز او لون او شكل الخط

تعالى نشوف





عمل 3 زر



فوق بضم ويندو ريسورس

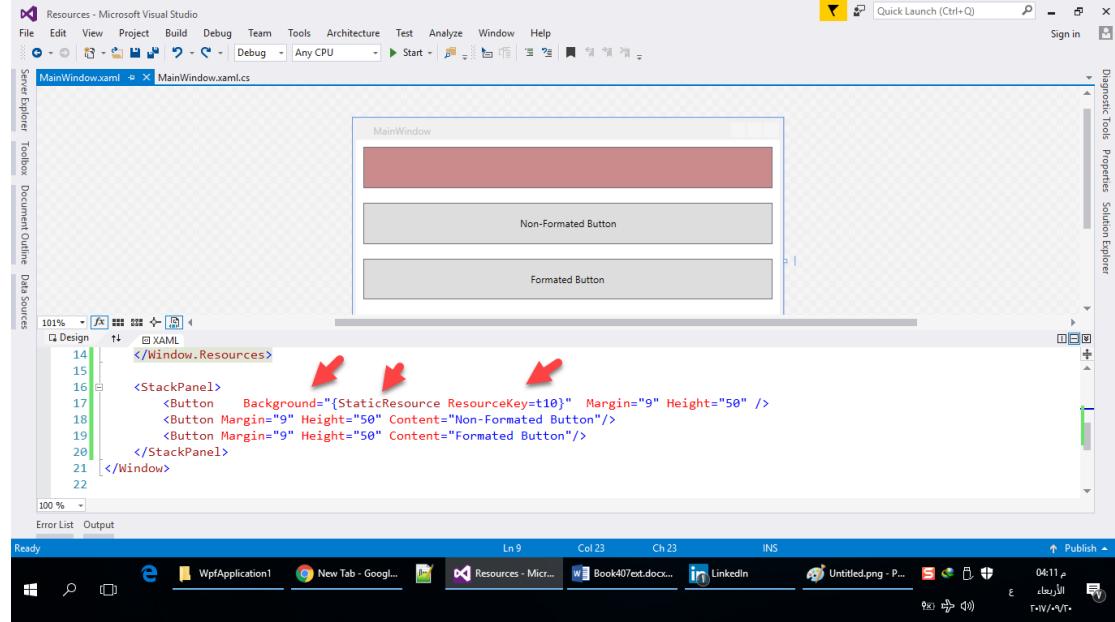
وبداخلها

Image brush

وبعمل

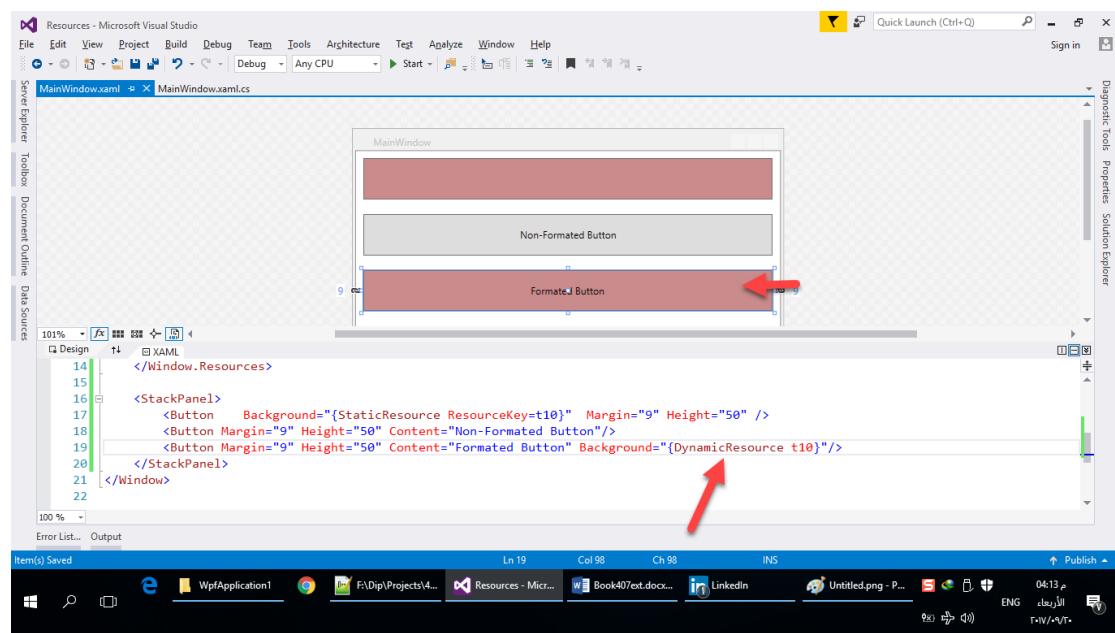
مفتاح لانه الريسورس بيكون له قيمة ومفتاح المفتاح لا ينكرر بعمل المفتاح وبمرر مسار الصورة باقى الخيارات هيت الشرحها فى دروس

Brush



بنزل تحت اقوله البالك جروند هتجبيها من الاستاتيك ريسورس

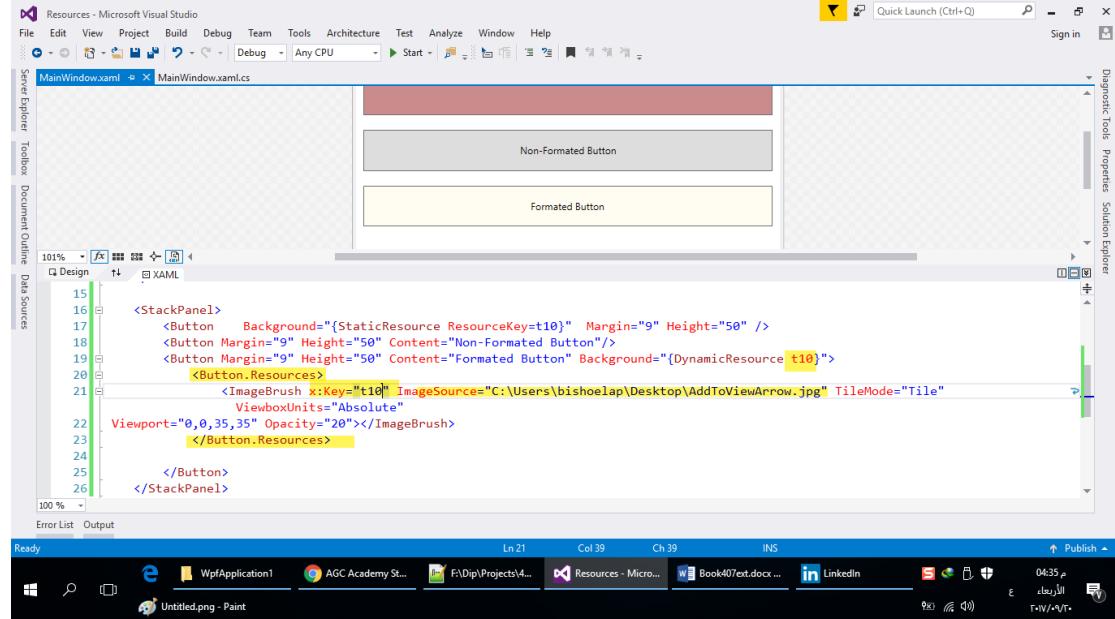
وامرر المفتاح وشوف لون المفتاح اتغير للون الصورة اللي حطتها فيه



شوف عملت ريسورس ديناميكي هنعرف الفرق بينهم بعدين بس شوف اتغيرت الخافية

بيكولوك كل

عنصر موجود ليه الري سورس بتاعته الخاصه بيه



بص هنا

غيرت الصورة وال

Resource

بتلاقيها في اي كنترول

عملت زر وجيبت الريوسس المهم مررت له ايمج براش بصورة مختلفة

تمام وروحت للزر المطلوب

واديه نفس

Key

نكم

ليه وانا بكتب اسم الصورة الجديدة مغيرش الريوسس اللي فوق والاتنين واحدين نفس المفتاح ليه

لاته السورس اللي فوق static

بيتعمل ها

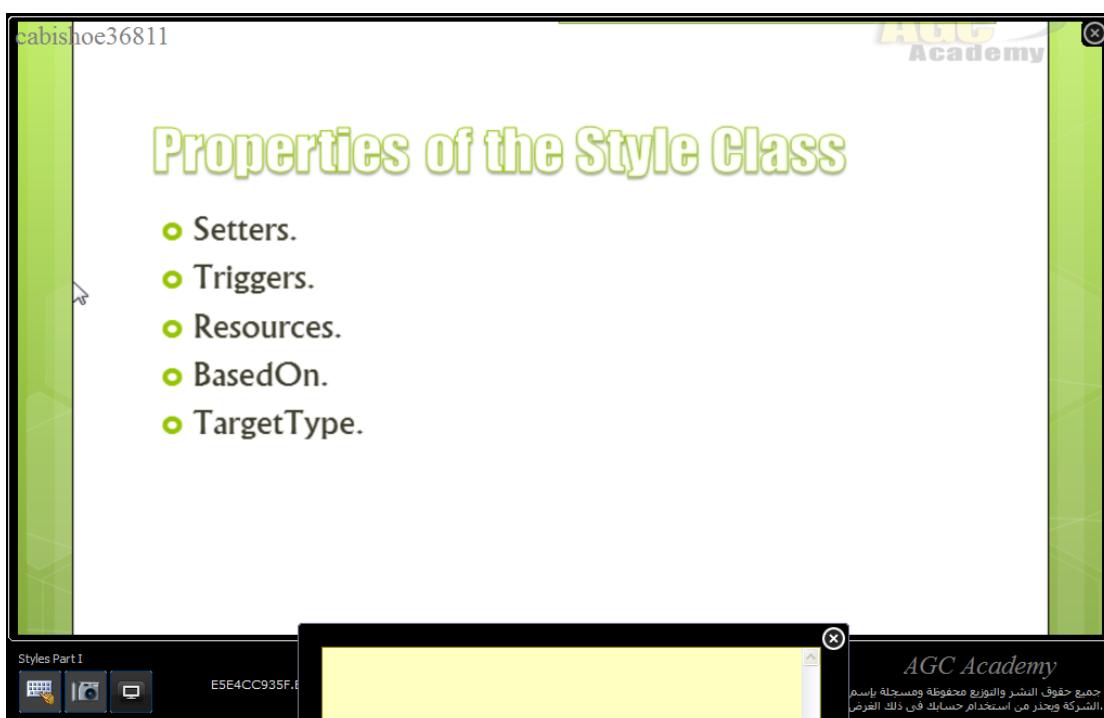
Initialize

مرة واحدة بس

وبعد كده بيتم استخدامها ولدوقتي لسه عامله فمعمولوش

Initialize

فمستخدموش على طول وده الفرق ولو نزلت تحت غيرت اسم المفتاح شيلت حرف واحد بس هيستخدم فورا صور الريوسس اللي فوق



هنشرح العناصر دى بالترتيب اولاً كتابة الاستايل اول صورة كما موضح

Style

The screenshot shows the Microsoft Visual Studio interface for a WPF application named "WpfApplication1". The main window title is "Resources - Microsoft Visual Studio". The menu bar includes File, Edit, View, Project, Build, Debug, Team, Tools, Architecture, Test, Analyze, Window, and Help. The toolbar includes icons for Undo, Redo, Cut, Copy, Paste, Find, Replace, and Save. The status bar at the bottom shows "Item(s) Saved", "Ln 14 Col 1 Ch 1 INS", and "Publish".

The left sidebar contains the Server Explorer, Toolbox, Document Outline, and Data Sources. The top navigation bar shows tabs for "MainWindow.xaml*" (selected), "MainWindow.xaml.cs", "MainWindow.xaml", and "MainWindow.xaml.cs".

The central area is the XAML editor, displaying the following XAML code:

```
68.29%  Design  XAML  
9    
10     <Style x:Key="BtnStyle">  
11         <Setter Property="Control.FontSize" Value="36"/>  
12         <Setter Property="Control.Background" Value="Black"/>  
13     </Style>  
14 </Window.Resources>  
15 <Grid>  
16     </Grid>  
17  
18 </Grid>
```

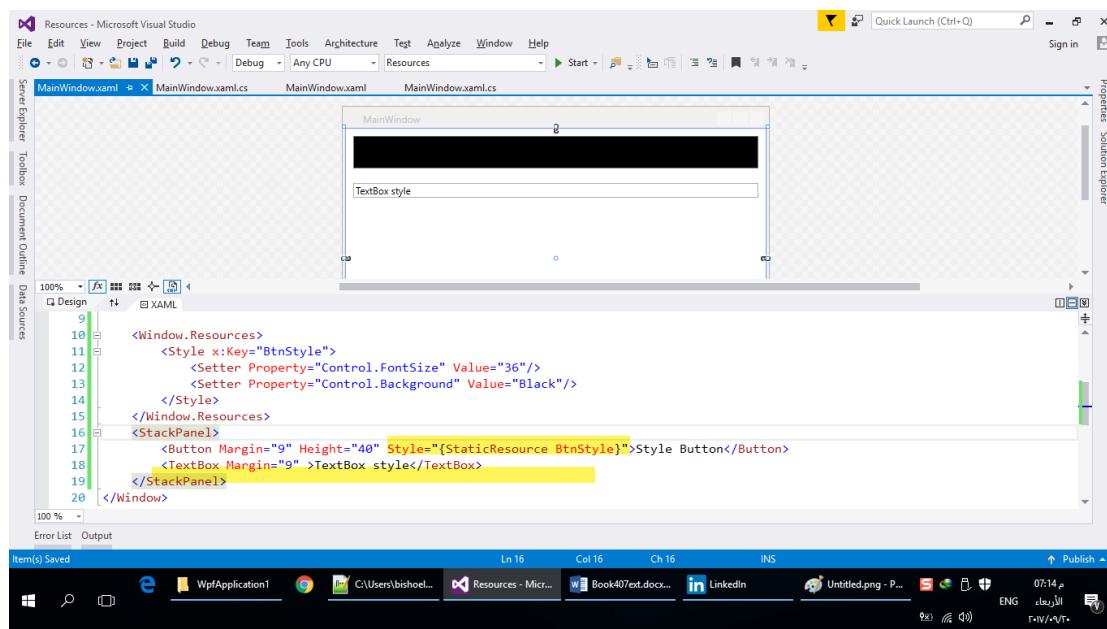
The code editor has syntax highlighting for XAML, with "Window.Resources" and "Style" blocks highlighted in yellow. The status bar indicates the current line is 14, column 1, and character 1, with "INS" mode active.

Setter

وبقوله البروبرتى واقوله كونترول

وكنترول دى يعني اى حاجة بتورث من كلاس الكنترول الكلام ده هيبقى عليها بمعنى كل الكنترول اللي الفيجوال بيست D:

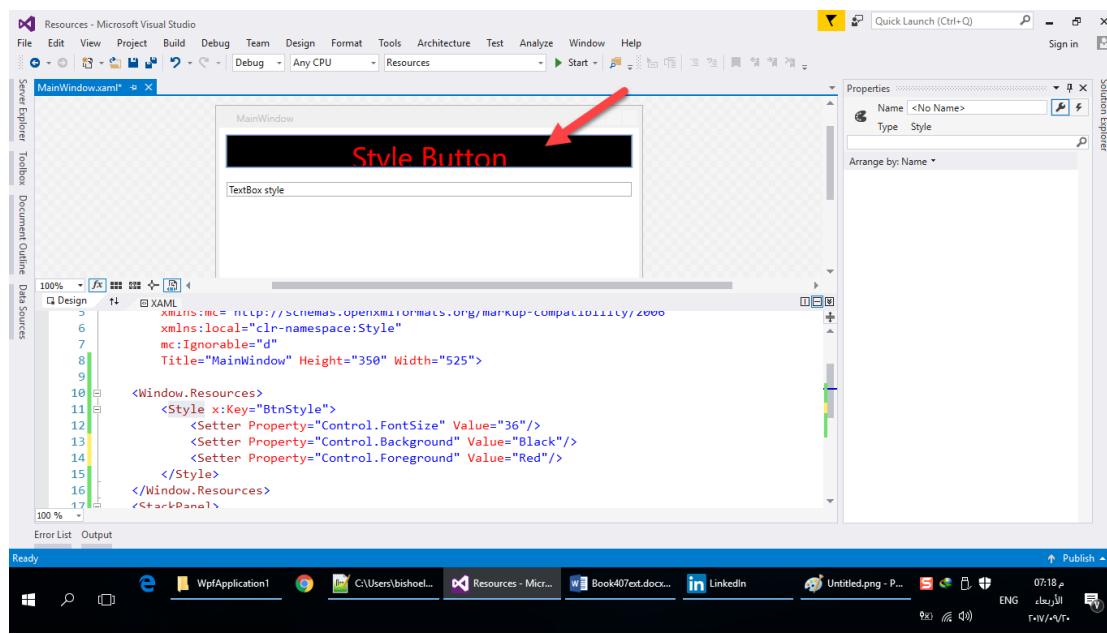
واسم البروبرتى او الخاصية بتعاتنا كذا وبعدين اقوله القيمة



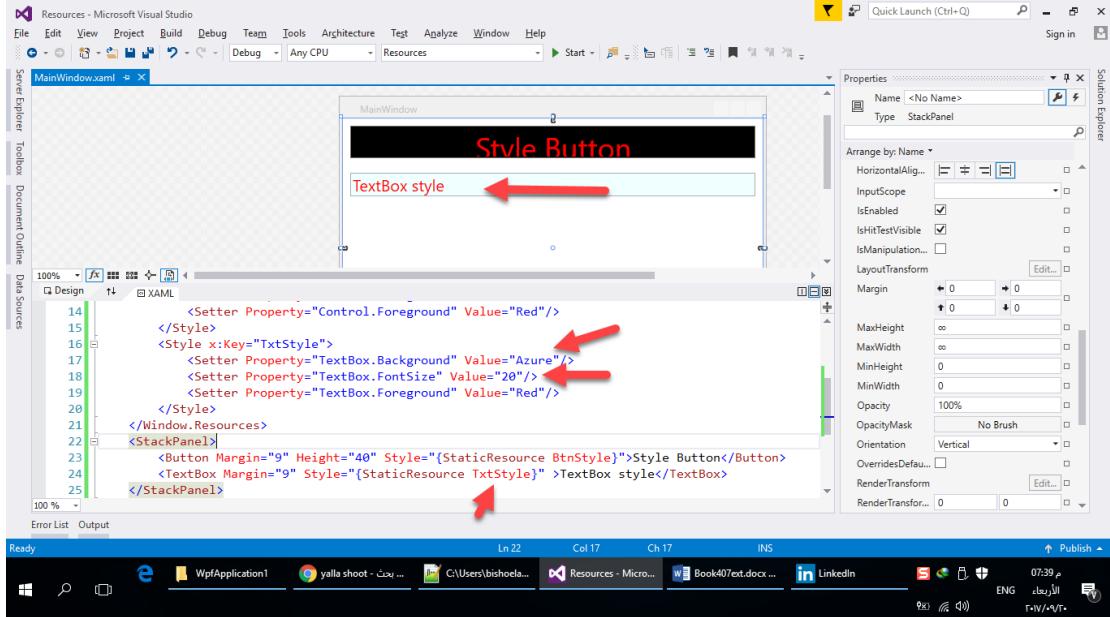
عمل تيكتست بوكس وزر

شوف الزر ناديت على الريسورس بتعاعي بتع الاستايل اطبق كما موضح

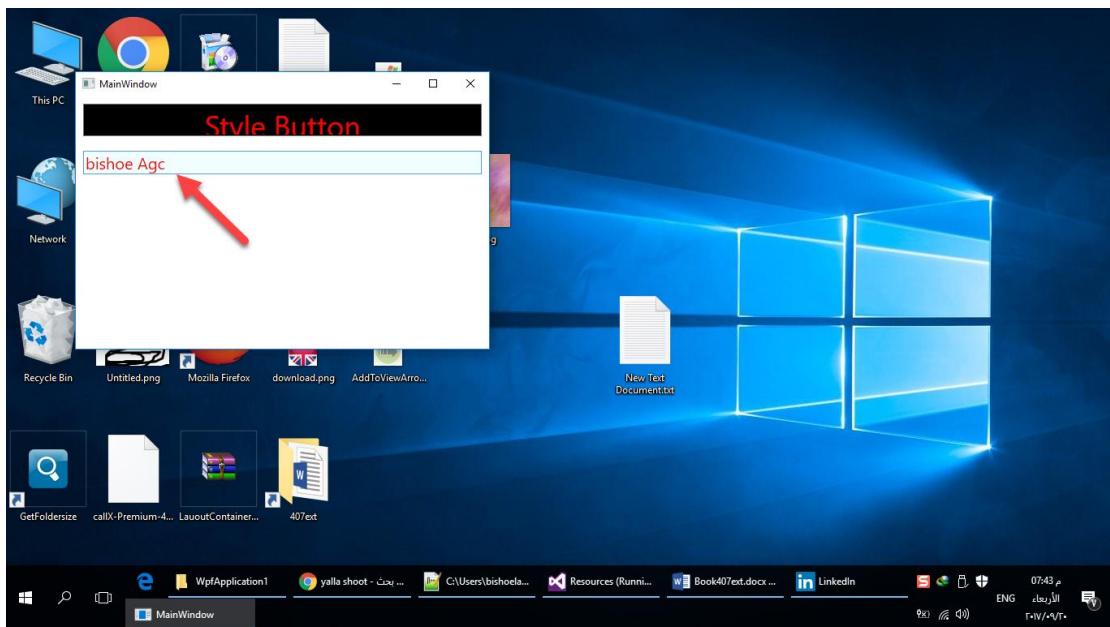
نكم



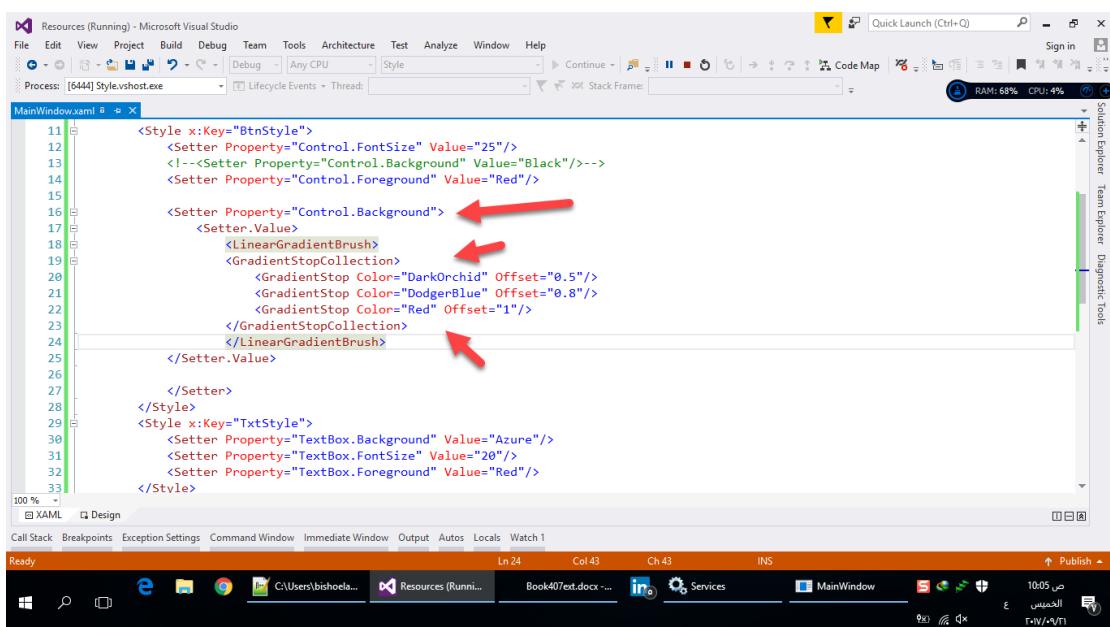
غيرت لون الخط



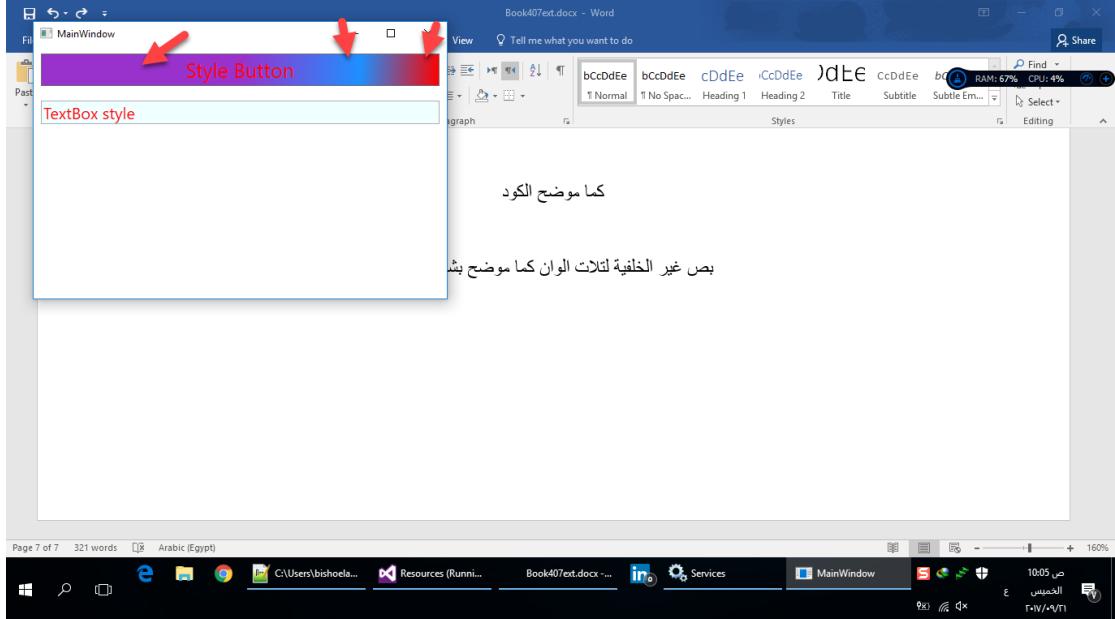
عملت ريسورس اخر للتيكست بوكس



كده عملنا استايل بالطريقة العاديه السهله تعالى نصعبهها شوية

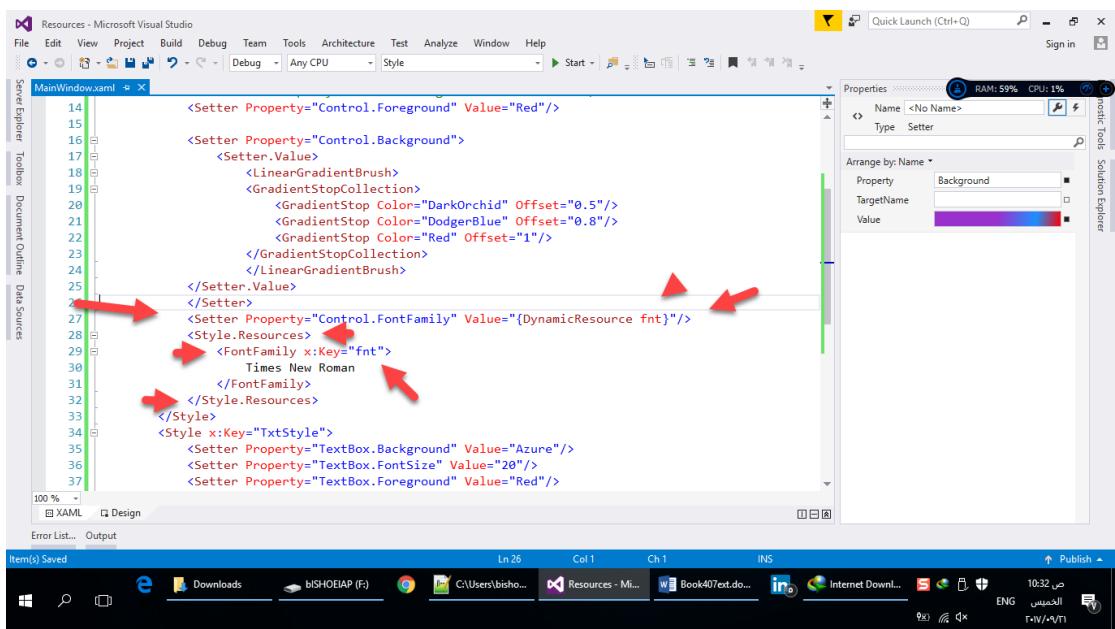


كما موضح الكود

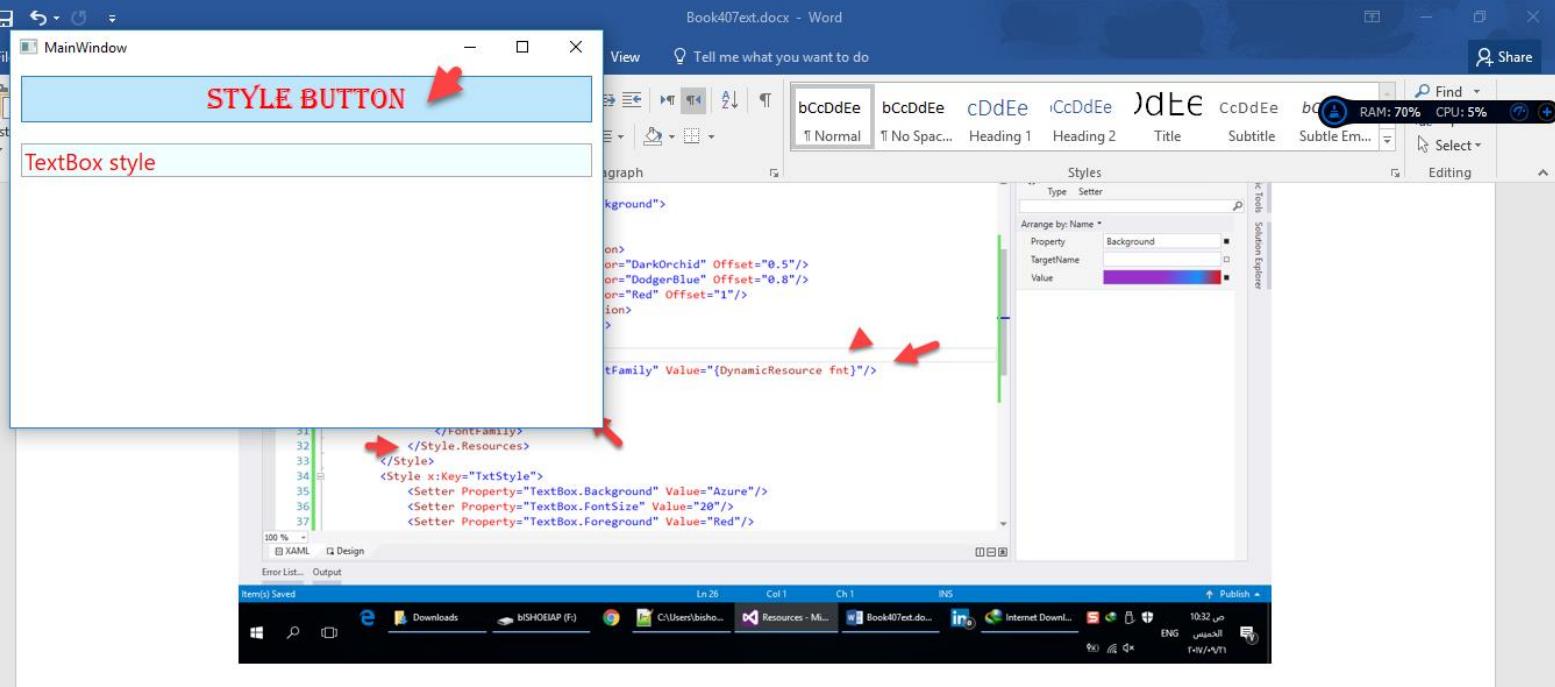


بص غير الخلفية لثلاث الوان كما موضح بشكل جميل

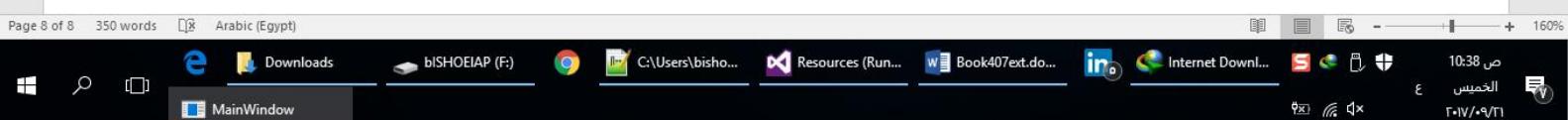
Style resource



غير شكل الاستايل انا هنا كتبت اسم الخط والتجربه غيرت اسمه باسم خط اوضح تعالى نشوف



غير شكل الاستايل انا هنا كتبت اسم الخط والتجربه غيرت اسمه لاسم خط اوضح تعالى نشوف



نشوف اسم الخط اتغير

Attaching Event Handlers

1. `<Style x:Key="MouseOverHighlightStyle">`
2. `<EventSetter Event="TextBlock.MouseEnter" Handler="element_MouseEnter" />`
3. `<EventSetter Event="TextBlock.MouseLeave" Handler="element_MouseLeave" />`
4. `<Setter Property="TextBlock.Padding" Value="5"/>`
5. `</Style>`

Handle events

1. `private void element_MouseEnter`
2. `(object sender, MouseEventArgs e)`
3. `{((TextBlock)sender).Background = new SolidColorBrush(Colors.LightGoldenrodYellow); }`
4. `private void element_MouseLeave(object sender, MouseEventArgs e)`
5. `{((TextBlock)sender).Background = null; }`



Style

The screenshot shows the Microsoft Visual Studio interface with the XAML editor open. The code in the XAML editor is:

```
1 <Window.Resources>
2   <Style x:Key="TxtEvents">
3     <EventSetter Event="TextBox.MouseEnter" Handler="TextBox_MouseEnter">
4       </EventSetter>
5     </Style>
6   </Window.Resources>
7   <Grid>
8     <TextBox>I m Text box</TextBox>
9   </Grid>
10 
```

Red arrows highlight several parts of the code: one arrow points to the opening `<Window.Resources>`, another to the `<Style x:Key="TxtEvents">` declaration, and others point to the `EventSetter` and its properties.

بنكتب اسم الايفنت فى Event

وده بيحصل لما الماوس يعدى على التيكست بوكس

The screenshot shows the Microsoft Visual Studio interface with the C# code editor open. The code in the C# editor is:

```
1 public partial class StyleEvent : Window
2 {
3   InitializeComponent();
4 }
5 private void TextBox_MouseEnter(object sender, MouseEventArgs e)
6 {
7   ((TextBox)sender).Background = new SolidColorBrush(Colors.Green);
8 }
9 private void TextBox_MouseLeave(object sender, MouseEventArgs e)
10 {
11   ((TextBox)sender).Background = null;
12 }
```

A red arrow points to the `Background` property assignment in the `TextBox_MouseEnter` event handler.

يعمل فويد وامر لون الخلفية

Resources - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Document Outline Data Sources

StyleEvent.xaml.cs* StyleEvent.xaml

Design XAML

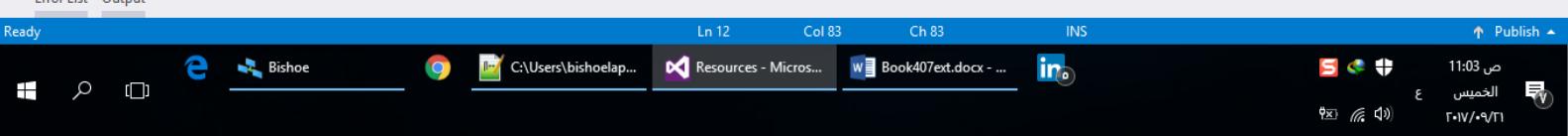
```
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Style"
7     mc:Ignorable="d"
8     Title="StyleEvent" Height="300" Width="300">
9     <Window.Resources>
10    <Style x:Key="TxtEvents">
11       <EventSetter Event="TextBox.MouseEnter" Handler="TextBox_MouseEnter"></EventSetter>
12       <EventSetter Event="TextBox.MouseLeave" Handler="TextBox_MouseLeave"/>
13    </Style>
14  </Window.Resources>
15  <Grid>
16    <TextBox Style="{StaticResource TxtEvents}">I m Text box</TextBox>
17  </Grid>
18 </Window>
19
20
```

Properties RAM: 73% CPU: 15%

Name <No Name>

Type Style

Arrange by: Name



بمر الرisors

تعالى نعمل لـ

Mouse leave

معمول فوق اهي تعالى نبرمجها

Resources - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

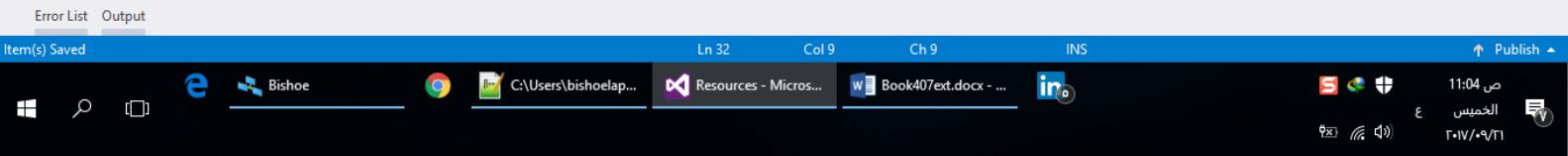
Server Explorer Toolbox

StyleEvent.xaml.cs* StyleEvent.xaml

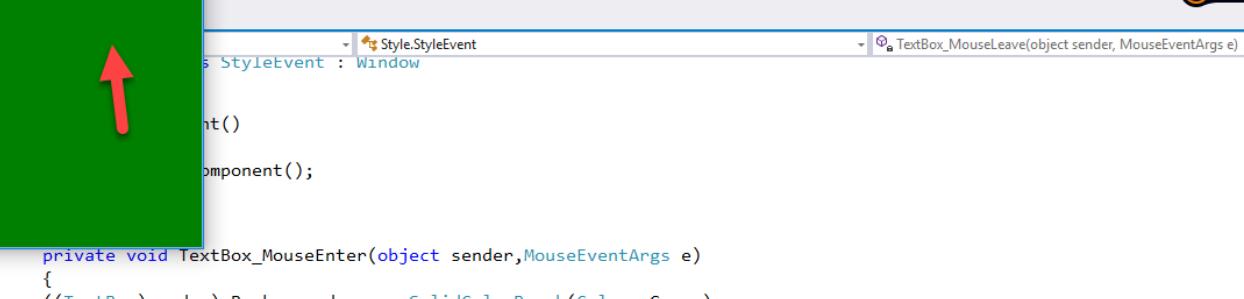
Style

```
20 public partial class StyleEvent : Window
21 {
22     // References
23     public StyleEvent()
24     {
25         InitializeComponent();
26     }
27     // Reference
28     private void TextBox_MouseEnter(object sender, MouseEventArgs e)
29     {
30         ((TextBox)sender).Background = new SolidColorBrush(Colors.Green);
31     }
32     // Reference
33     private void TextBox_MouseLeave(object sender, MouseEventArgs e)
34     {
35         ((TextBox)sender).Background = null;
36     }
37 }
38
39
```

Properties RAM: 73% CPU: 2%



بقوله لما ابعد بالماوس هتخلى الخلفية فارغه يعني لو منها بيقى ابيض نجرب



A screenshot of Microsoft Visual Studio showing a green tooltip labeled "I'm TextBox" positioned above a code editor window. The code editor displays C# code for a Windows application, specifically handling mouse events for a TextBox control. A red arrow points from the tooltip towards the code editor.

```
Resources (Running) - Microsoft Visual Studio
File StyleEvent - X
Tools Architecture Test Analyze Window Help
Any CPU Style Continue ...
Cycle Events Thread Stack Frame
Code Map RAM: 77% CPU: 11%
StyleEvent.cs
1 I'm TextBox
2 
3 public partial class StyleEvent : Window
4 {
5     public StyleEvent()
6     {
7         InitializeComponent();
8     }
9 
10    private void TextBox_MouseEnter(object sender, MouseEventArgs e)
11    {
12        ((TextBox)sender).Background = new SolidColorBrush(Colors.Green);
13    }
14 
15    private void TextBox_MouseLeave(object sender, MouseEventArgs e)
16    {
17        ((TextBox)sender).Background = null;
18    }
19 }
20 
21 
22 
23 
24 
25 
26 
27 
28 
29 
30 
31 
32 
33 
34 
35 
36 
37 
38 
39
```

غير الخلفية بمحمد مراد الماؤس، علم التكست يوكبر، ولما يبعد بيرجع لونها لابيض

Based on

The screenshot shows the Microsoft Visual Studio interface with the following details:

- Title Bar:** Resources - Microsoft Visual Studio
- Menu Bar:** File, Edit, View, Project, Build, Debug, Team, Tools, Architecture, Test, Analyze, Window, Help
- Toolbar:** Standard toolbar with icons for New, Open, Save, Print, etc.
- Toolbars:** Quick Launch (Ctrl+Q) and Sign in
- Solution Explorer:** Shows files BasedOnProp.xaml*, StyleEvent.xaml.cs, and StyleEvent.xaml
- Properties Window:** Shows a single item named <No Name> of type Style.
- Design View:** Displays a window titled "Button Font" with a central orange rectangular area labeled "Button Color".
- XAML Editor:** Shows the following XAML code:

```
100% fx Design XAML
  xmlns:local="clr-namespace:StyleEvent"
  mc:Ignorable="d"
  Title="BasedOnProp" Height="300" Width="300">
<Window.Resources>
  <Style x:Key="FontStyle">
    <Setter Property="Control.FontFamily" Value="Arial"/>
    <Setter Property="Control.FontSize" Value="20"/>
    <Setter Property="Control.FontWeight" Value="Bold"/>
  </Style>
  <Style x:Key="ColorStyleBasedOnFont" BasedOn="{StaticResource FontStyle}">
    <Setter Property="Control.Background" Value="Coral"/>
    <Setter Property="Control.Foreground" Value="FloralWhite"/>
  </Style>
</Window.Resources>

```
- Status Bar:** Ready, Ln 16, Col 1, Ch 1, INS
- Taskbar:** Shows icons for Edge, File Explorer, Google Chrome, Snagit Capture, and Book407ext.docx (L...)
- System Tray:** Shows icons for battery, signal strength, volume, and system status.

```

<Window.Resources>
    <Style x:Key="FontStyle">
        <Setter Property="Control.FontFamily" Value="Arial"/>
        <Setter Property="Control.FontSize" Value="20"/>
        <Setter Property="Control.FontWeight" Value="Bold"/>
    </Style>
    <Style x:Key="ColorStyleBasedOnFont" BasedOn="{StaticResource FontStyle}">
        <Setter Property="Control.Background" Value="Coral"/>
        <Setter Property="Control.Foreground" Value="FloralWhite"/>
    </Style>
</Window.Resources>

```

بعمل استايل كمان بس بضيف كلمة

Based on

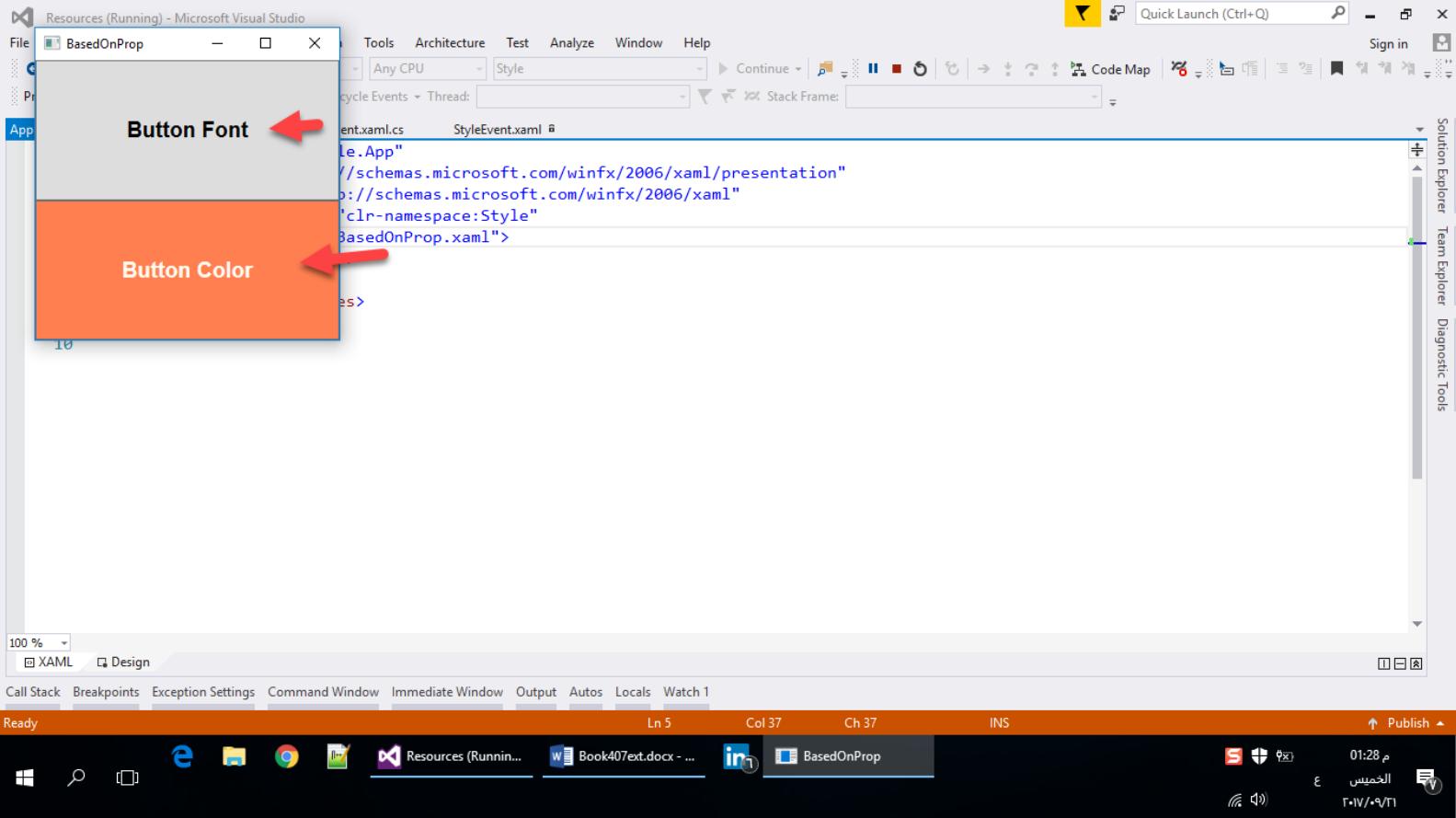
وامرر له مفتاح الاستايل اللي فوق

```

<Window>
    <Window.Resources>
        <Style x:Key="FontStyle">
            <Setter Property="Control.FontFamily" Value="Arial"/>
            <Setter Property="Control.FontSize" Value="20"/>
            <Setter Property="Control.FontWeight" Value="Bold"/>
        </Style>
        <Style x:Key="ColorStyleBasedOnFont" BasedOn="{StaticResource FontStyle}">
            <Setter Property="Control.Background" Value="Coral"/>
            <Setter Property="Control.Foreground" Value="FloralWhite"/>
        </Style>
    </Window.Resources>
    <Grid>
        <Grid.RowDefinitions>
            <RowDefinition/>
            <RowDefinition/>
        </Grid.RowDefinitions>
        <Button Style="{StaticResource FontStyle}">Button Font</Button>
        <Button Grid.Row="1" Style="{StaticResource ColorStyleBasedOnFont}">Button Color</Button>
    </Grid>
</Window>

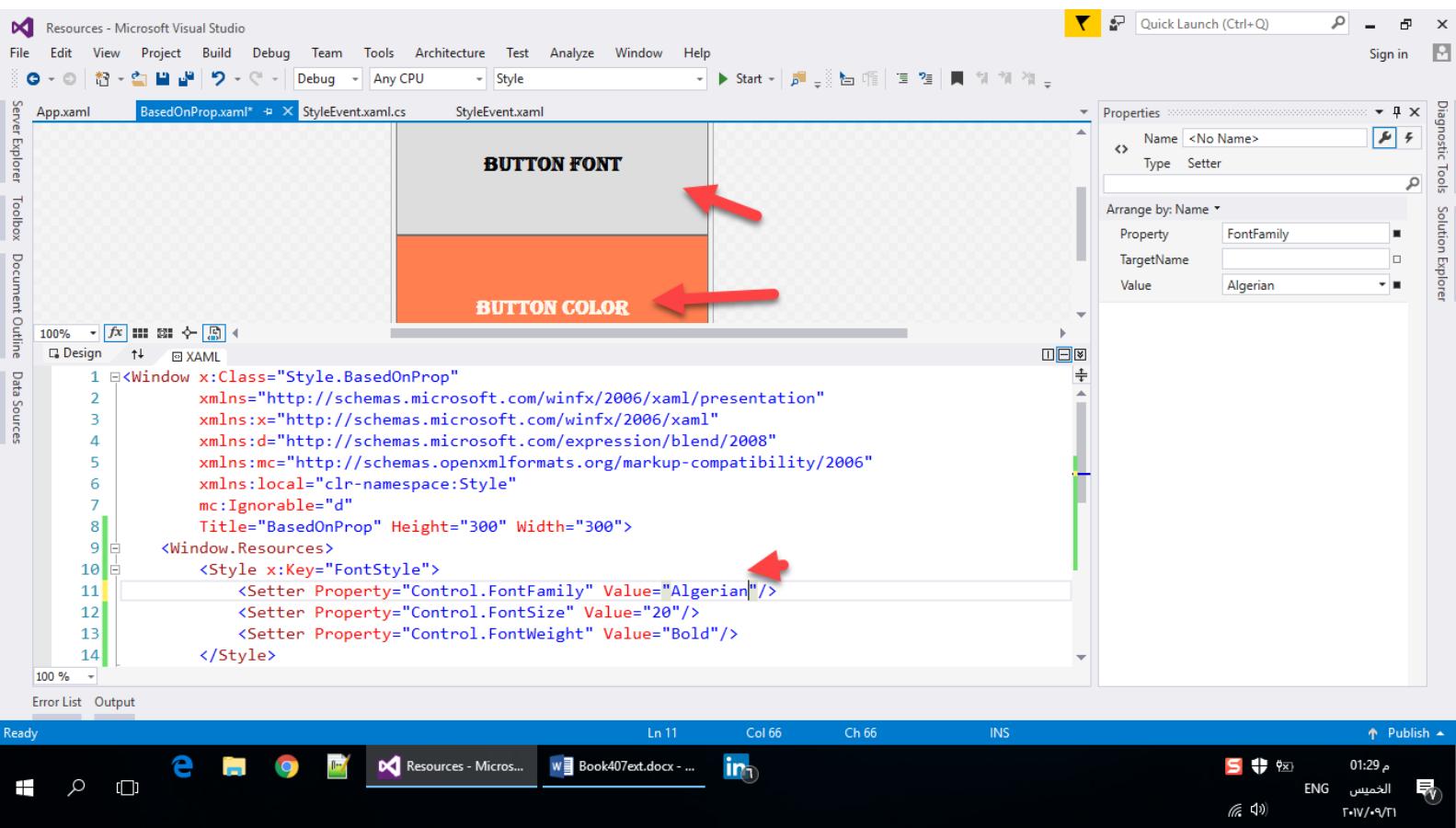
```

بعمل مفاتيحين وكل واحد واحد خصائص مختلفة



شوف كل واحد له خصائصه المختلفة

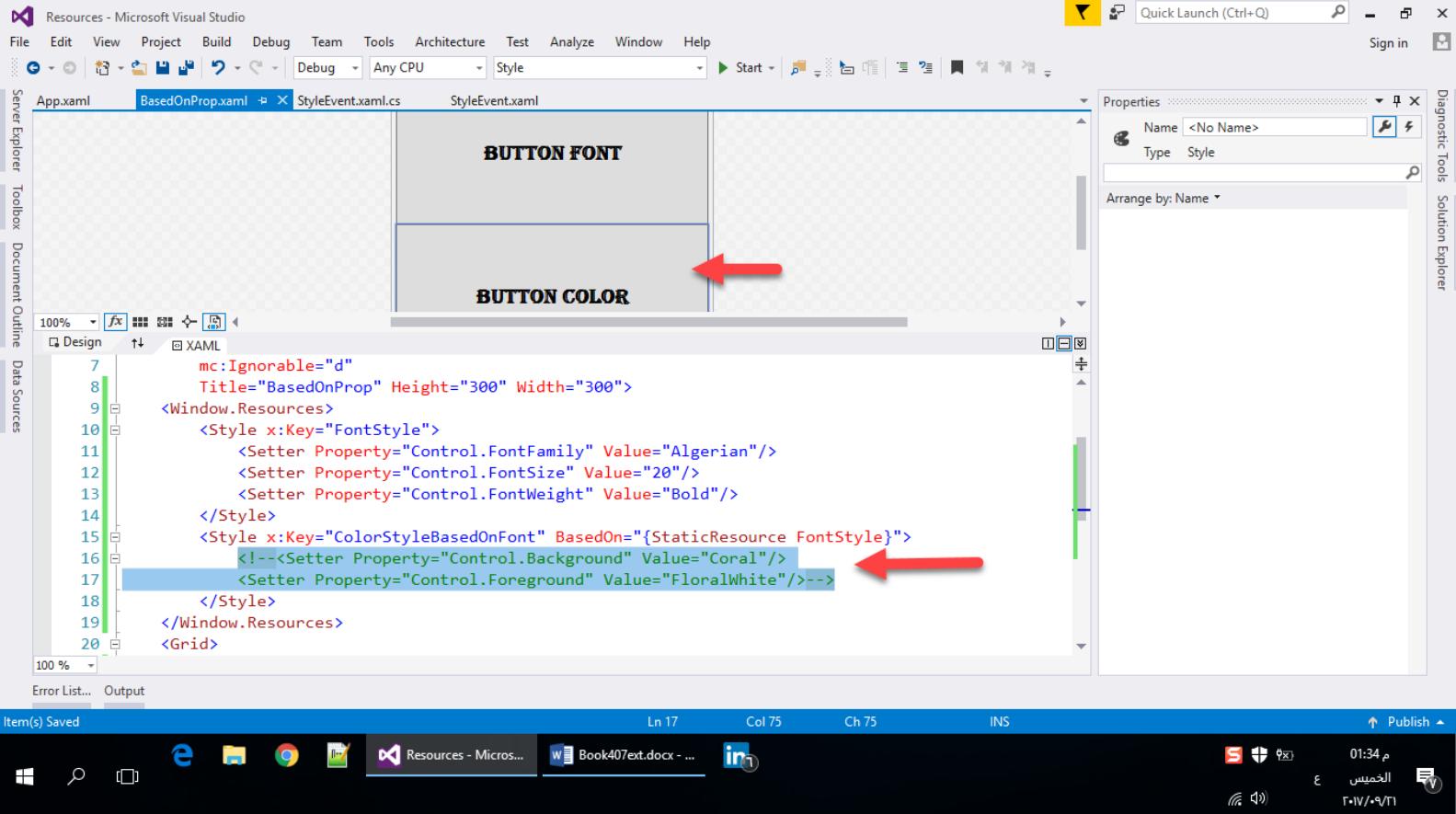
تعالى نغير فى الاستايل اللي فوق ونشوف



غيرت الخط فى الاستايل الاول ليه اطبق على الثاني

بسب فى الاستايل الثاني كاتبين

Based On

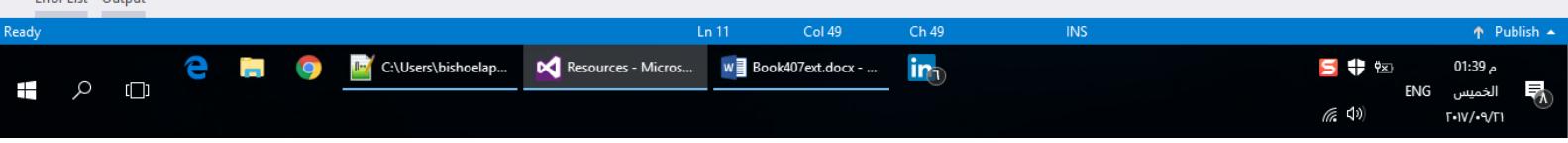


شوف عطلت كل حاجة ما عدا السطر الاول ليه لانه قولته

Based on بيعتمد على ترجمتها

Automatically Applying Style

```
1 <Window x:Class="Style.ApplyStyle"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Style"
7     mc:Ignorable="d"
8     Title="ApplyStyle" Height="300" Width="300">
9     <Window.Resources>
10    <Style x:Key="Btn">
11        <Setter Property="Button.Background">
12            <Style>
13            </Style>
14        </Setter>
15    </Style>
16    </Window.Resources>
17    <StackPanel>
18        <Button Margin="9" Height="50">Style</Button>
19        <Button Margin="9" Height="50">None</Button>
20        <Button Margin="9" Height="50">Style</Button>
21    </StackPanel>
22 </Window>
```

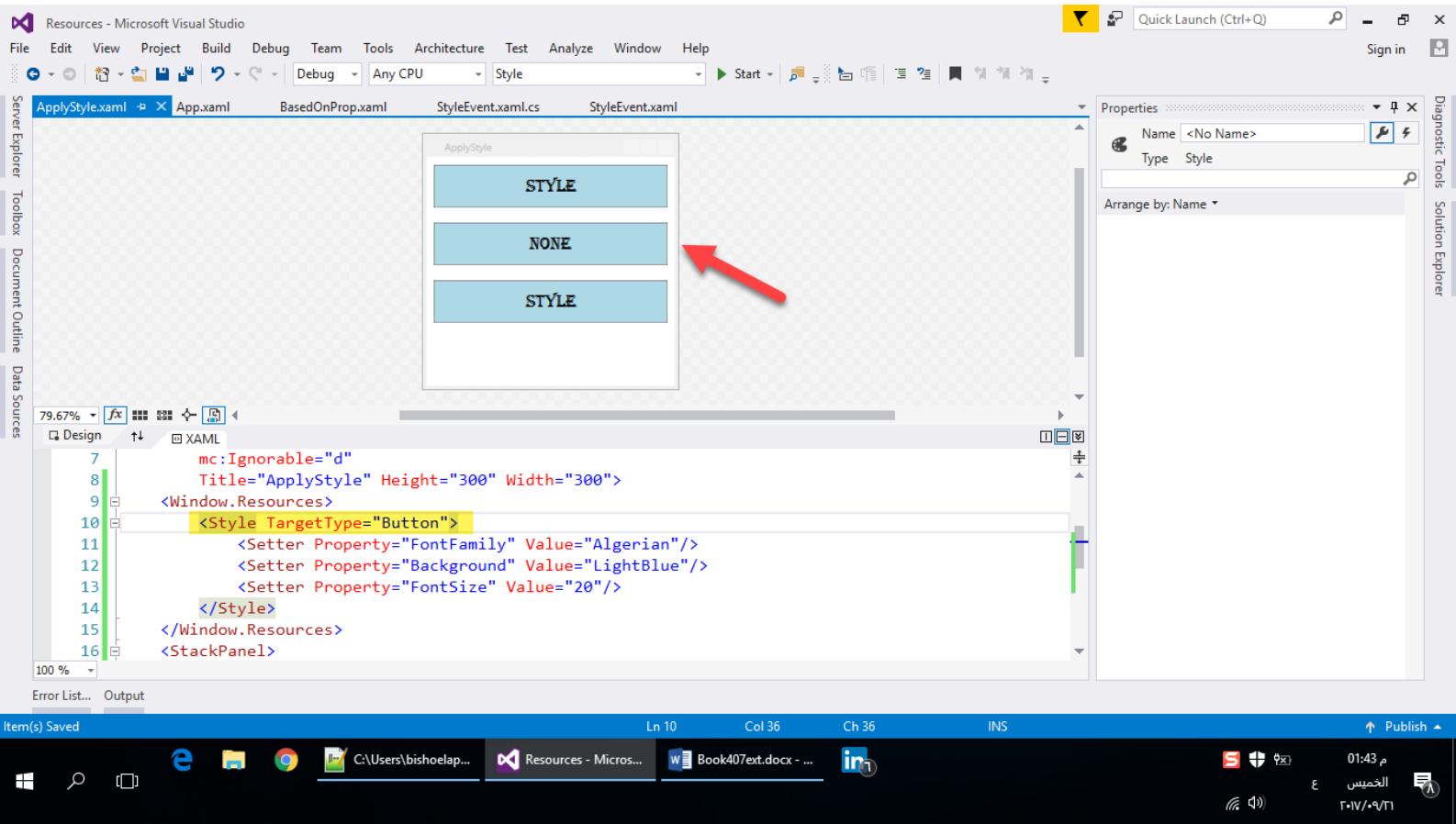


عملت 3 ازر تحت وفوق عملت ريسورس
بس شوف كل شوية اكتب في البروبرتي
اسم الكنترول وبعدين الخاصية تعب
تعالي نختصرها

```
1 <Window x:Class="Style.ApplyStyle"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Style"
7     mc:Ignorable="d"
8     Title="ApplyStyle" Height="300" Width="300">
9     <Window.Resources>
10    <Style x:Key="Btn" TargetType="Button">
11        <Setter Property="FontFamily" Value="Algerian"/>
12        <Setter Property="Background" Value="LightBlue"/>
13        <Setter Property="FontSize" Value="20"/>
14    </Style>
15    </Window.Resources>
16    <StackPanel>
17        <Button Margin="9" Height="50">Style</Button>
18        <Button Margin="9" Height="50">None</Button>
19        <Button Margin="9" Height="50">Style</Button>
20    </StackPanel>
21 </Window>
```

بكتب التارجت تايب زر
وبعدين بنادي على البروبرتي المطلوبة
تمام

تعالى نشيله



بس شيلته من هنا اتطبق فعلا الاستايل

هو بيعوض عن المفتاح كالتالى

X:Key="{x:Type Button}"

هو بيقوله المفتاح بتاعك

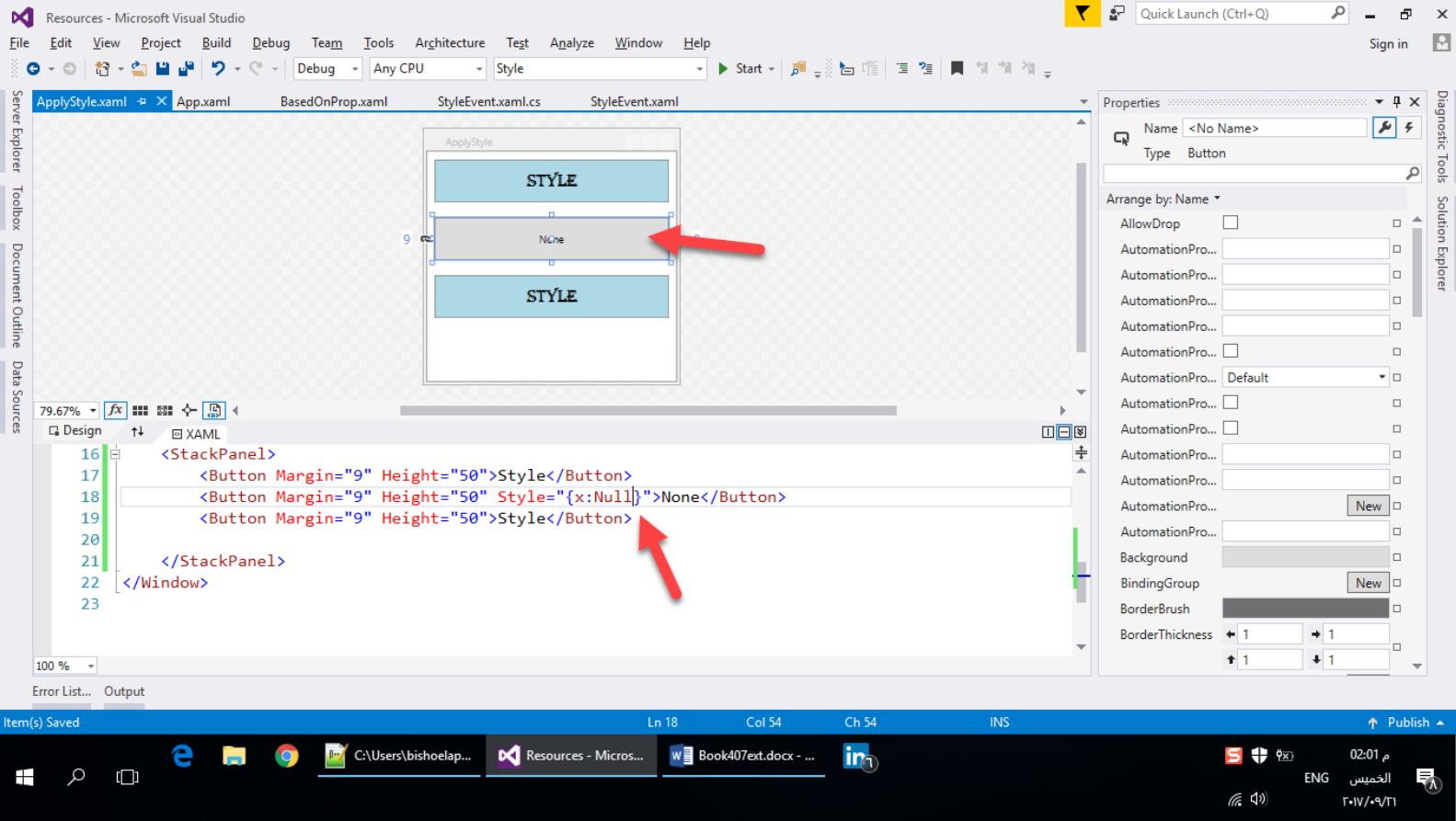
X+

Type

اللى جاي ايه هو التايب اللي جاي اللي هو الزر

وممكن نختصرها زى ما عملنا ونكتب تارجت تايب زر ونخلص

الاثنتين ينفعوا



كده شيلت الاستايل من الزر ده

ولو انا حطيت لون معين للزر ده هيطبق ومش هيبص نهائى للتارجت تايب والاستايلات اللي فوق وهياخذ اقرب حاجة ليه اللي هي بنمرر داخل الزر نفسه

Triggers

حاجة بتغير من قيمة بروبرتى معينة لما بروبرتى تانىه تتغير او ايغنت يحصل

Introduction To Triggers

- Triggers are linked to styles through the Style.
- Every style can have an unlimited number of triggers.
- Each trigger is an instance of a class that derives from System.Windows.TriggerBase.
- You can apply triggers directly to elements, without needing to create a style, by using the FrameworkElement.Triggers collection.



الトリgger موصولة بالاستايل عن طريق الاستايل يعني نستخدم الトリgger في الاستايل لازم نحطها بداخل استايل

2

كل استايل ممكن يكون بداخله عدد غير محدود من الトリgger

3

الكلas ده البيز كلاس بتاع الトリgger كلها يعني الاصل او الاب بتاعهم اللي بيأخذو من كله حاجة الトリgger

4

بيقولك تقدر تعمل

Apply

للعنصر دايركت من غير ماتحطه في استايل

لأنه كل عنصر موجود في تريجر والترiger متعرفة في

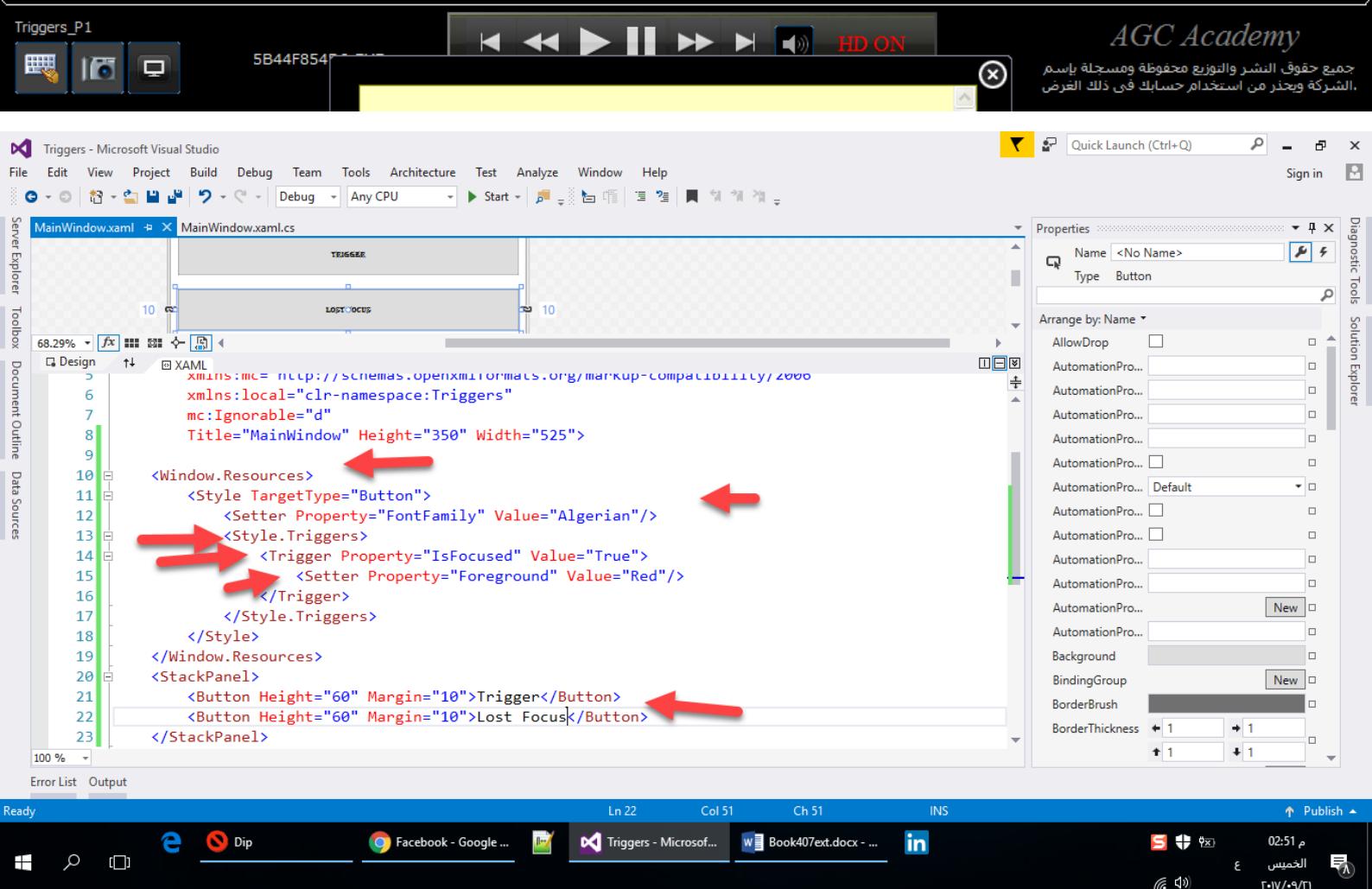
Frame work element class

فمش هحتاج انك تحطه في استايللا تقدر تحطه داخل زر معين

Simple Trigger

```
1. <Style x:Key="BigFontButton">
2.   <Style.Setters>
3.     <Setter Property="Control.FontFamily"
4.       Value="Times New Roman"/>
5.     <Setter Property="Control.FontSize" Value="18" />
6.   </Style.Setters>

7.   <Style.Triggers>
8.     <Trigger Property="Control.IsFocused" Value="True">
9.       <Setter Property="Control.Foreground" Value="DarkRed"/>
10.    </Trigger>
11.  </Style.Triggers>
12. </Style>
```



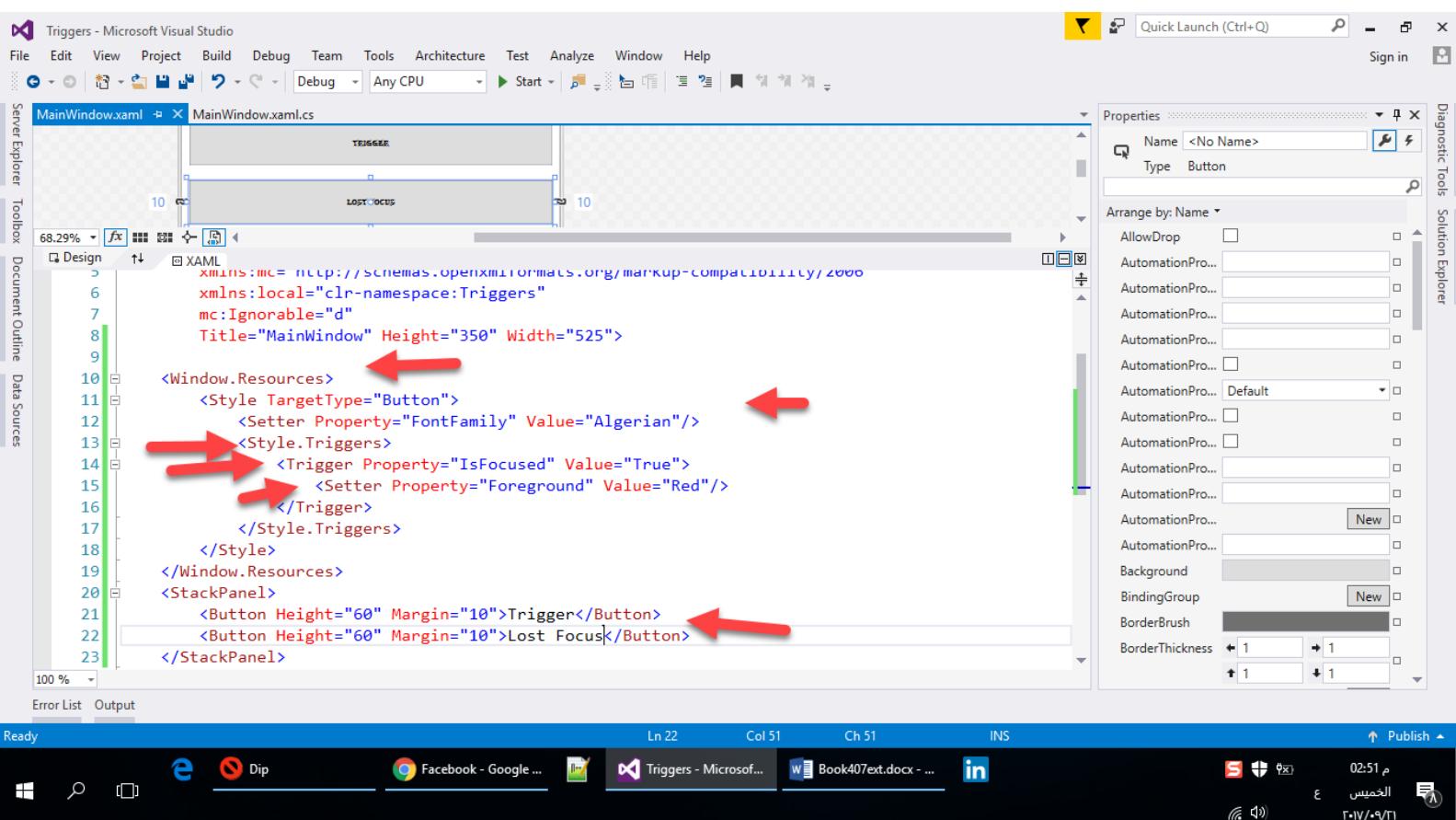
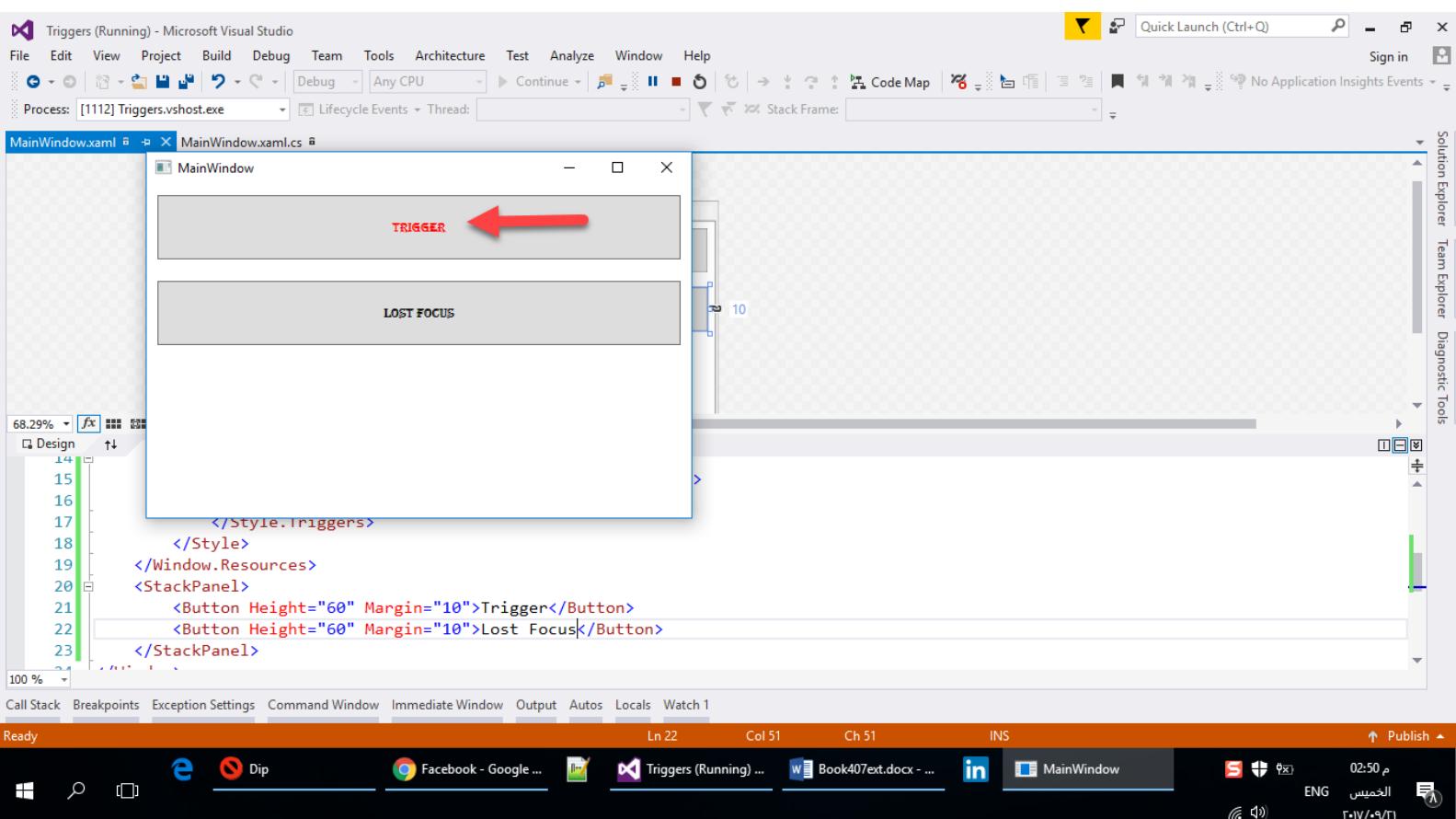
هنا يعلم الترجمة قوله لو حالة الز

IsFocused

Focused الزر معموله

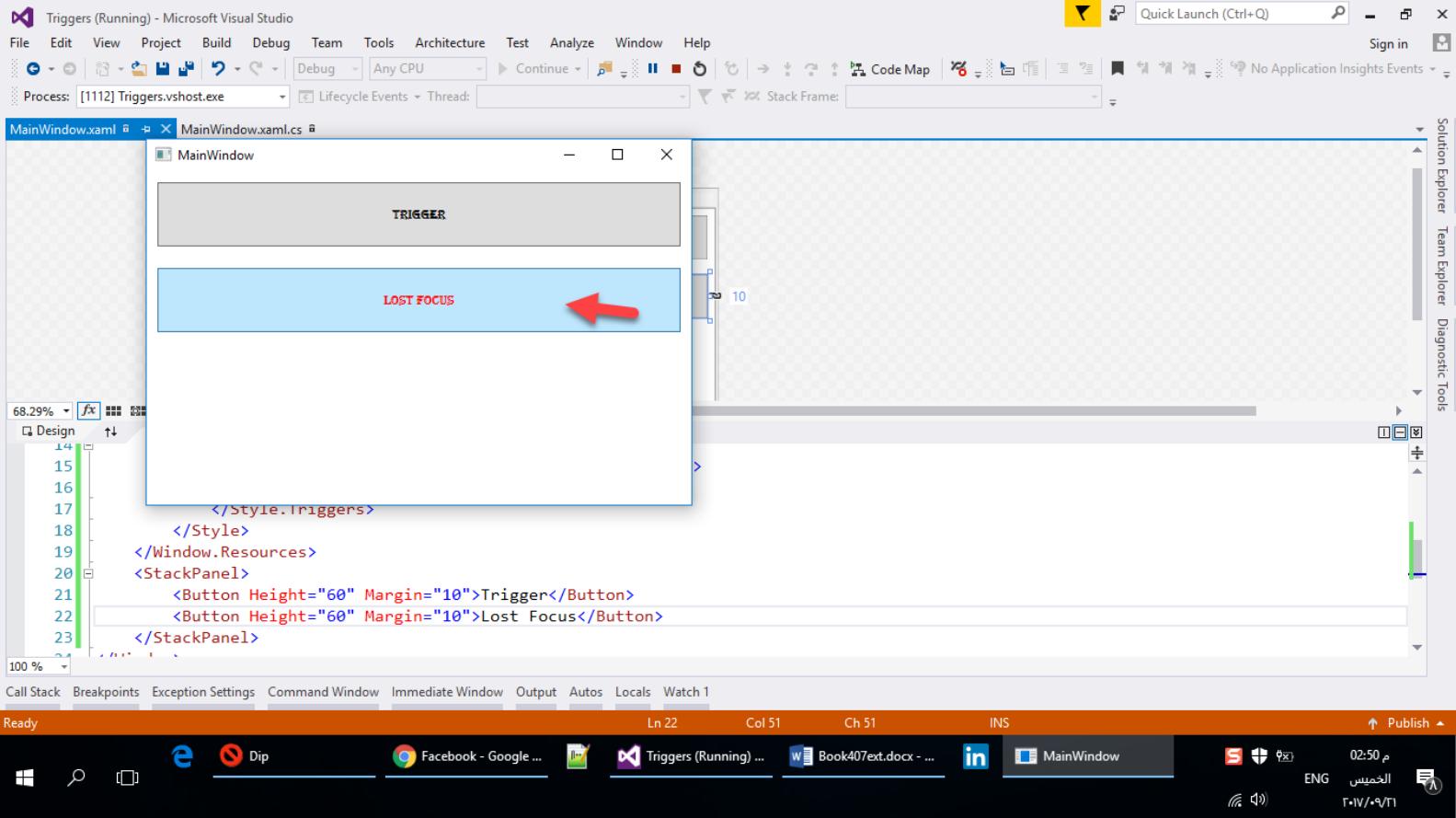
و حالتہ ب true

نحو نجرب تعلیم الخط لون غير



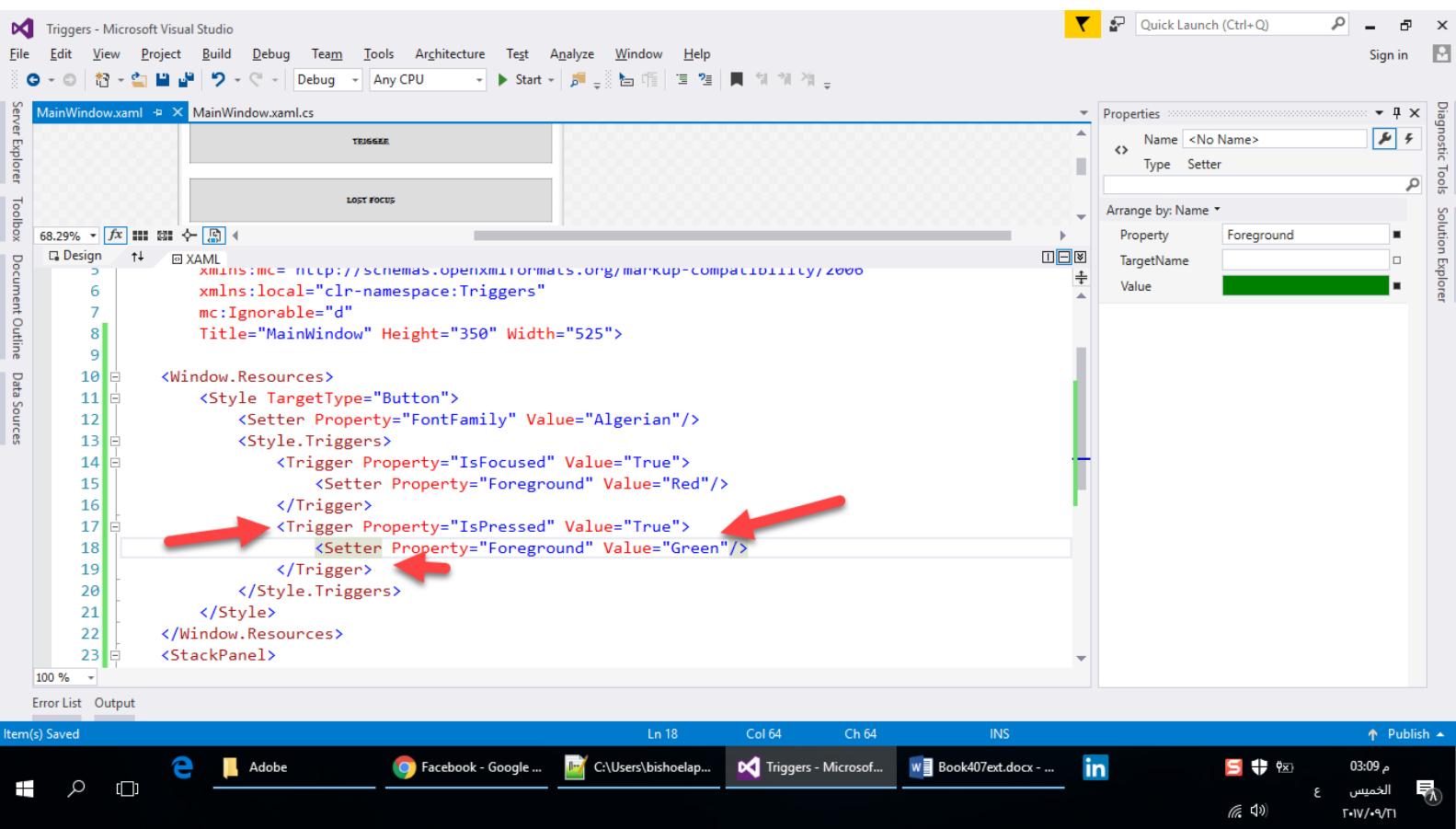
هنا focuses معمول الزوار فعلاً

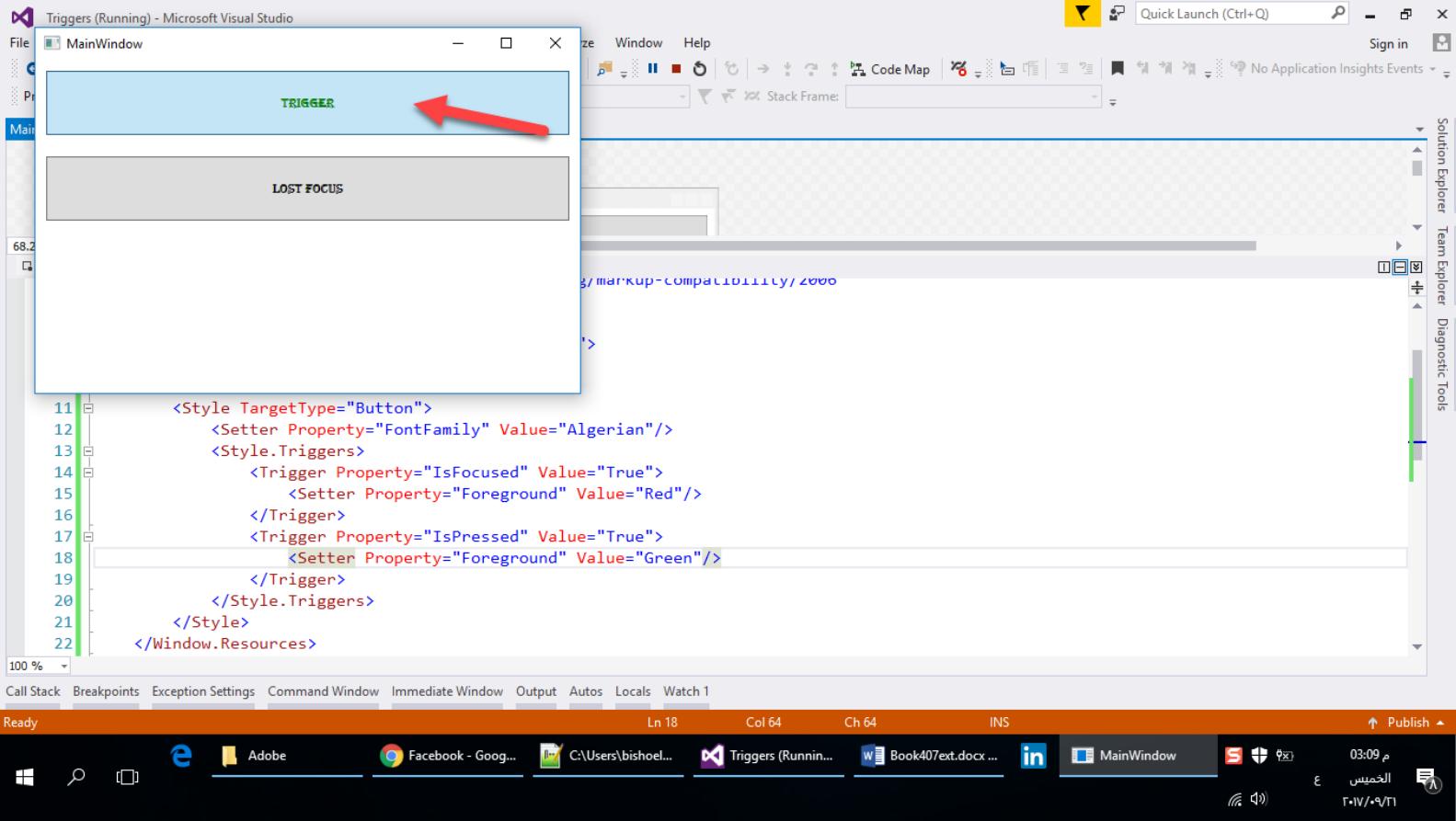
فُلُونَه اتغَرِّ تَعَالَى نَدْوِس عَلَى الْمَهْ تَحْت



اللى تحت اتغير لونه بنجاح واللى فوق رجع للوضع الاصلى ليه لاته بقى ب false

تعالى نشوف لو فيه تريجر كمان بيشتغل فى حالة الضغط على الزر انهى واحد هيشتغل الاول الفوكس ولا البريسيد





هنا طول منا دايس جايب اخضر واشيل يجيب احمر

كده هو مفرقش معاه ترتيب التريجرا هو كده بينفذ بناء على ترتيب الايفنت اللي في الزر نفسه

طب لو اتنين تريجرا بيشتغلوا على ايافت واحد بيشوف اخر تريجرا وينفذ الاول

Multi Trigger

بيكون فيه اكتر من شرط مثل

لما ندوس كليك على زر بنحط شرط انه لازم يكون الزر ده متراس عليه او فوكس عليه من البداية

فالمالتي تريجرا بيحط شرط بجانب التريجرا العادي وبس نجرب

Triggers - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

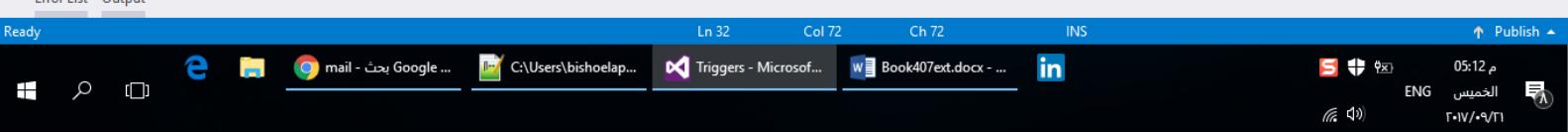
Quick Launch (Ctrl+Q) Sign in

MainWindow.xaml + MainWindow.xaml.cs

```
19     </Trigger>
20     <Style.Triggers>
21   </Style>
22   <Style x:Key="Multi">
23     <Style.Triggers>
24       <MultiTrigger>
25         <MultiTrigger.Conditions>
26           <Condition Property="Button.IsFocused" Value="True"/>
27           <Condition Property="Button.IsMouseOver" Value="True"/>
28
29         </MultiTrigger.Conditions>
30         <MultiTrigger.Setters>
31           <Setter Property="Button.Foreground" Value="Blue"/>
32           <Setter Property="Button.FontSize" Value="20"/>
33
34         </MultiTrigger.Setters>
35       </MultiTrigger>
36     </Style.Triggers>
37   </Style>
38 </Window.Resources>
39 <StackPanel>
40   <Button Height="60" Margin="10">Trigger</Button>
41   <Button Height="60" Margin="10" Style="{StaticResource Multi}">Lost Focus</Button>
42 </StackPanel>
43
```

100 % XAML Design

Error List Output



كود المالتى ترigger

Triggers (Running) - Microsoft Visual Studio

File Edit View Window Help

Quick Launch (Ctrl+Q) Sign in

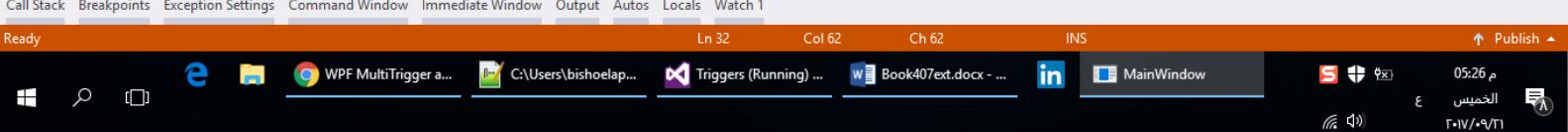
MainWindow

TRIGGER

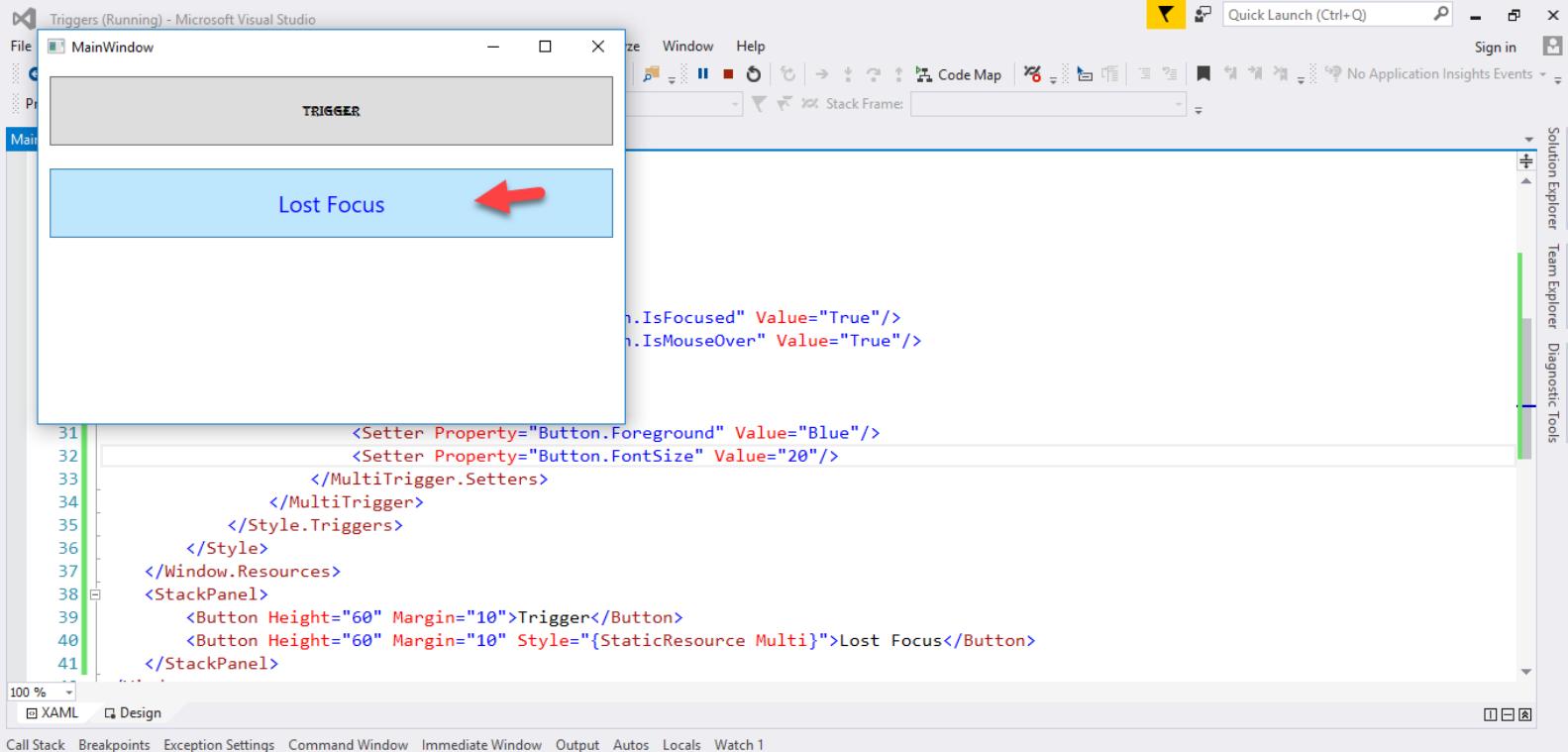
Lost Focus

```
19     </Trigger>
20     <Style.Triggers>
21   </Style>
22   <Style x:Key="Multi">
23     <Style.Triggers>
24       <MultiTrigger>
25         <MultiTrigger.Conditions>
26           <Condition Property="Button.IsFocused" Value="True"/>
27           <Condition Property="Button.IsMouseOver" Value="True"/>
28
29         </MultiTrigger.Conditions>
30         <MultiTrigger.Setters>
31           <Setter Property="Button.Foreground" Value="Blue"/>
32           <Setter Property="Button.FontSize" Value="20"/>
33
34         </MultiTrigger.Setters>
35       </MultiTrigger>
36     </Style.Triggers>
37   </Style>
38 </Window.Resources>
39 <StackPanel>
40   <Button Height="60" Margin="10">Trigger</Button>
41   <Button Height="60" Margin="10" Style="{StaticResource Multi}">Lost Focus</Button>
42 </StackPanel>
43
```

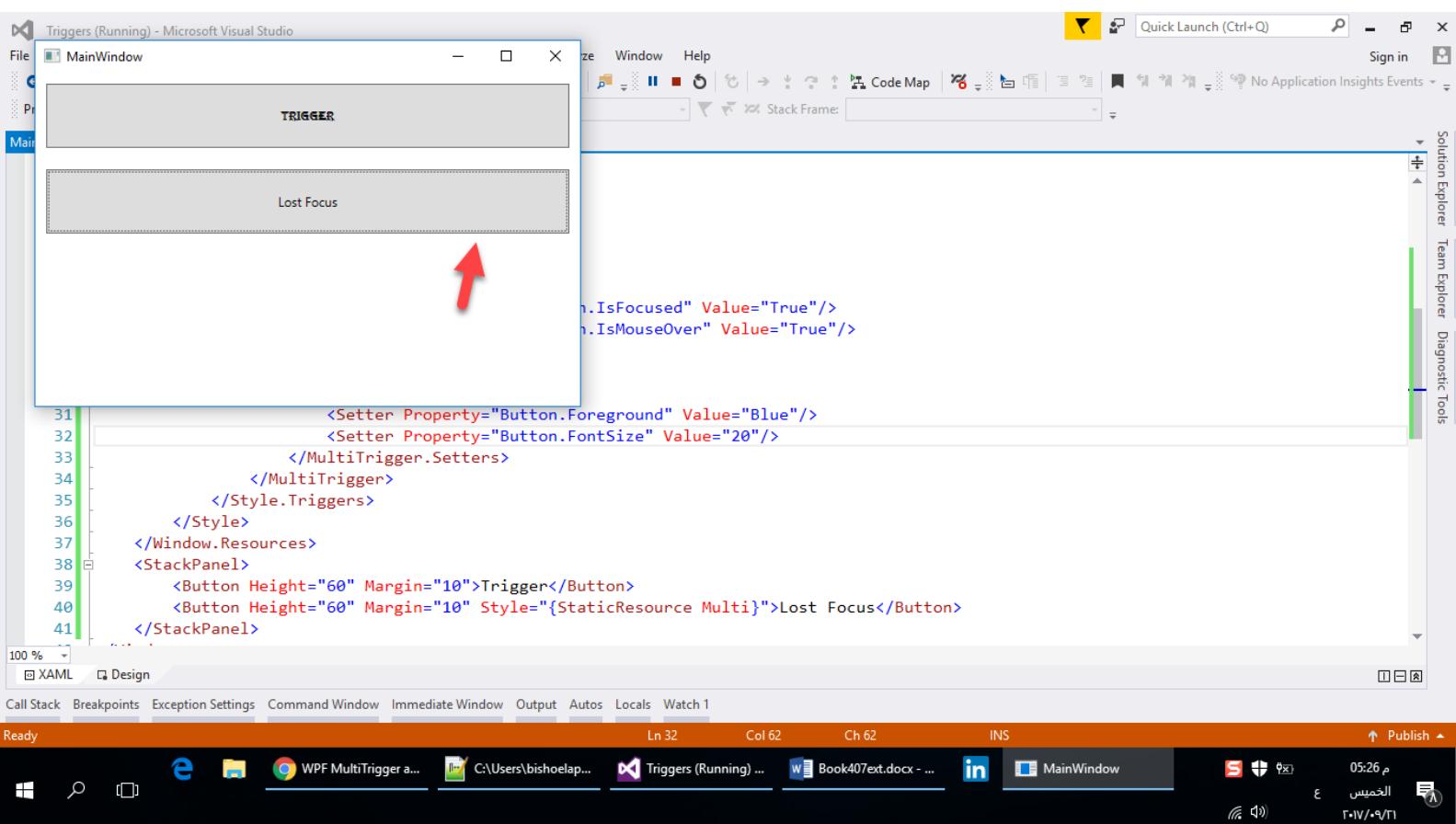
100 % XAML Design



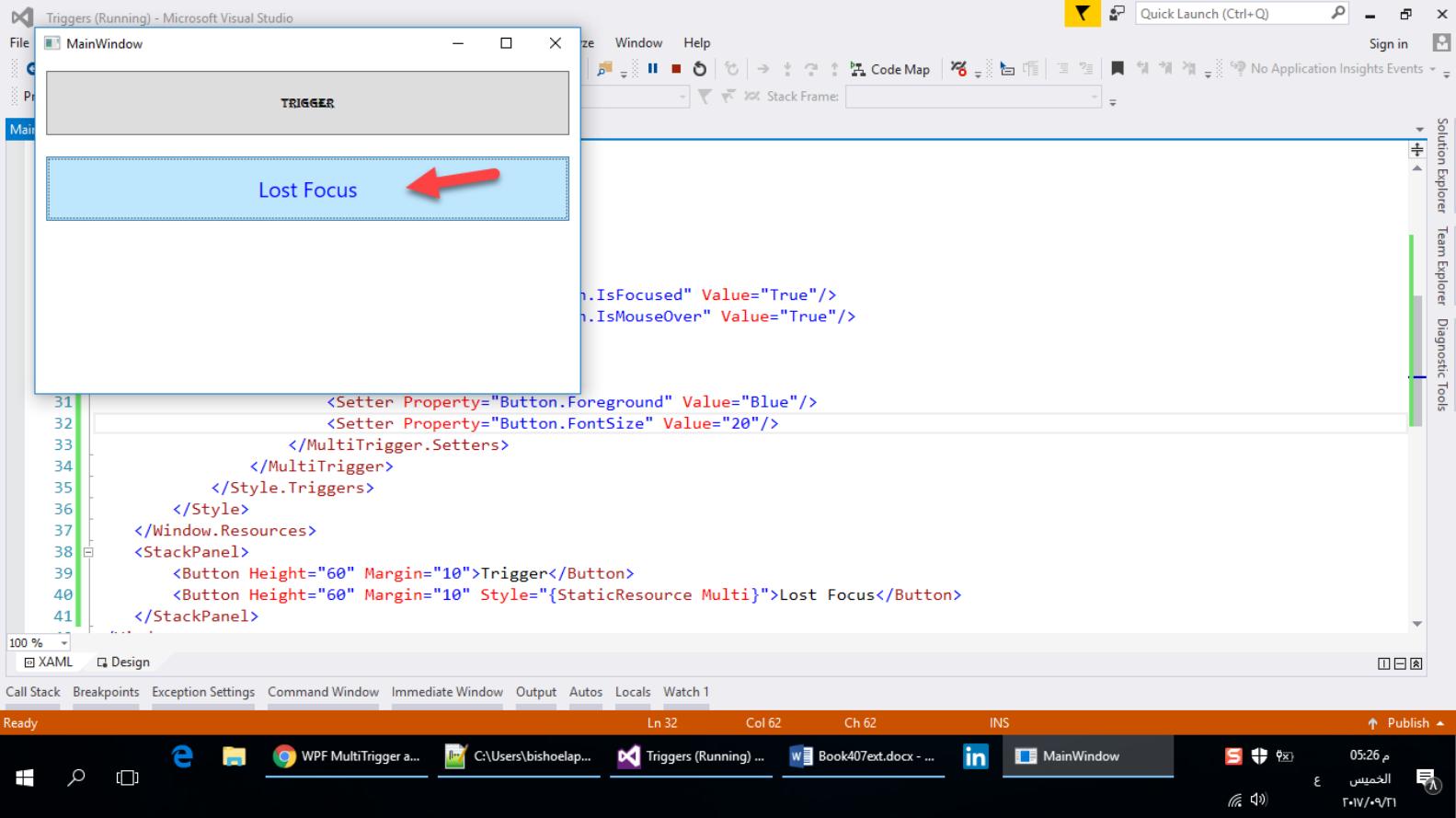
واقف على الزر مفيش حاجة



دوسن على الزر نفذ التريجور تعالى بعد



نروحته بالماوس تانى



اشتعل تمام وکبرلى الخط زى مانا مبرمجه

Event trigger

بیحصله فایر لما ایفت معینه تتفذ

وبنستخدمه عامة فى الائيمشين

بص معاليا المثال

```

19         </Trigger>
20     </Style.Triggers>
21   <Style x:Key="Multi">
22     <Style.Triggers>
23       <MultiTrigger>
24         <MultiTrigger.Conditions>
25           <Condition Property="Button.IsFocused" Value="True"/>
26           <Condition Property="Button.IsMouseOver" Value="True"/>
27
28         </MultiTrigger.Conditions>
29         <MultiTrigger.Setters>
30           <Setter Property="Button.Foreground" Value="Blue"/>
31           <Setter Property="Button.FontSize" Value="20"/>
32         </MultiTrigger.Setters>
33       </MultiTrigger>
34     <Style.Triggers>
35   </Style>
36   <Style x:Key="Animation">
37     <Style.Triggers>
38       <EventTrigger RoutedEvent="Mouse.MouseEnter">
39         <EventTrigger.Actions>
40           <BeginStoryboard>
41             <Storyboard>
42               <DoubleAnimation Duration="0:0:0.5" Storyboard.TargetProperty="FontSize"
43                 To="25">
44             </DoubleAnimation>
45           </Storyboard>
46         </BeginStoryboard>
47       </EventTrigger.Actions>
48     </EventTrigger>
49     <EventTrigger RoutedEvent="Mouse.MouseLeave">
50       <EventTrigger.Actions>
51         <BeginStoryboard>
52           <Storyboard>
53             <DoubleAnimation Duration="0:0:0.5" Storyboard.TargetProperty="FontSize"
54               To="12">
55             </DoubleAnimation>
56           </Storyboard>
57         </BeginStoryboard>
58       </EventTrigger.Actions>
59     </EventTrigger>
60   </Style.Triggers>
61 </Style>
62 </Window.Resources>
63 <StackPanel>
64   <Button Height="60" Margin="10">Trigger</Button>
65   <Button Height="60" Margin="10" Style="{StaticResource Multi}">Lost Focus</Button>
66   <Button Height="60" Margin="10" Style="{StaticResource Animation}">Event Trigger</Button>
67 </StackPanel>
68 </Window>
69
70
71

```

ال코드 نجرب

Triggers (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Process: [11020] Triggers.vhost.exe Lifecycle Events Thread: Stack Frame:

MainWindow.xaml

MainWindow

Trigger

Lost Focus

Event Trigger

0:0:0.5" Storyboard.TargetProperty="FontSize"

<StackPanel>
 <Button Height="60" Margin="10">Trigger</Button>
 <Button Height="60" Margin="10" Style="{StaticResource Multi}">Lost Focus</Button>
 <Button Height="60" Margin="10" Style="{StaticResource Animation}">Event Trigger</Button>
</StackPanel>
</Window>

100 % XAML Design

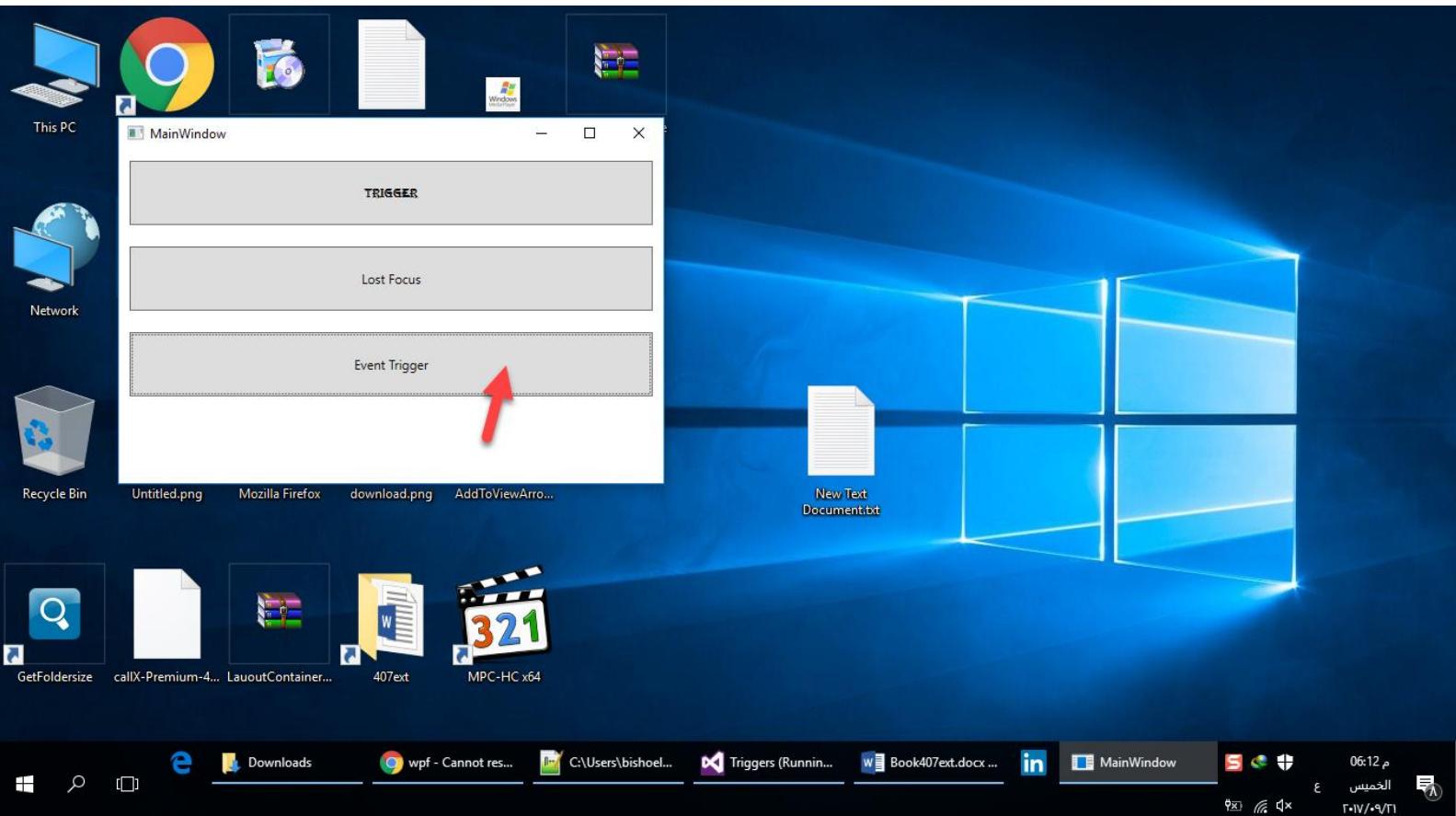
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Autos Locals Watch 1

Ln 56 Col 1 Ch 1 INS

Ready

06:10 م الخميس ٢٠١٩/٩/٣١

وقفت بالماوس كبره بطريقه الانيمشين بس طبعاً متظاهرش في الصور



الخط صغر بطريقه حلو ومحركة

وهنا لازم اعمل انيمشين مضاد عشان يشيل تأثير الانيمشين الاول يرجعه لحالته لانه لما بخلص مش بيرجع لوحده لازم ايفنت كمان تكون عكس الاولى زي ما عملنا كده

Behavior

المطوريين قالوا نعمل ايقت ونريجر جاهزة ونحطها في حاجة اسمه ال

Behavior

والمستخدم يسحب ويحط ال

Behavior

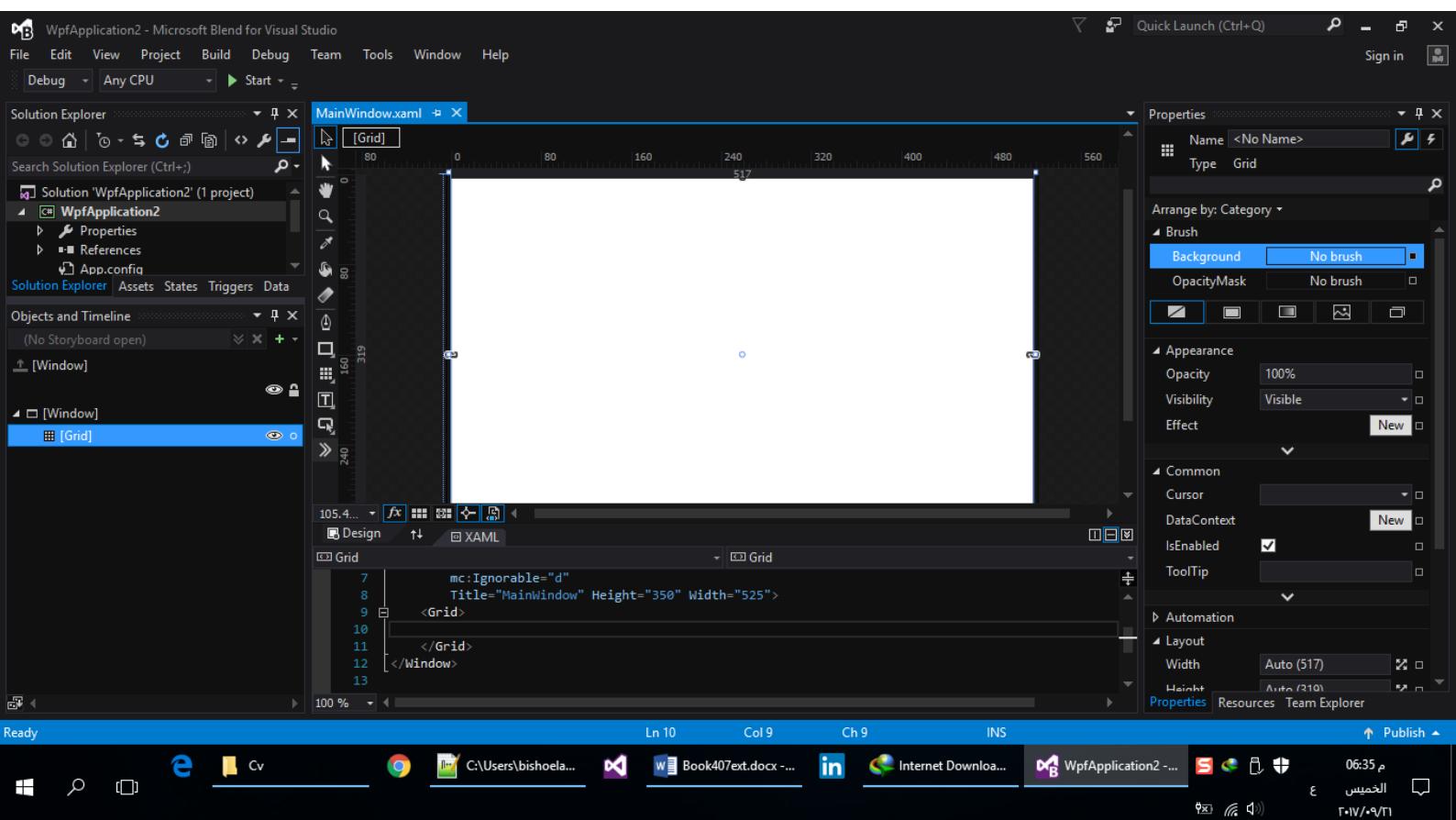
على العنصر ويشتغل على

طول

نلاقيه فين في برنامج

Blender

المرفق دايما مع الفيجوال بيسك

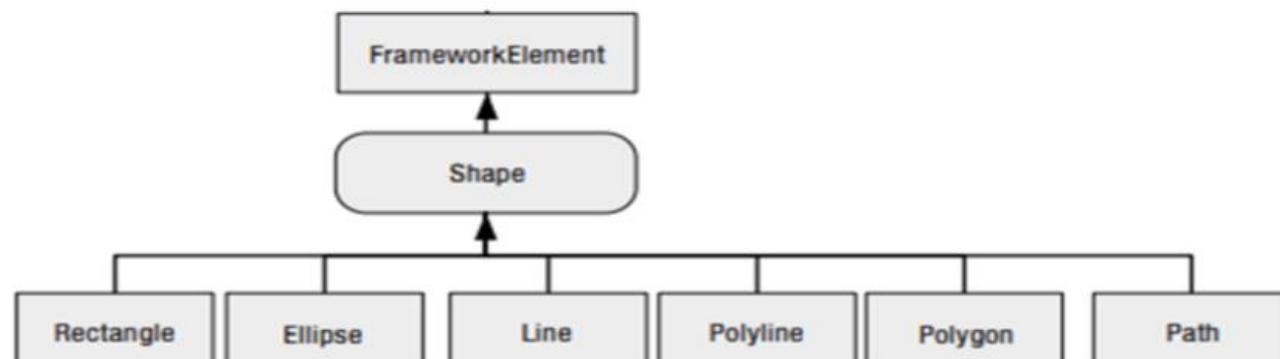


هنشتغل عليه قدام

Shapes

Shapes Behavior

- Shapes derive from FrameworkElement so:
 - They draw themselves.
 - They are organized in the same way as other elements.
 - They support the same events as other elements.



Shapes_P1

530981AGCC.FXP

HD ON

AGC Academy

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الشركة ويحظر من استخدام حسابك في ذلك الفرض

The Shape Classes

- Every shape derives from the abstract `System.Windows.Shapes.Shape` class.
 - Rectangle
 - Ellipse
 - Line
 - Polyline
 - Polygon
 - Path

Shapes_P1

530981AGCC.FXP

HD ON

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الشركة ويحظر من استخدام حسابك في ذلك الفرض

Shapes Properties

- | | |
|--|---|
| 1) Fill. | 7) StrokeLineJoin and StrokeMiterLimit. |
| 2) Stroke. | 8) Stretch. |
| 3) StrokeThickness. | 9) DefiningGeometry. |
| 4) StrokeStartLineCap and StrokeEndLineCap. | 10) GeometryTransform. |
| 5) StrokeDashArray, StrokeDashOffset, and StrokeDashCap. | 11) RenderedGeometry. |



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1 بتلون الشيب نفسه

Shape

2 الاطار بتاع الشيب من برا

3 حجم سمك الاطار

4 الاستارت لайн يستخدم مع الخط بس

ويتحدد نهاية الخط هيبي شكله ازاي

End line

زيها او نا انقلبطة فى الوصف هيكون بدايه ونهاية الخط شكله ازاي

5

بيخلو الاستروك عباره عن شرط صغيره بدلا من الالين لайн واحد لا بيكون شرط صغيره - - - -

6

يستخدموا فى الشيبس اللي فيها خطوط متقطعة المربع او المثلث

وبنقدر تحديد التقاطع ويكون شكله ازاي

8

بيعرف العنصر ازاي هيكون داخل الكونتينير بتاعنا

fill , uniform

ولا ايه

91011

هنتكلم عنهم بعدين

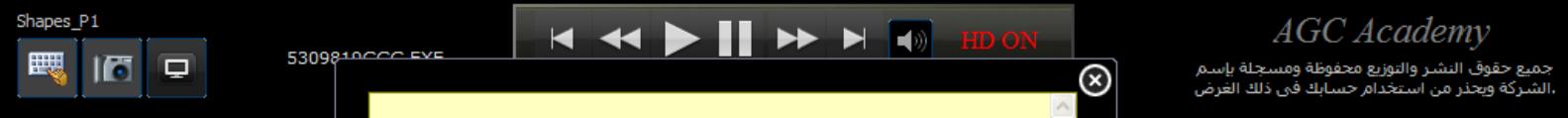
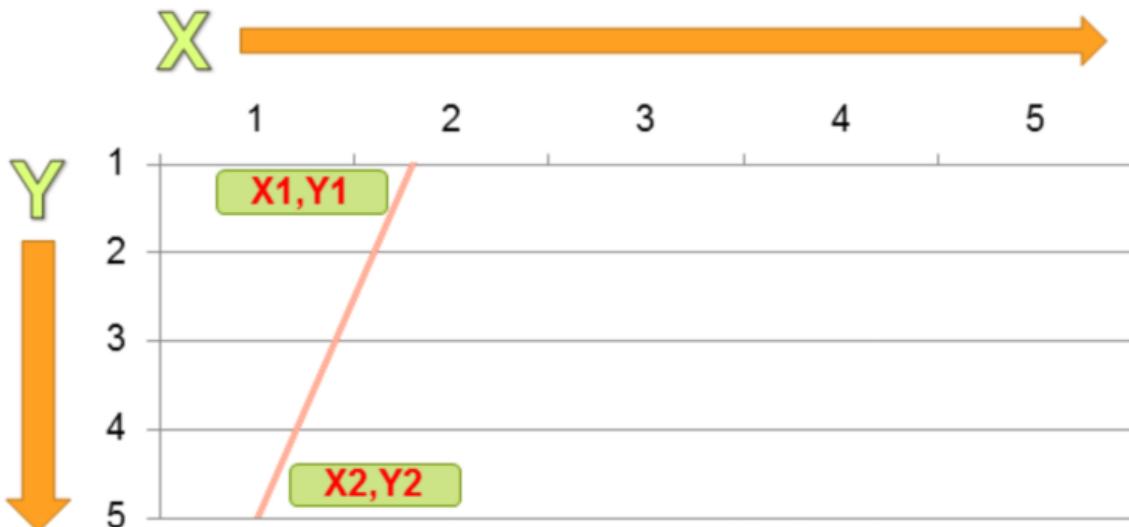
Radius

cabishoe36811

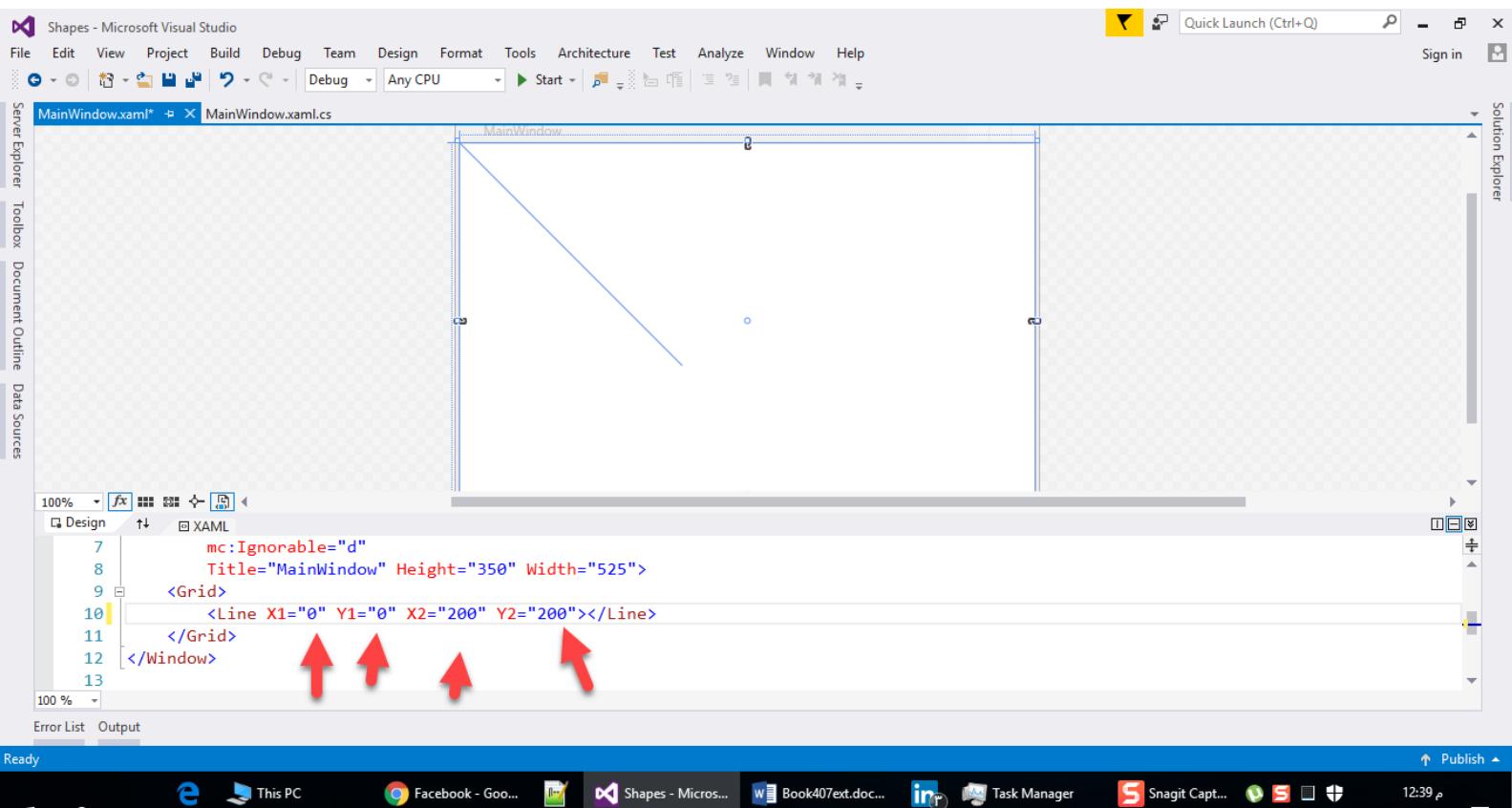
Academy
www.agcit.com

Line

○ <Line X1="2" Y1="0" X2="1" Y2="5"/>

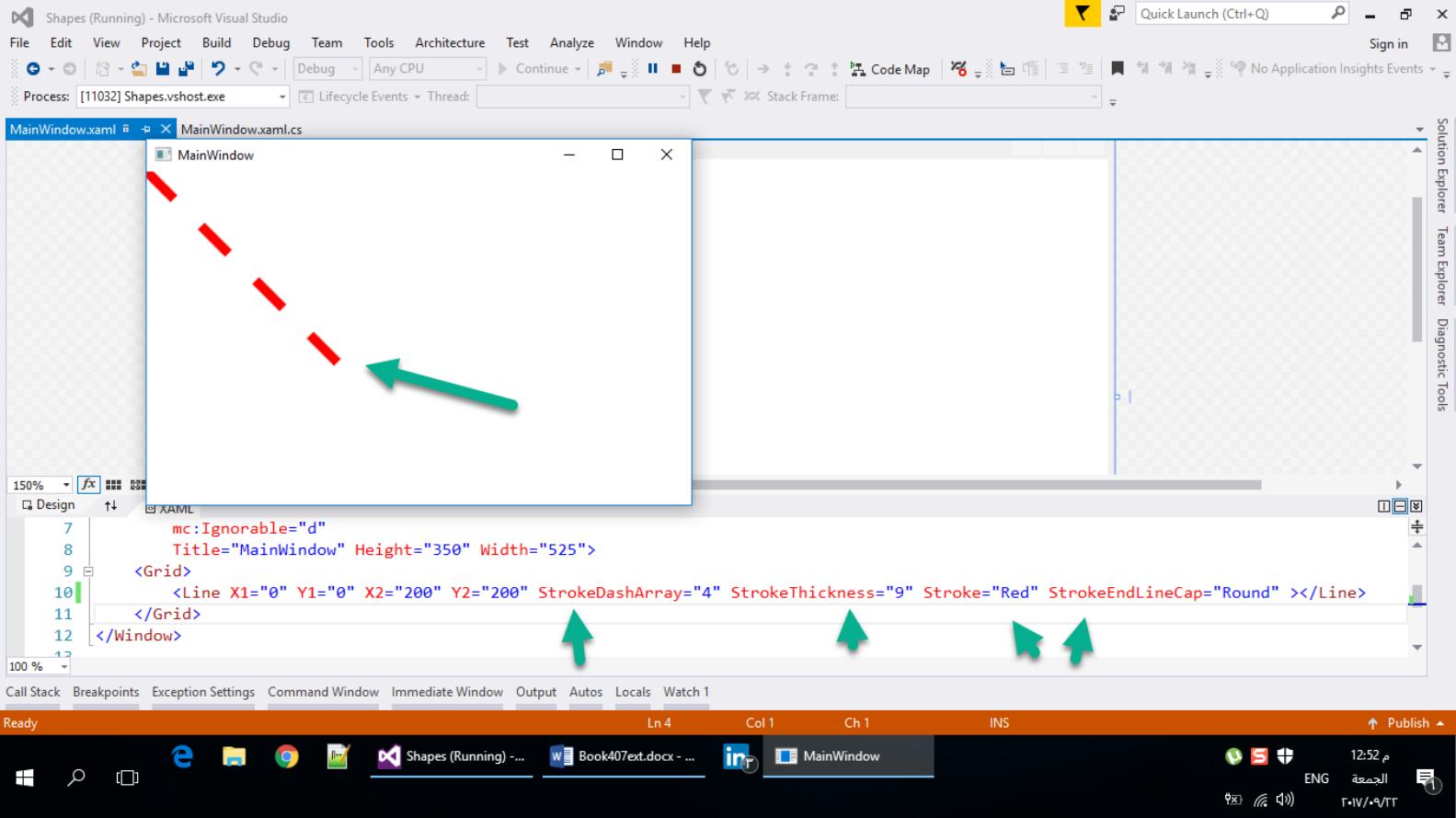


رسم الخط



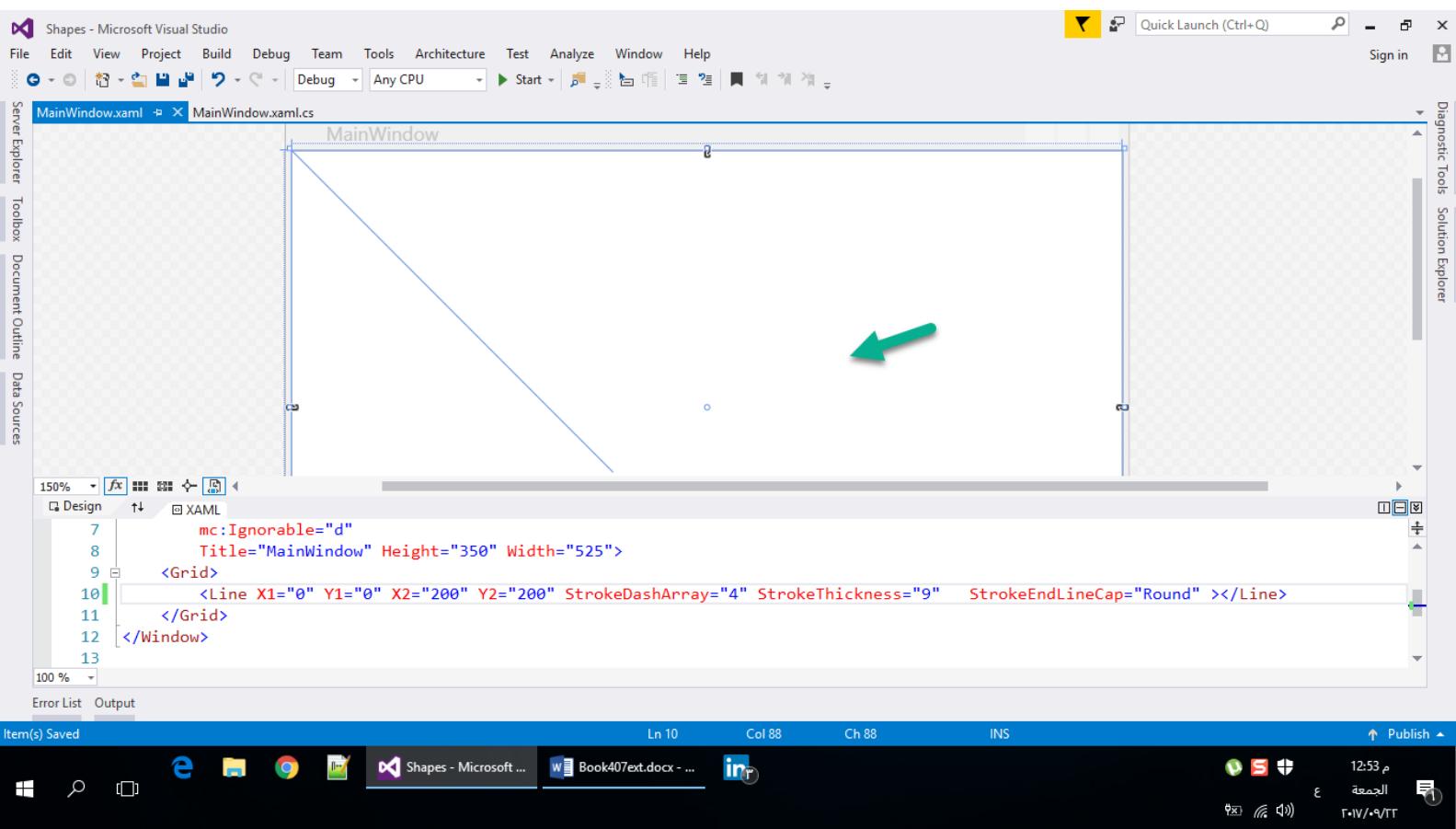
يبعد عن 0

وطول عرض 200



خلی بالک وانتا بتطبیق التأثیر مش بیظہر لیه لانه لون الخط ابیض افتراءضی لازم تغیر لون الخط لا لون عشان تشوف الخط + التأثیرات الاولی بتعمل الخط متقطع التانية حجم السمک بتاع الخط بعد كده اللون اخر حاجة شکل نهاية خط

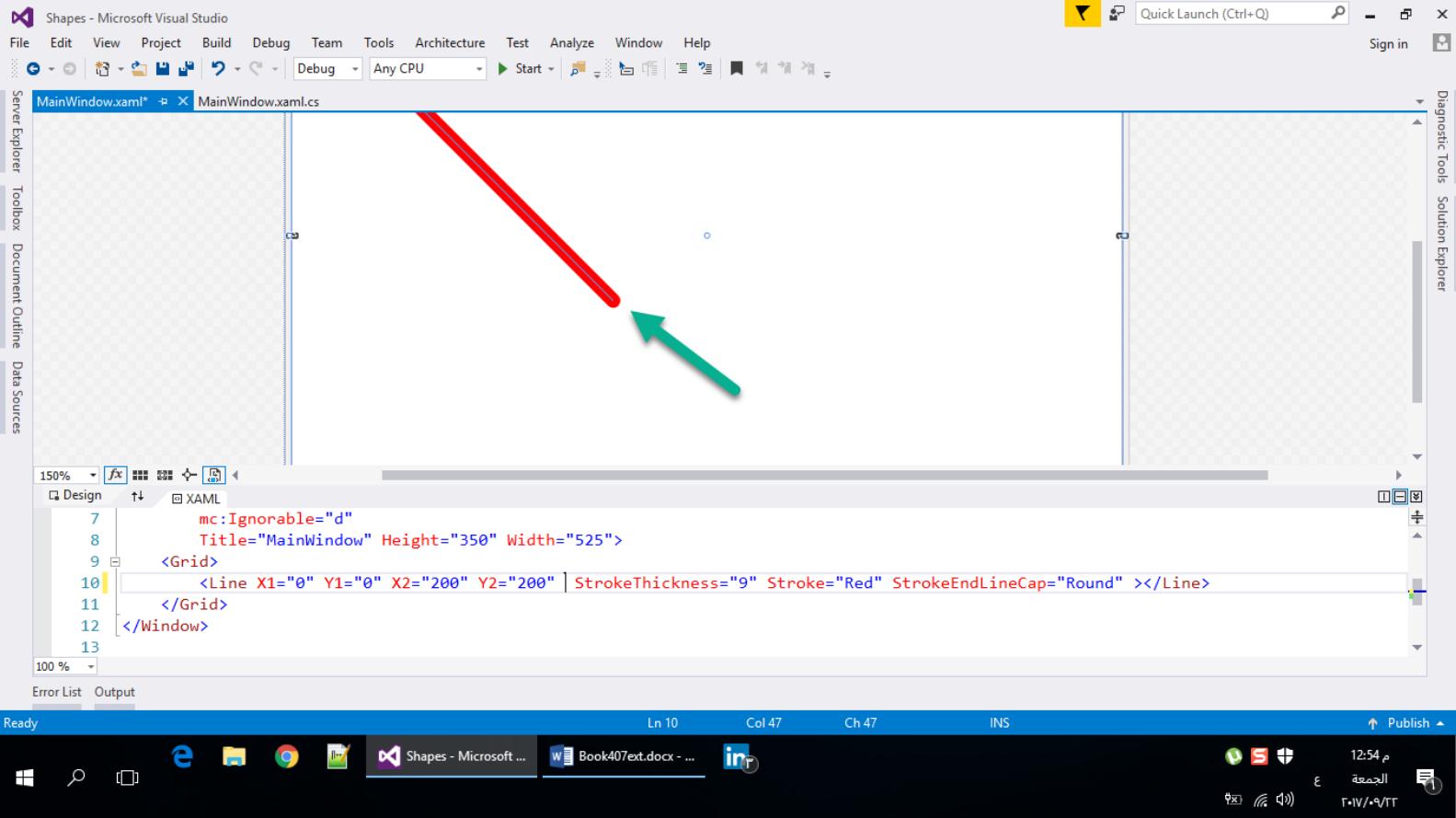
تعالی اوريك نشيل اللون ونشوف الخط



الخط موجود بس لونه ابیض ومش ظاهر اللي ظاهر ده بتاع الفیجوال بیسک واحدا شغالین فخلی بالک

هتشیل

StrokeDashArray="4"



بص ظهرت نهاية الخط على شكل دائرة

عمل مثال

A screenshot of Microsoft Word showing a slide titled 'Rectangle and Ellipse'. It displays four yellow rounded rectangles of increasing complexity in corner radius:

- Corner radius of 5.
- Corner radius of 10.
- Corner radius of 10 (X) and 25 (Y).
- Corner radius of 100 (X) and 60 (Y).

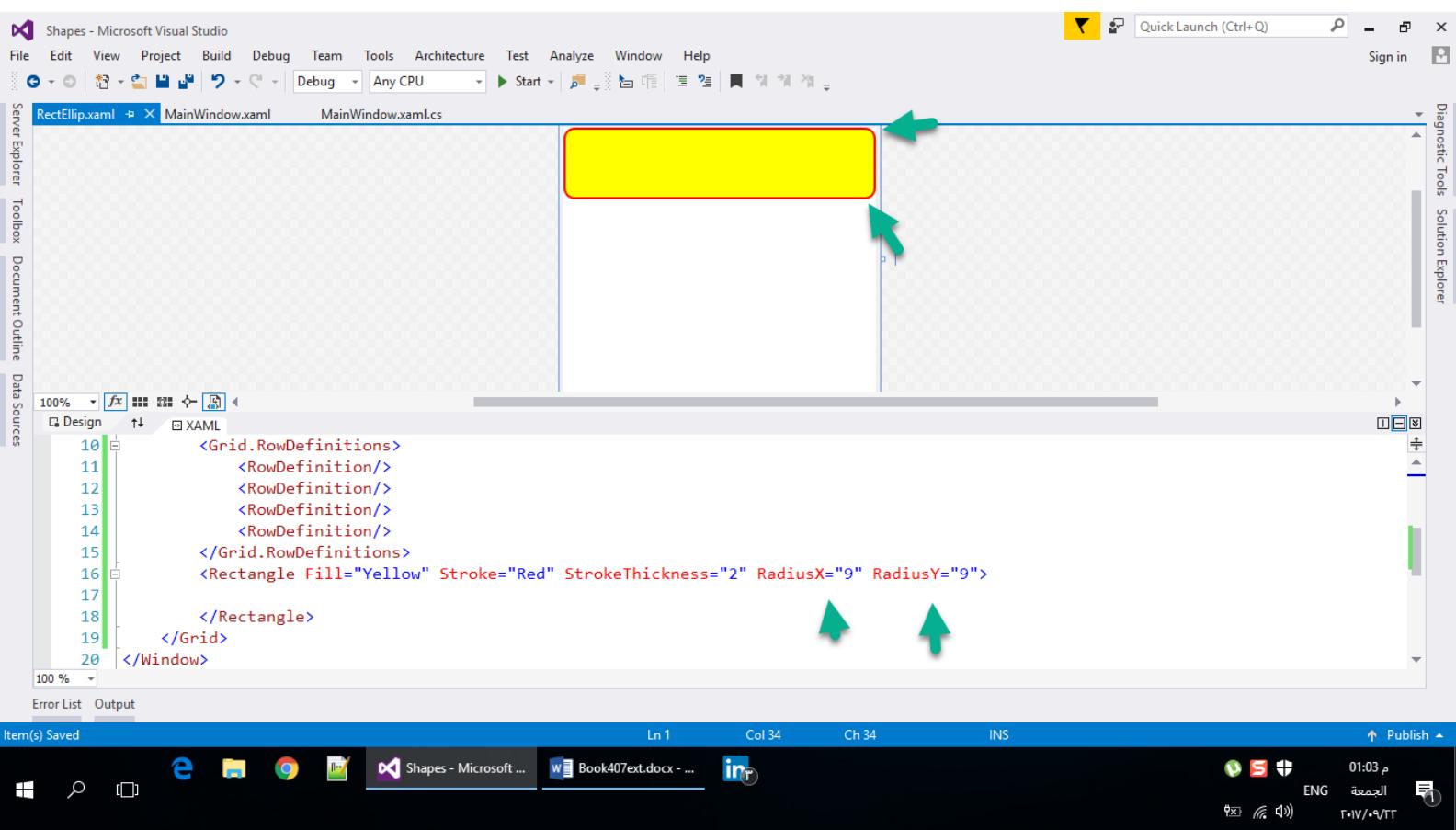
The status bar at the bottom left shows the text 'Shapes_P1' and '5309819CCC.'.

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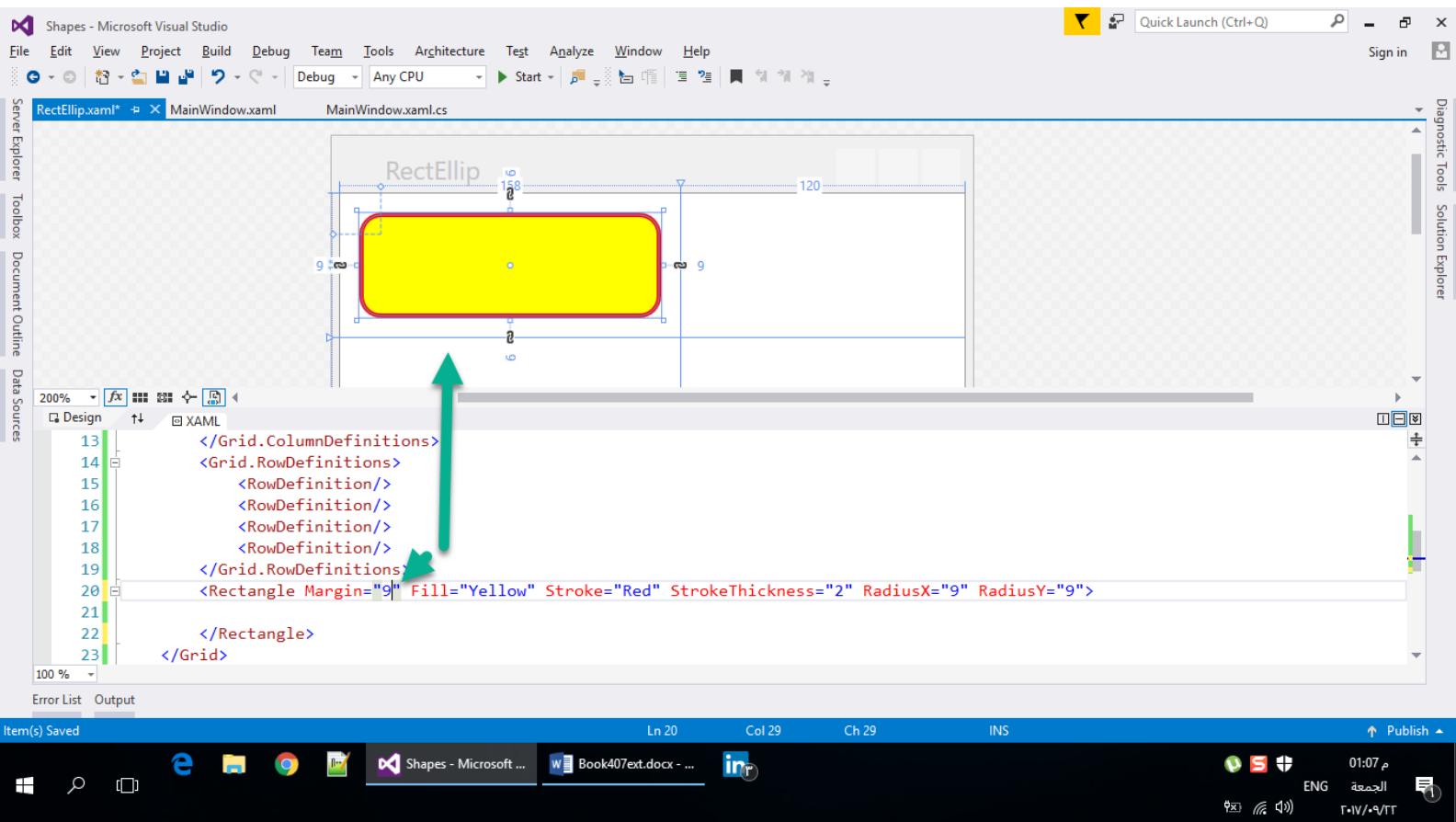
هنعمل

Rectangle

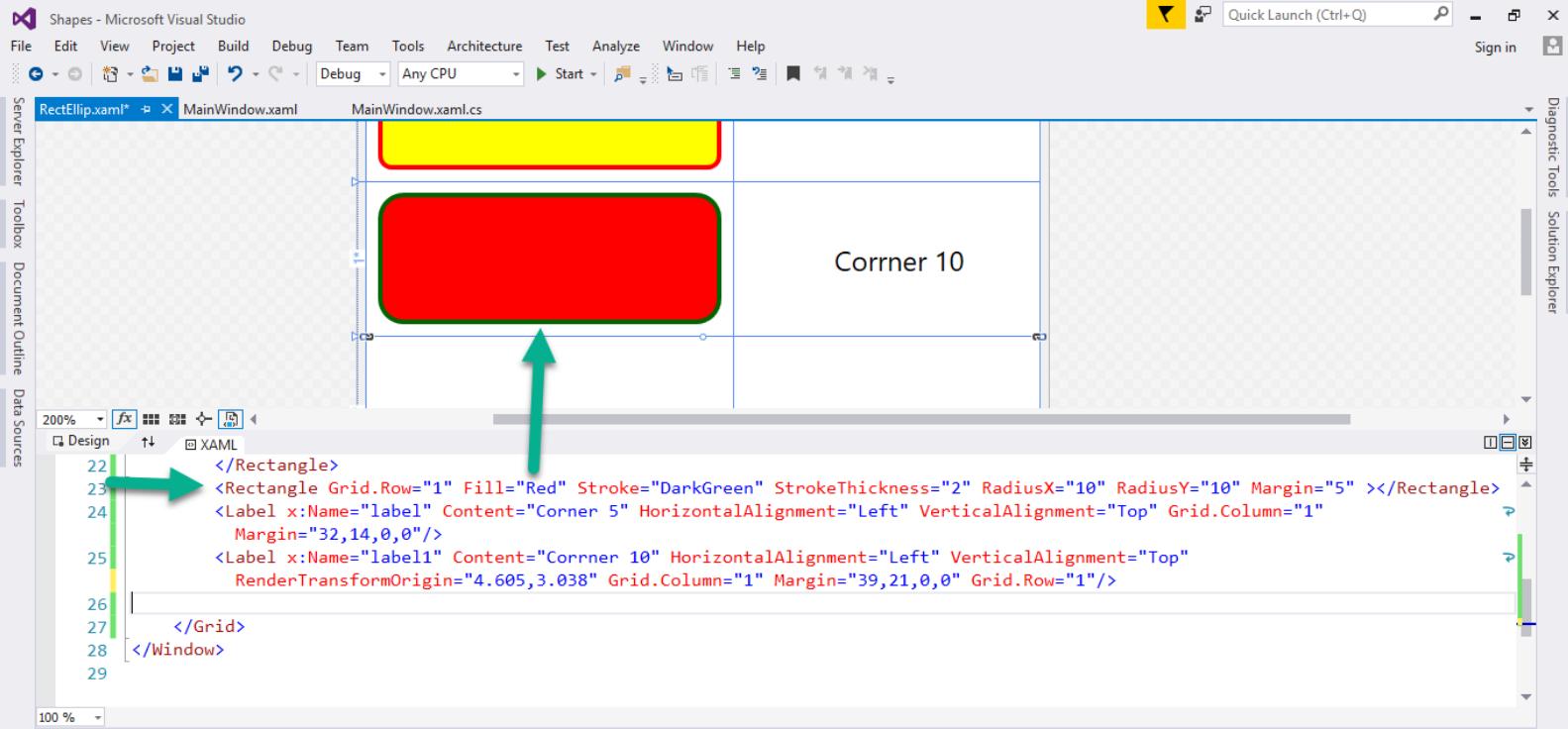


لونه اصفر الاطار احمر تتعيم الحواف radius

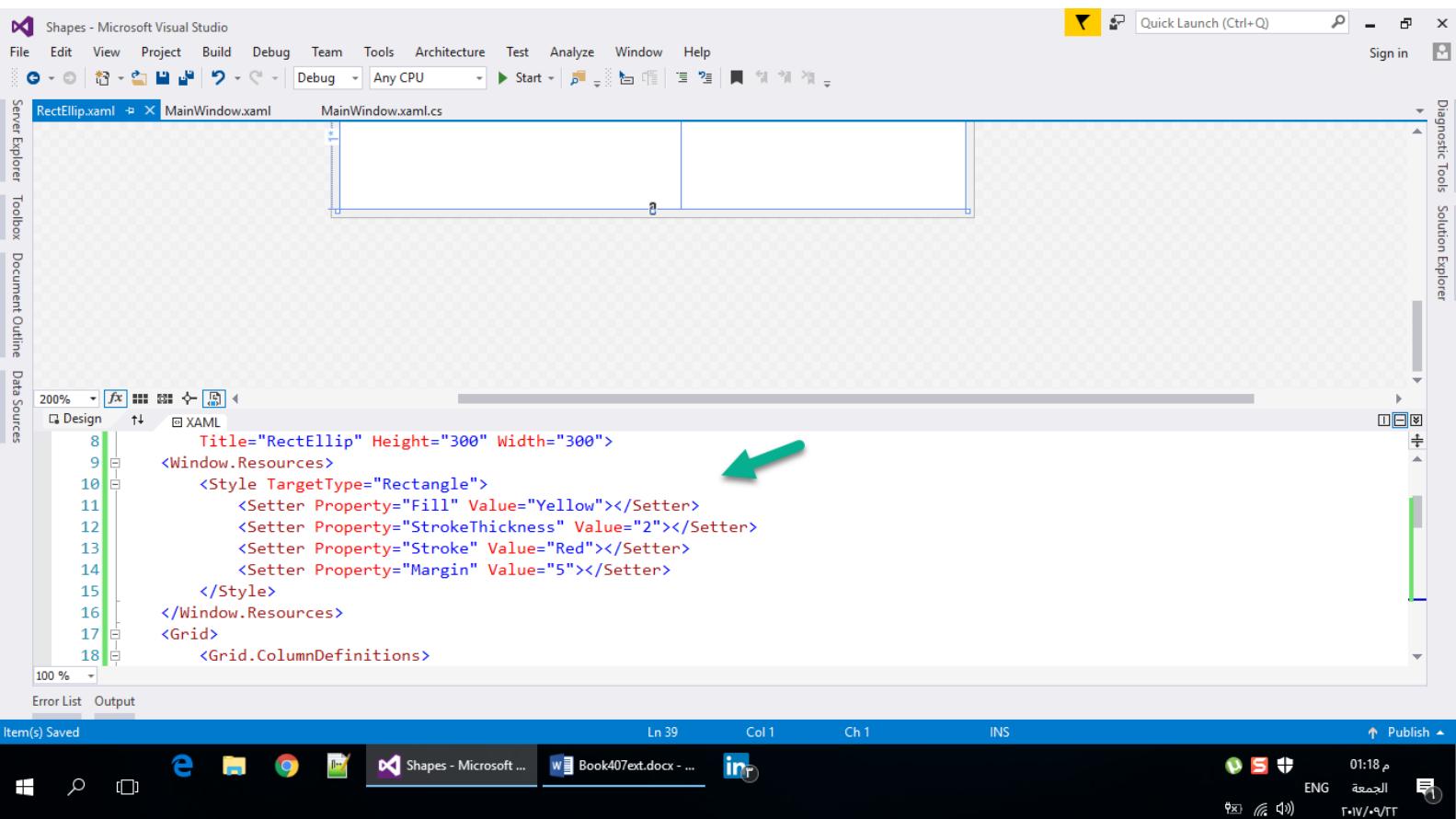
و ٩ و ٩



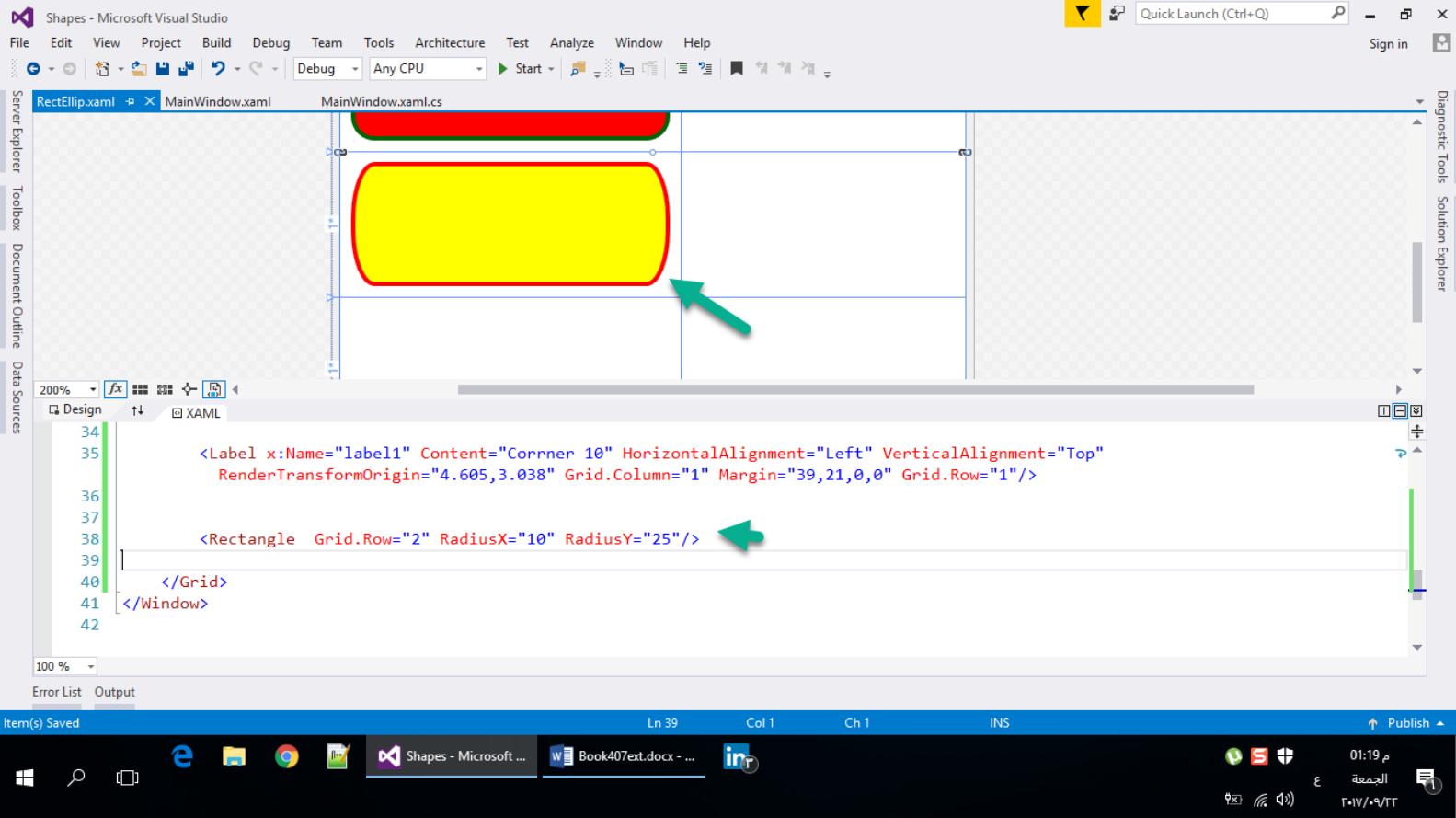
سوف فيه خصائص العنصر العادي ونقدر نستخدمها



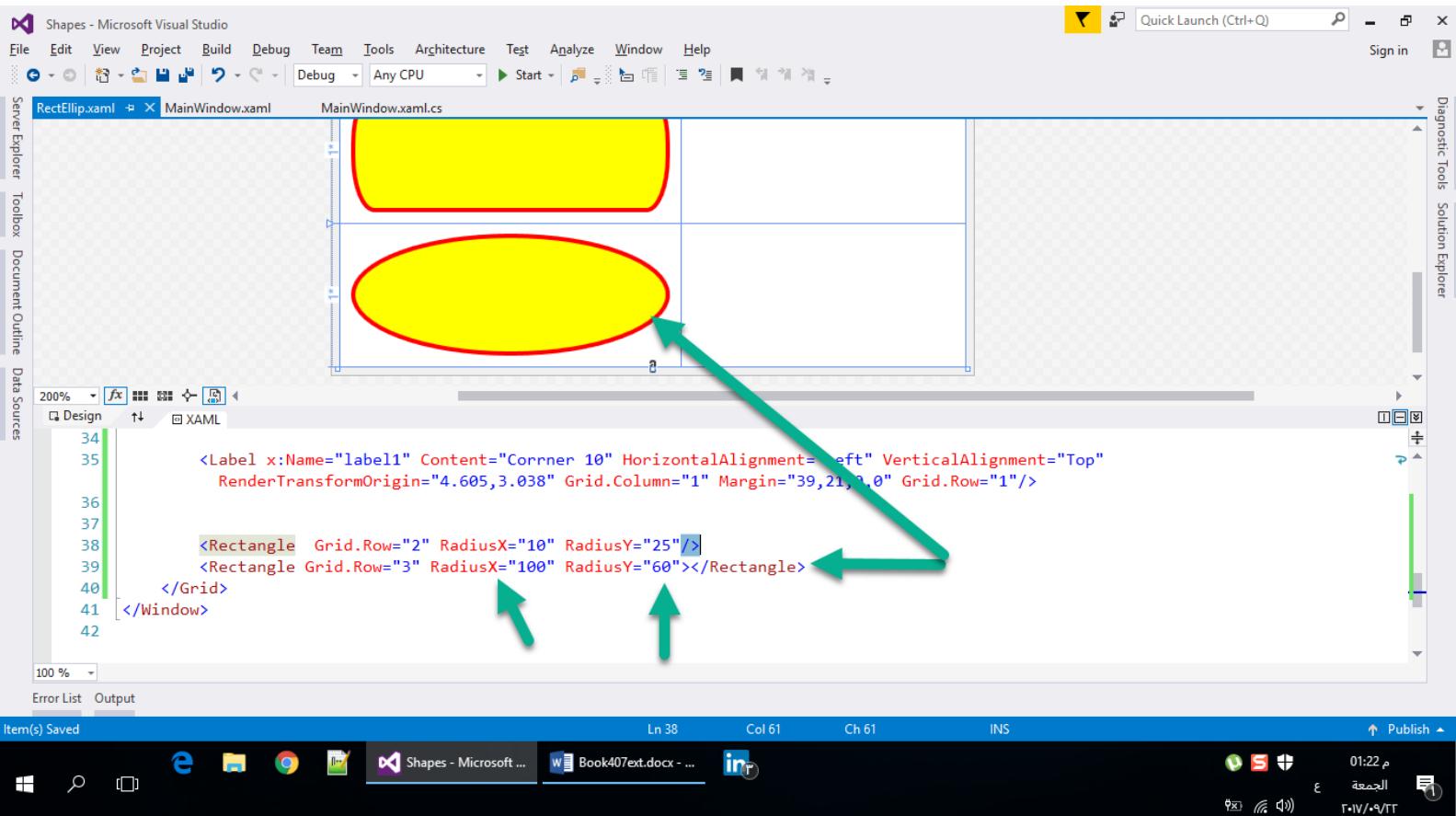
مثال كمان بنغير في تعييم الاطار



بنعمل استايل لكل ال
Rectangle



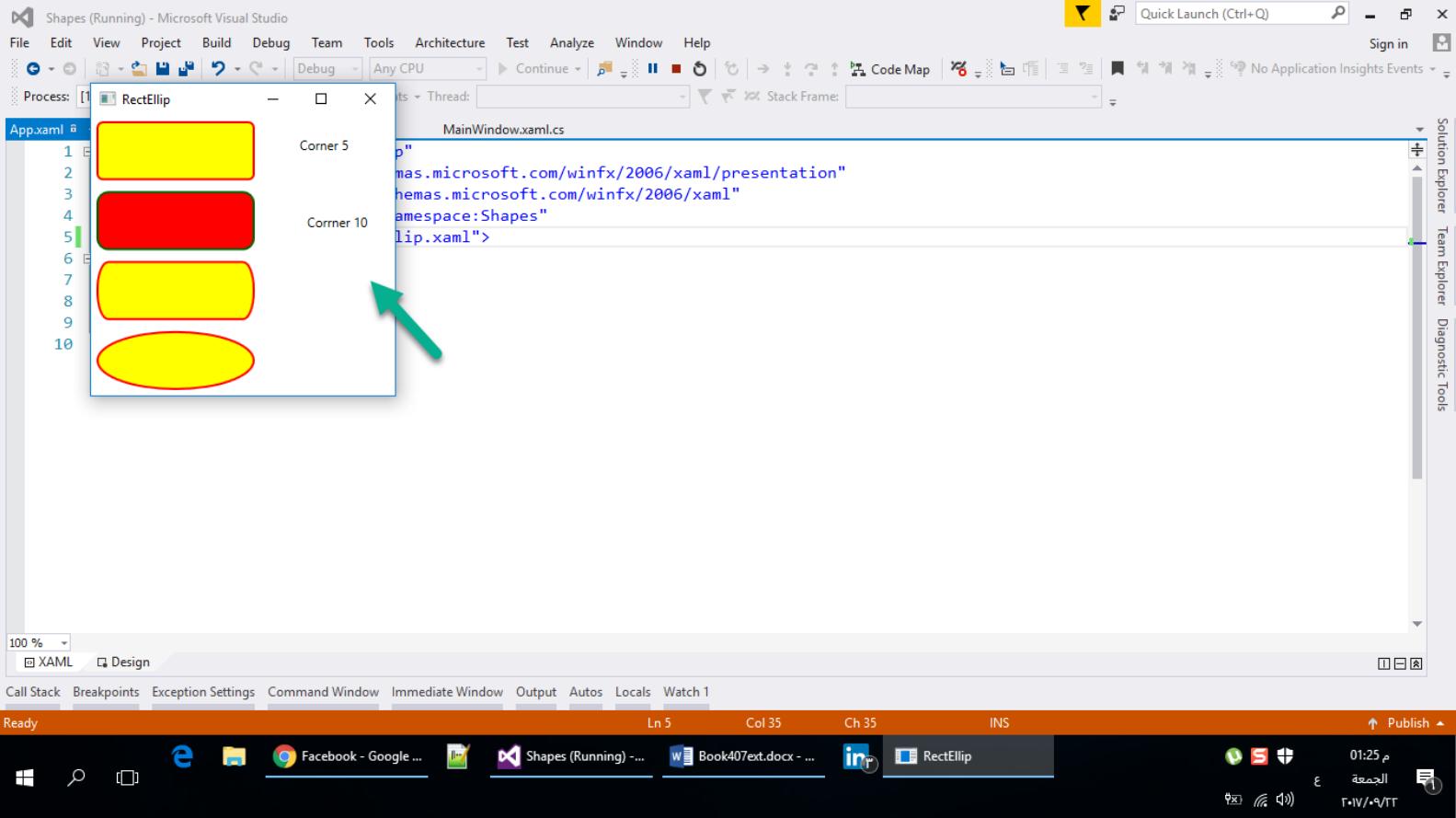
انا هنا ضيفتها سحب وافلات من التوليبوكس بتاع الفيجوال وشيلت كل خصائصها وحطيت خصائص من عندي كما موضح



Shawf Al

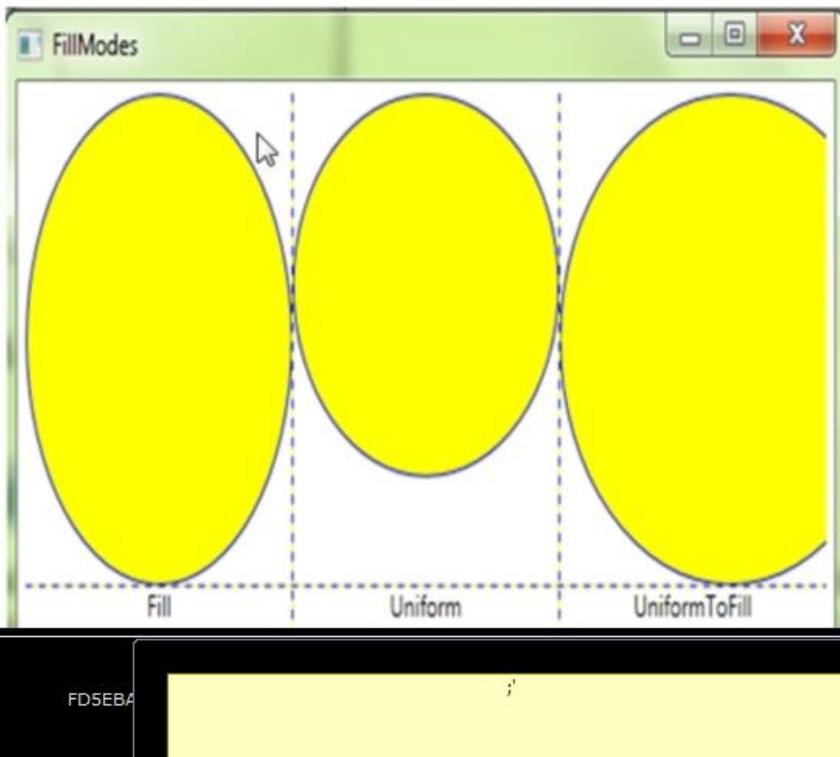
Radius

عمل دائرة كما موضح



انا غيرت ل 150 عشان يعمل دائرة

Rectangle and Ellipse Fill Modes


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Ellipse

Shapes - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

FillModes.xaml App.xaml MainWindow.xaml MainWindow.xaml.cs

Server Explorer Toolbox Document Outline Data Sources Diagnostic Tools Solution Explorer

200% 100% Design XAML

```

<Window.Resources>
    <Style TargetType="Ellipse">
        <Setter Property="Fill" Value="Yellow"/>
        <Setter Property="StrokeThickness" Value="2"/>
        <Setter Property="Stroke" Value="Red"/>
        <!--<Setter Property="Margin" Value="5"/>-->
    </Style>

```

Ready e new 1 - Notepad+ Ln 35 Col 96 Ch 96 INS Publish

Windows Search Task View Shapes - Microsoft ... Book407ext.docx - ... in µTorrent 3.5 (build 451 x 512 kB (have 1939) Created By VTS AG DHT: 739 nodes D: 87.6 kB/s T: 150.9 MB U: 13.5 kB/s T: 9.1 MB ENG الجمعة 03:48 م

تعالى نشوف اتعلموا ازاي عشان لسه هنعدل عليهم عشان يكونوا زي المثال

Shapes - Microsoft Visual Studio

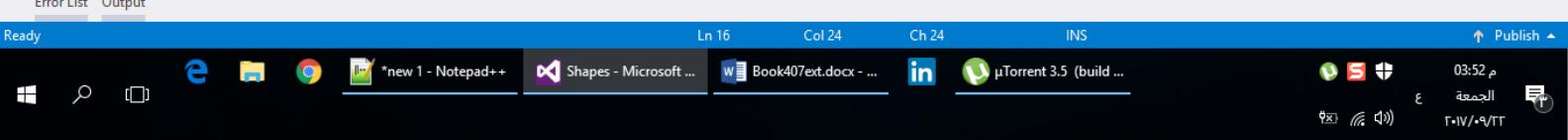
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in Diagnostic Tools Solution Explorer

FillModes.xaml App.xaml MainWindow.xaml MainWindow.xaml.cs

```
1 <Window x:Class="Shapes.FillModes"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Shapes"
7     mc:Ignorable="d"
8     Title="FillModes" Height="300" Width="300">
9     <Window.Resources>
10    <Style TargetType="Ellipse">
11        <Setter Property="Fill" Value="Yellow"/>
12        <Setter Property="StrokeThickness" Value="2"/>
13        <Setter Property="Stroke" Value="Red"/>
14        <!--<Setter Property="Margin" Value="5"/>-->
15    </Style>
16  </Window.Resources>
17
18  <Grid>
19      <Grid.RowDefinitions>
20          <RowDefinition/>
21          <RowDefinition/>
22      </Grid.RowDefinitions>
23      <Grid.ColumnDefinitions>
24          <ColumnDefinition/>
25          <ColumnDefinition/>
26          <ColumnDefinition/>
27      </Grid.ColumnDefinitions>
28
29      <Grid>
30          <Grid.ColumnDefinitions>
31              <ColumnDefinition/>
32              <ColumnDefinition/>
33              <ColumnDefinition/>
34          </Grid.ColumnDefinitions>
35          <Ellipse Grid.Column="1"/>
36          <Ellipse Grid.Column="2"/>
37          <Label Grid.Column="0" Grid.Row="1" HorizontalContentAlignment="Center">Fill</Label>
38          <Label Grid.Column="1" Grid.Row="1" HorizontalContentAlignment="Center">Uniform</Label>
39          <Label Grid.Column="2" Grid.Row="1" HorizontalContentAlignment="Center">Uniform To fill</Label>
40      </Grid>
41  </Grid>
42
43  </Window>
```

100 % XAML Design Error List Output



Shapes - Microsoft Visual Studio

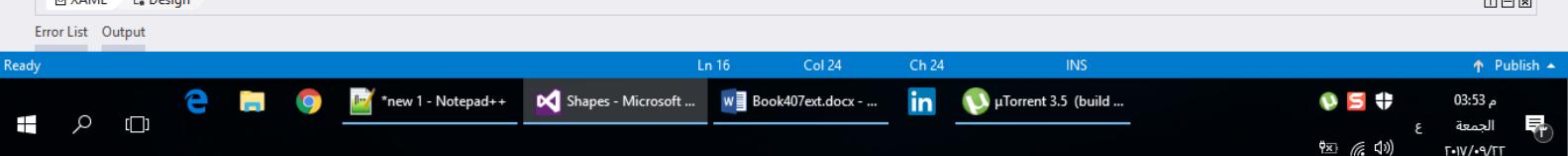
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in Diagnostic Tools Solution Explorer

FillModes.xaml App.xaml MainWindow.xaml MainWindow.xaml.cs

```
16 <Window.Resources>
17
18 <Grid>
19     <Grid.RowDefinitions>
20         <RowDefinition/>
21         <RowDefinition/>
22     </Grid.RowDefinitions>
23     <Grid.ColumnDefinitions>
24         <ColumnDefinition/>
25         <ColumnDefinition/>
26         <ColumnDefinition/>
27     </Grid.ColumnDefinitions>
28
29     <Grid>
30         <Grid.ColumnDefinitions>
31             <ColumnDefinition/>
32             <ColumnDefinition/>
33             <ColumnDefinition/>
34         </Grid.ColumnDefinitions>
35         <Ellipse Grid.Column="1"/>
36         <Ellipse Grid.Column="2"/>
37         <Label Grid.Column="0" Grid.Row="1" HorizontalContentAlignment="Center">Fill</Label>
38         <Label Grid.Column="1" Grid.Row="1" HorizontalContentAlignment="Center">Uniform</Label>
39         <Label Grid.Column="2" Grid.Row="1" HorizontalContentAlignment="Center">Uniform To fill</Label>
40     </Grid>
41 </Grid>
42
43 </Window>
```

100 % XAML Design Error List Output

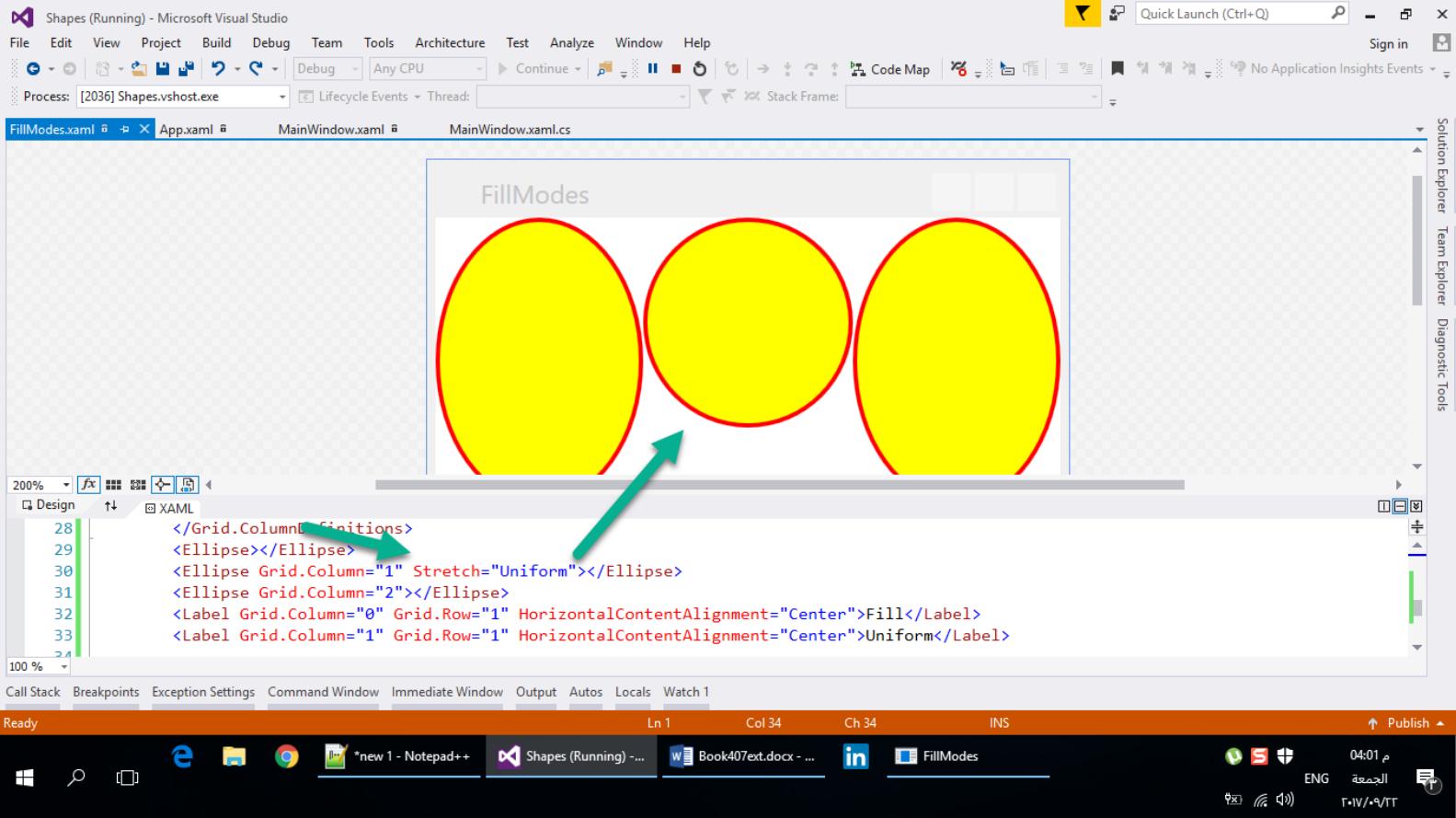


Ellipse

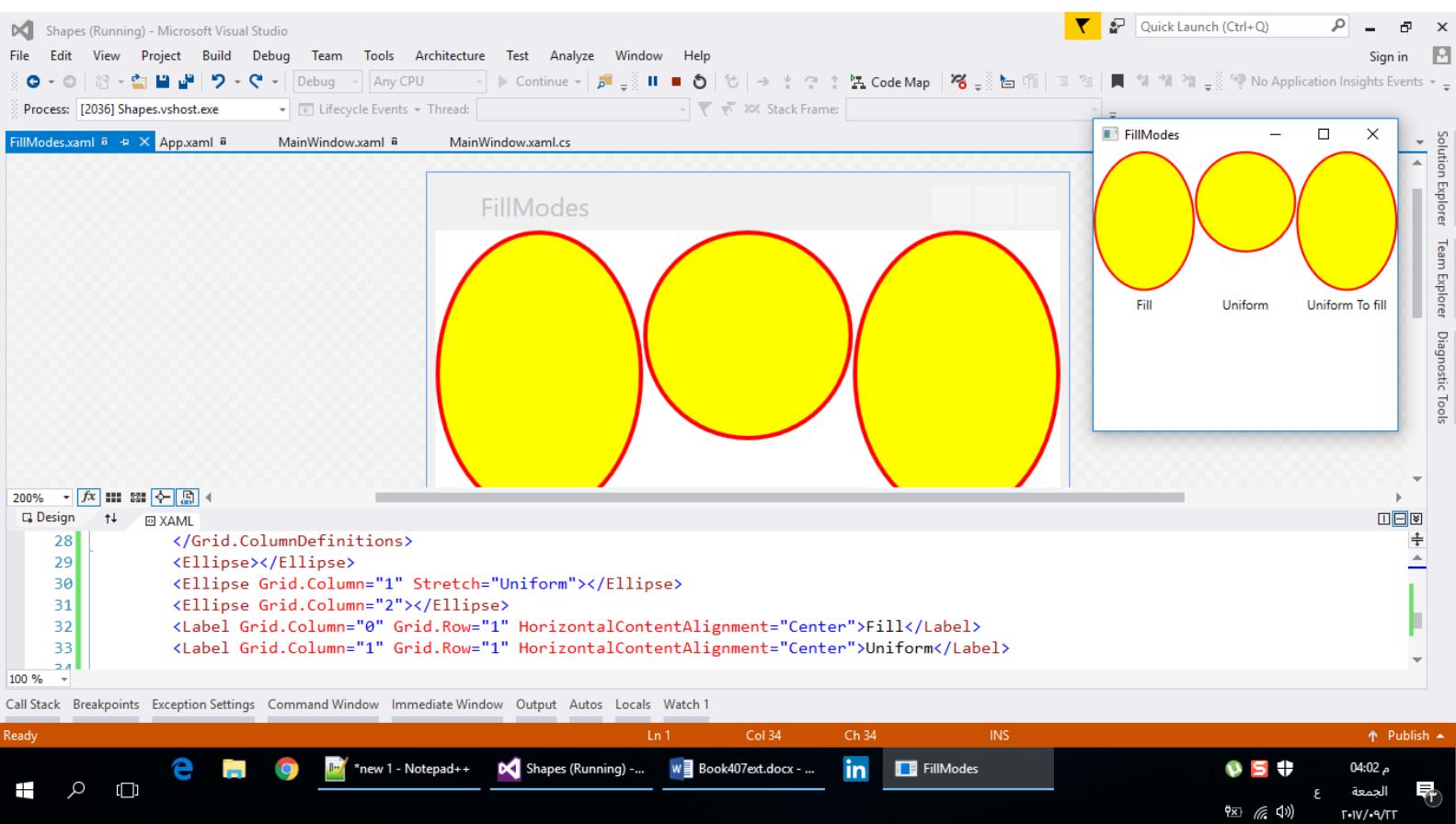
لـيـهـا كـذـا وـضـعـ وـضـعـ

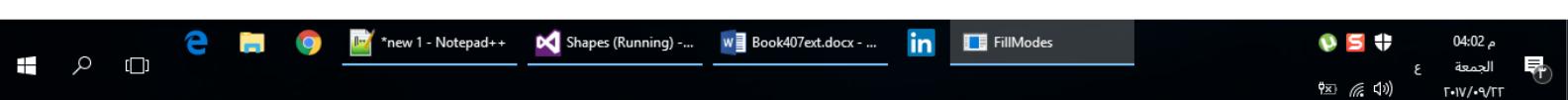
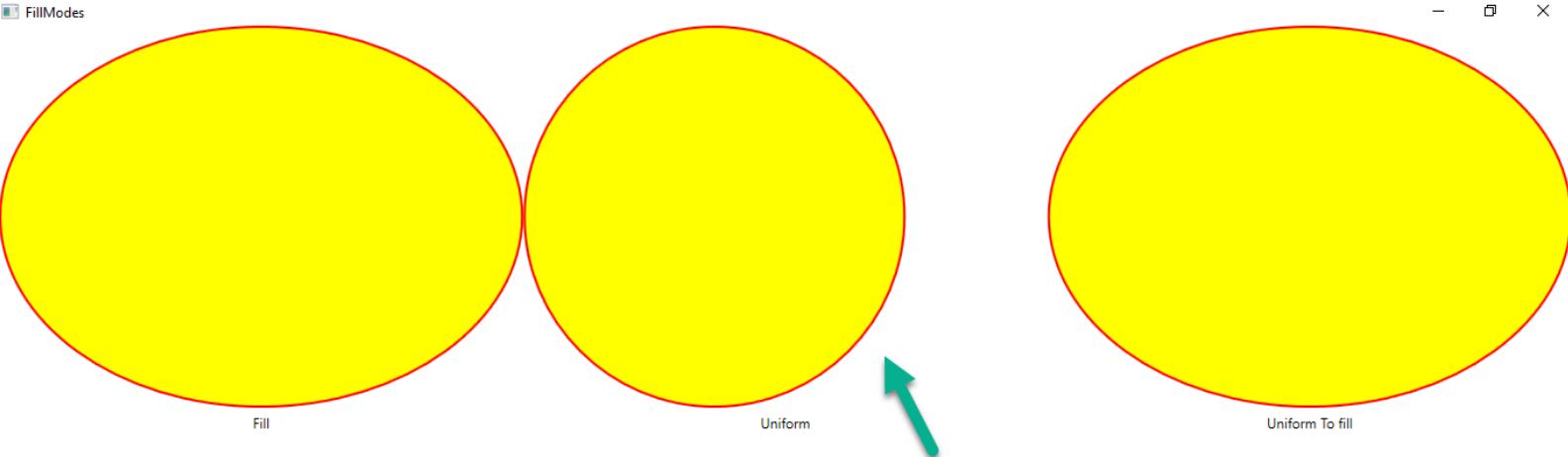
Fill

دـهـ اـفـتـراـصـياـ بـيـكـونـ الـوـضـعـ دـهـ زـىـ ماـ شـايـفـينـ الـوـضـعـ فـىـ التـلـاتـهـ تـعـالـىـ نـغـيـرـ تـانـىـ وـاحـدـةـ



شوف غير الشكل ازای





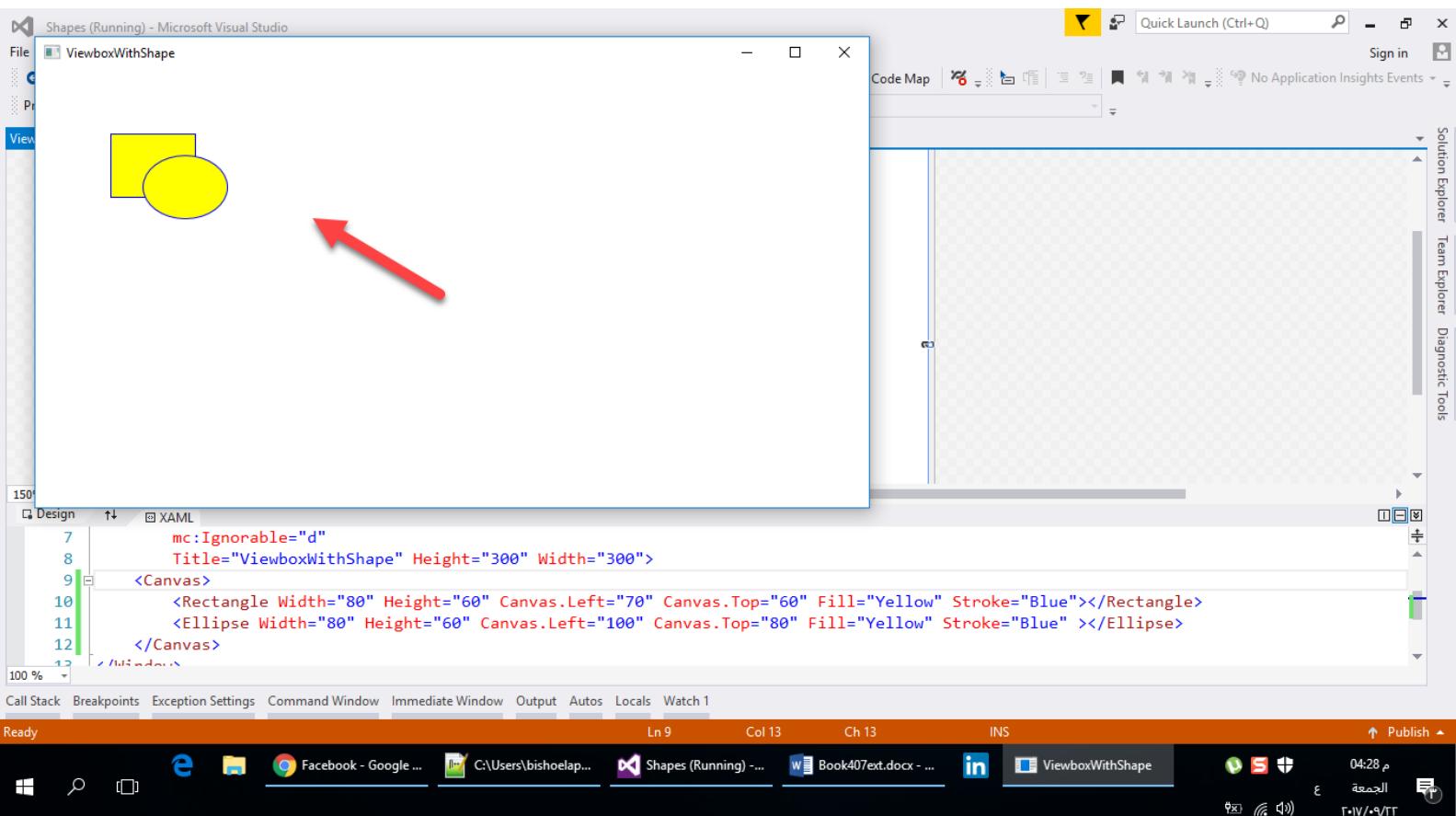
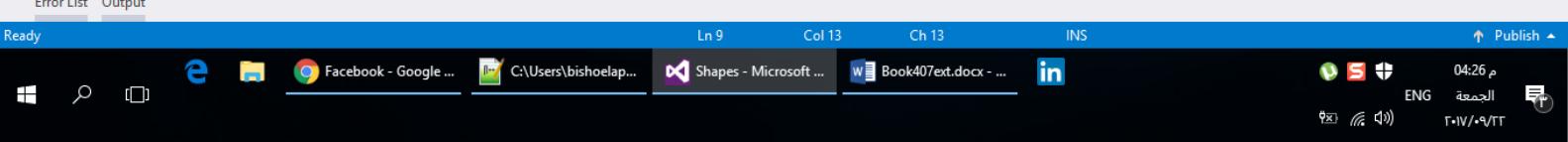
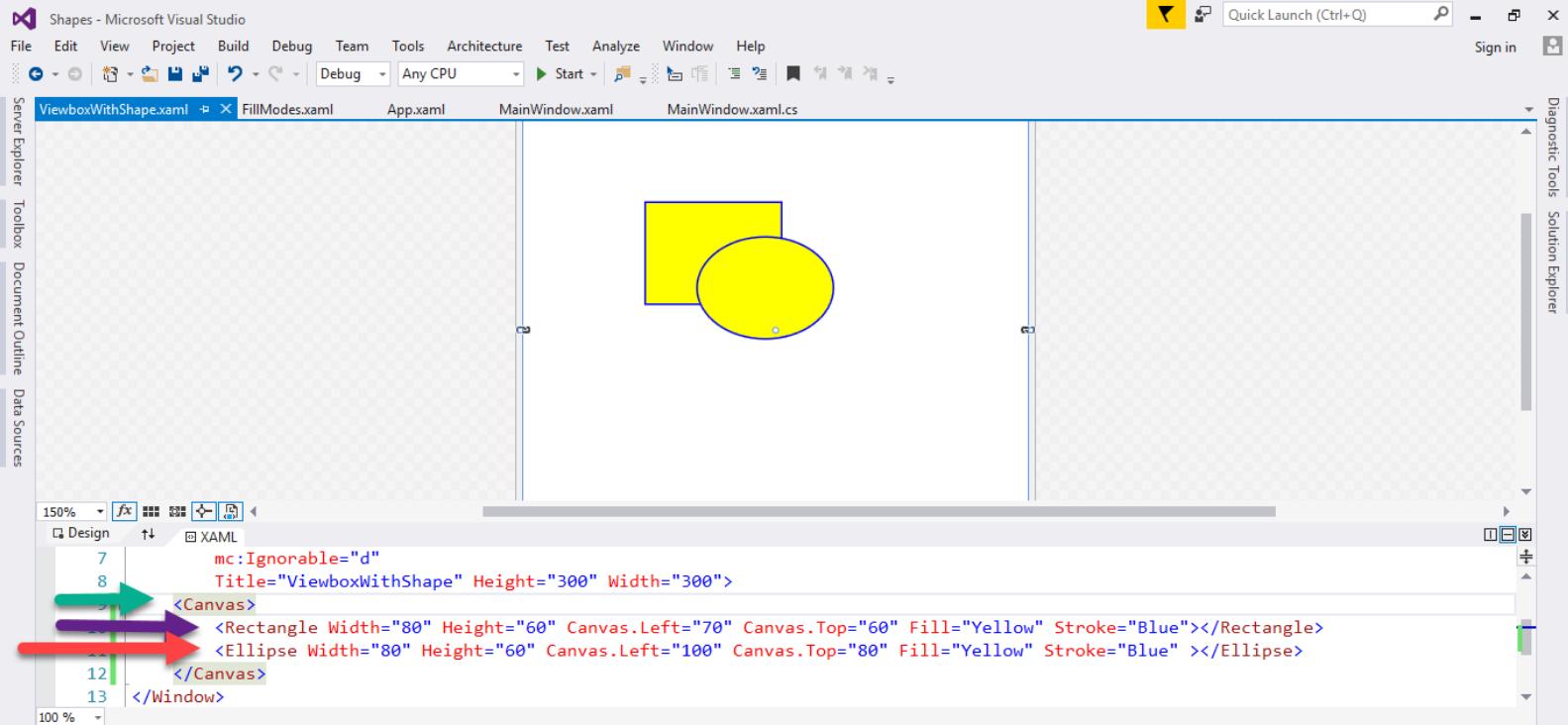
و هنلاقي ايقنت كتير زى الزر بداخل

Ellipse

View box

بيعمل تمدد لاي عنصر مش بيتعمله تمدد

هنعرض المشكلة الاول ونحلها تابع



المشكلة اهي مش بيحصل تمديد

وبيفضلوا في مكانها كمان ليه عاشرن محدد طول وعرض

Shapes - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

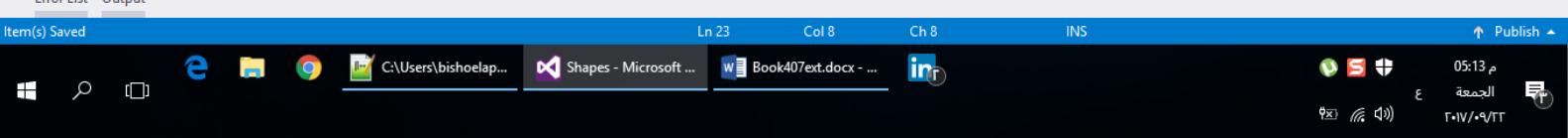
Server Explorer Toolbox Document Outline Data Sources

ViewboxWithShape.xaml FillModes.xaml App.xaml MainWindow.xaml MainWindow.xaml.cs

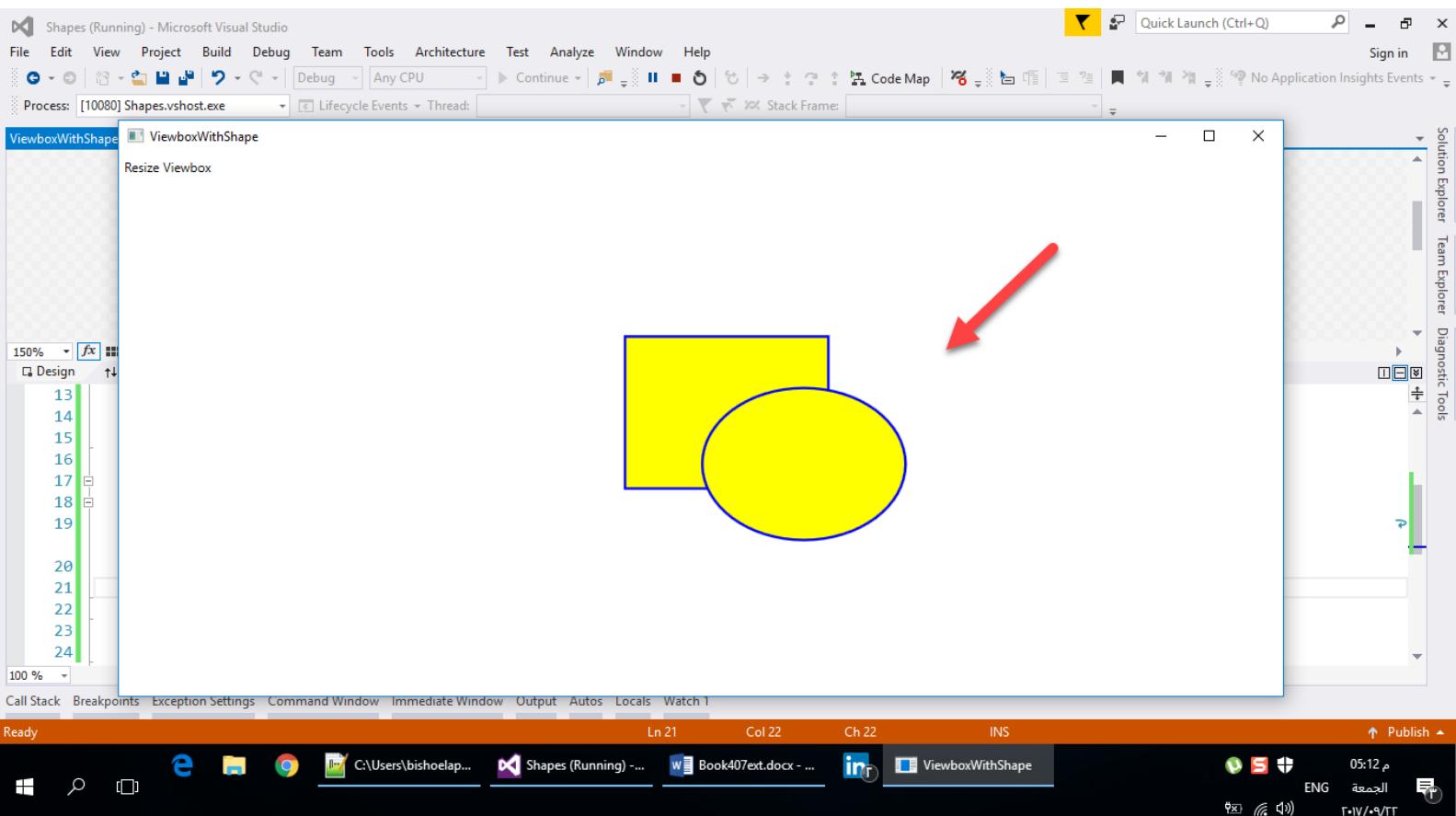
150% Design XAML

```
7 mc:Ignorable="d"
8 Title="ViewboxWithShape" Height="300" Width="300">
9
10 <Grid>
11   <Grid.RowDefinitions>
12     <RowDefinition Height="Auto" />
13     <RowDefinition Height="*" />
14
15   </Grid.RowDefinitions>
16   <Label>Resize Viewbox</Label>
17   <Viewbox Grid.Row="1">
18     <Canvas Width="200" Height="200" HorizontalAlignment="Left" VerticalAlignment="Top">
19       <Rectangle HorizontalAlignment="Left" Width="80" Height="60" Canvas.Left="70" Canvas.Top="60" Fill="Yellow" Stroke="Blue"></Rectangle>
20       <Ellipse Width="80" Height="60" Canvas.Left="100" Canvas.Top="80" Fill="Yellow" Stroke="Blue" ></Ellipse>
21     </Canvas>
22   </Viewbox>
23 </Grid>
```

Error List Output



ال코드 موضح وسهل نجرب



كترت بنجاح
والمشكله اتحلت

StretchDirection

خاصية بتحدد يتمدد لانهى اتجاه

Shapes - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

ViewboxWithShape.xaml* FillModes.xaml App.xaml MainWindow.xaml MainWindow.xaml.cs

Server Explorer Toolbox Document Outline Data Sources

Design XAML

150%

```
7     mc:Ignorable="d"
8     Title="ViewboxWithShape" Height="300" Width="300">
9
10    <Grid>
11      <Grid.RowDefinitions>
12        <RowDefinition Height="Auto" />
13        <RowDefinition Height="*" />
14
15      </Grid.RowDefinitions>
16      <Label>Resize Viewbox</Label>
17      <Viewbox Grid.Row="1" StretchDirection=""">
18        <Canvas Width="200" Height="200" HorizontalAlignment="Left" VerticalAlignment="Top">
19          <Rectangle HorizontalAlignment="Left" Width="80" Height="60" Canvas.Left="70" Canvas.Top="60" Fill="Yellow" Stroke="Blue"></Rectangle>
20          <Ellipse Width="80" Height="60" Canvas.Left="100" Canvas.Top="80" Fill="Yellow" Stroke="Blue" ></Ellipse>
21        </Canvas>
22      </Viewbox>
23    </Grid>
```

ھی فیہا 3 خیارات

polyline

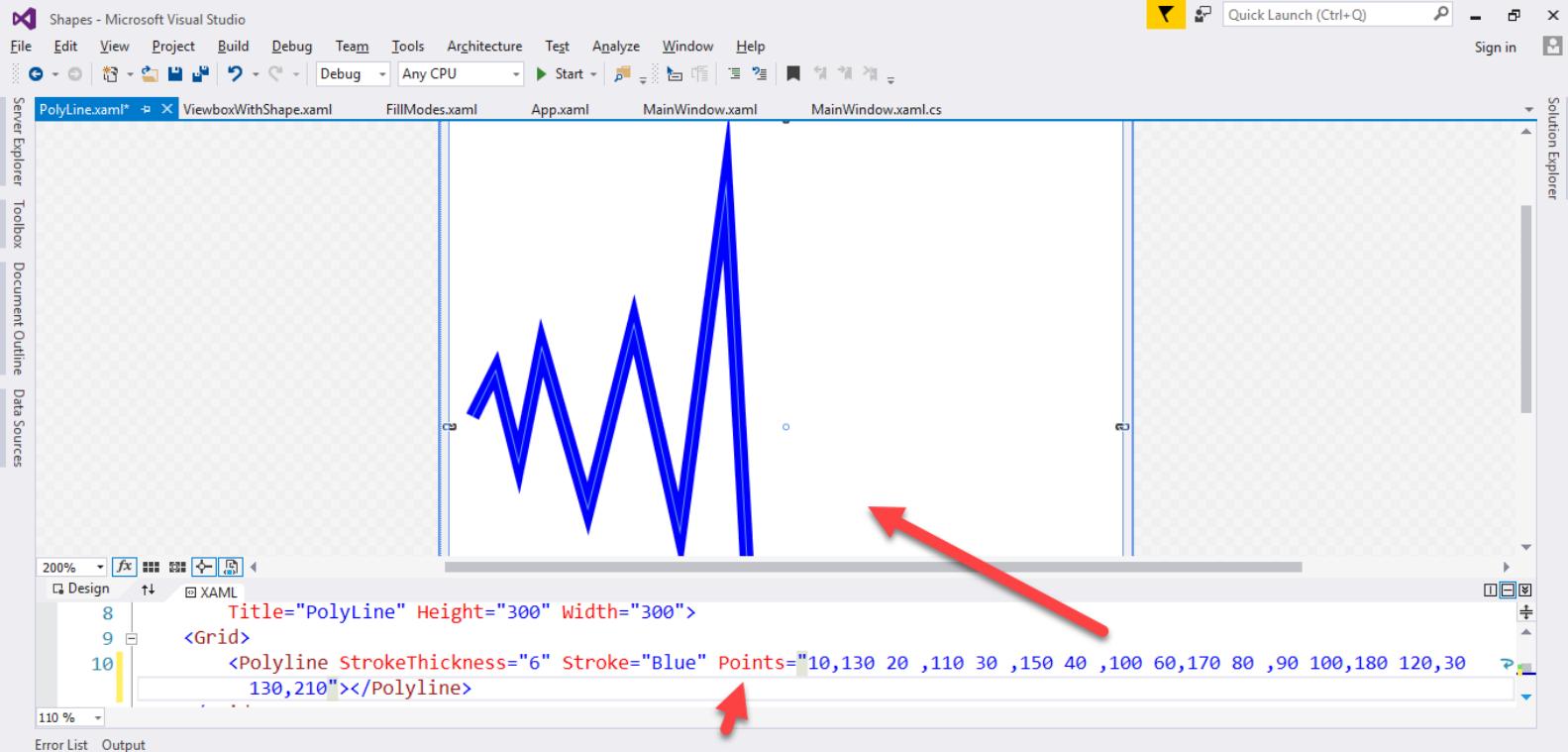
مجموعه خطوط مع بعض مش خط واحد تعالی نشوفها

The screenshot shows the Microsoft Visual Studio interface with the title "Shapes - Microsoft Visual Studio". The menu bar includes File, Edit, View, Project, Build, Debug, Team, Design, Format, Tools, Architecture, Test, Analyze, Window, and Help. The toolbar has icons for Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others. The ribbon tabs include Server Explorer, Toolbox, Document Outline, and Data Sources. The main window displays a PolyLine control in the Design view, which is a blue zigzag shape. Below it is the XAML code:

```
7     mc:Ignorable="d"
8         Title="PolyLine" Height="300" Width="300">
9             <Grid>
10                <Polyline StrokeThickness="6" Stroke="Blue" Points="10,130 20 ,110 30 ,150 40 ,100"></Polyline>
11            </Grid>
12        </Window>
```

Two red arrows point from the XAML code to the corresponding lines in the code editor, specifically pointing to the closing tag of the Polyline element and the closing tag of the Grid element.

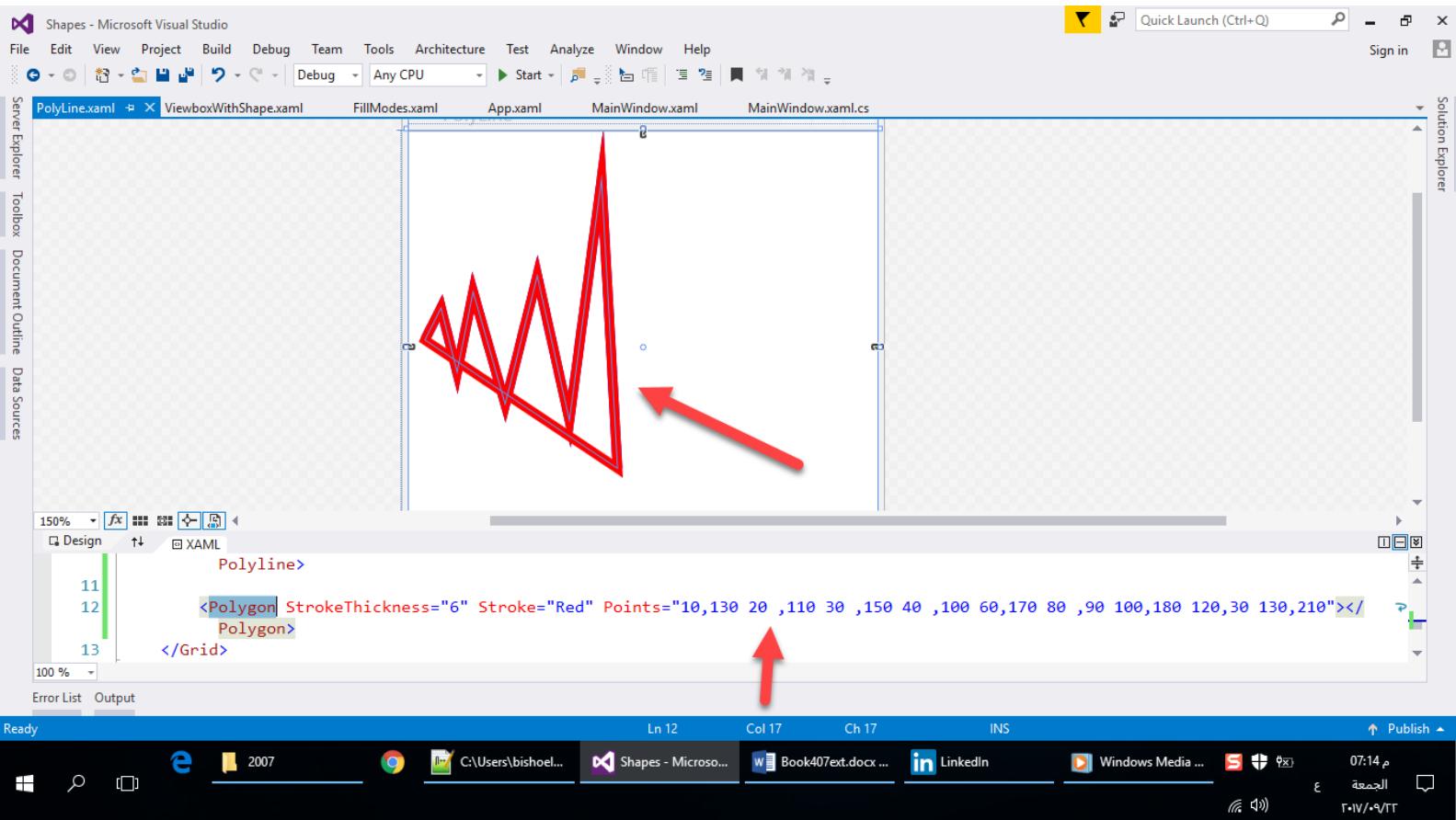
موضحة كما النتيجة



رسمه كمثال

Polygon

نجرية



كما موضح ده شكل اخر ب اداة اخرى

Line Caps

شكل نهاية الخط

```
1 <Window x:Class="Shapes.LineCaps"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Shapes"
7     mc:Ignorable="d"
8     Title="LineCaps" Height="300" Width="300">
9     <Grid>
10    <Grid.RowDefinitions>
11        <RowDefinition/>
12        <RowDefinition/>
13        <RowDefinition/>
14        <RowDefinition/>
15        <RowDefinition/>
16    </Grid.RowDefinitions>
17    <Grid.ColumnDefinitions>
18        <ColumnDefinition />
19        <ColumnDefinition />
20    </Grid.ColumnDefinitions>
21    <Polyline Grid.Row="0" StrokeThickness="10" Stroke="YellowGreen" SnapsToDevicePixels="True" Points="10,10 20,20 30,10 , 100,10" StrokeEndLineCap="Flat" />
22    <Polyline Grid.Row="1" StrokeThickness="10" Stroke="YellowGreen" SnapsToDevicePixels="True" Points="10,10 20,20 30,10 , 100,10" StrokeEndLineCap="Round" />
23    <Polyline Grid.Row="2" StrokeThickness="10" Stroke="YellowGreen" SnapsToDevicePixels="True" Points="10,10 20,20 30,10 , 100,10" StrokeEndLineCap="Square" />
24    <Polyline Grid.Row="3" StrokeThickness="10" Stroke="YellowGreen" SnapsToDevicePixels="True" Points="10,10 20,20 30,10 , 100,10" StrokeEndLineCap="Triangle" />
25    <Polyline Grid.Row="4" StrokeThickness="10" Stroke="YellowGreen" SnapsToDevicePixels="True" Points="10,10 20,20 30,10 , 100,10" />
26
27    <Label Grid.Row="0" Grid.Column="1">Flat</Label>
28    <Label Grid.Row="1" Grid.Column="2">Round</Label>
29    <Label Grid.Row="2" Grid.Column="3">Square</Label>
30    <Label Grid.Row="3" Grid.Column="4">Triangle</Label>
31    <Label Grid.Row="4" Grid.Column="5">Normal</Label>
32
33 </Grid>
34 </Window>
```

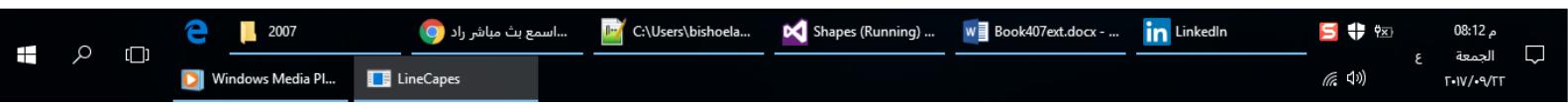
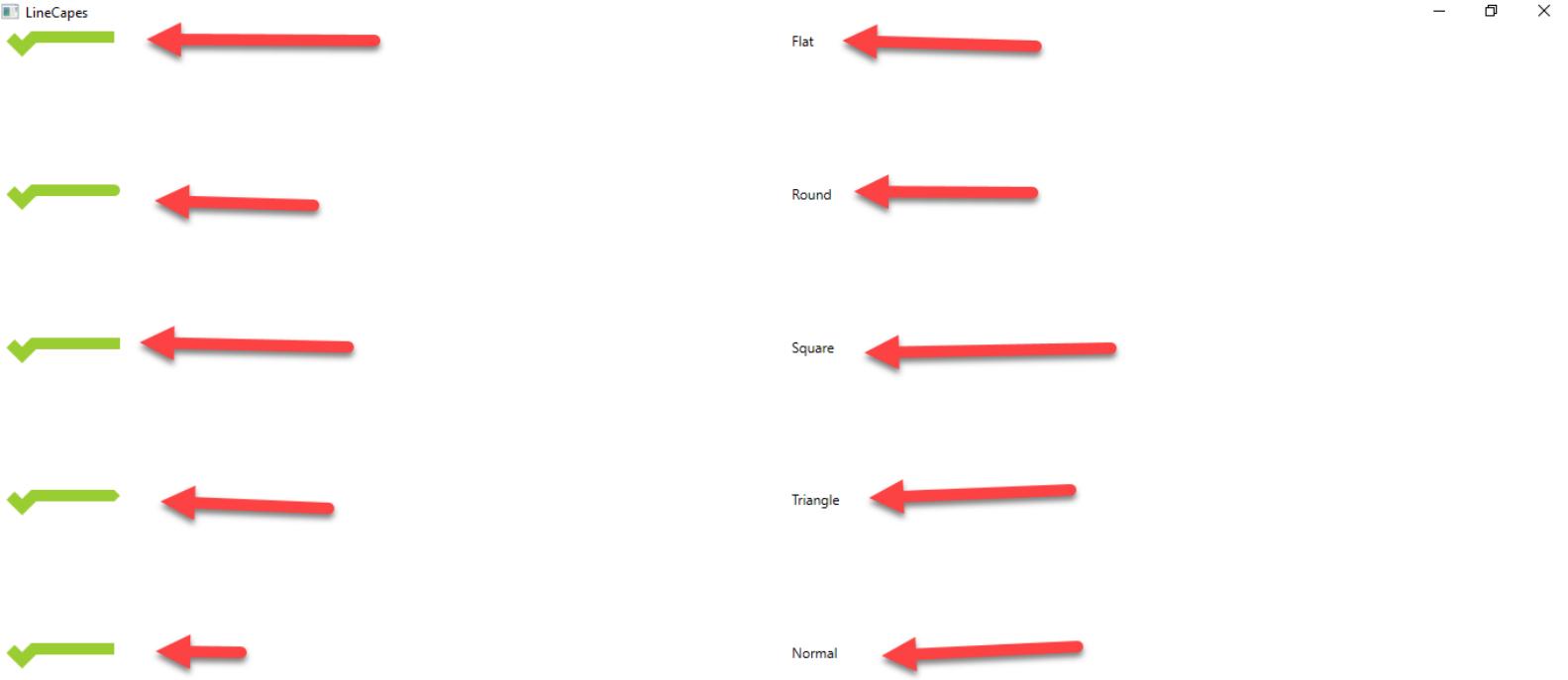
عمل خطوط و خاصية

snapsToDevice

بتخلی الرسمه ميحصلش ليها بكسليه

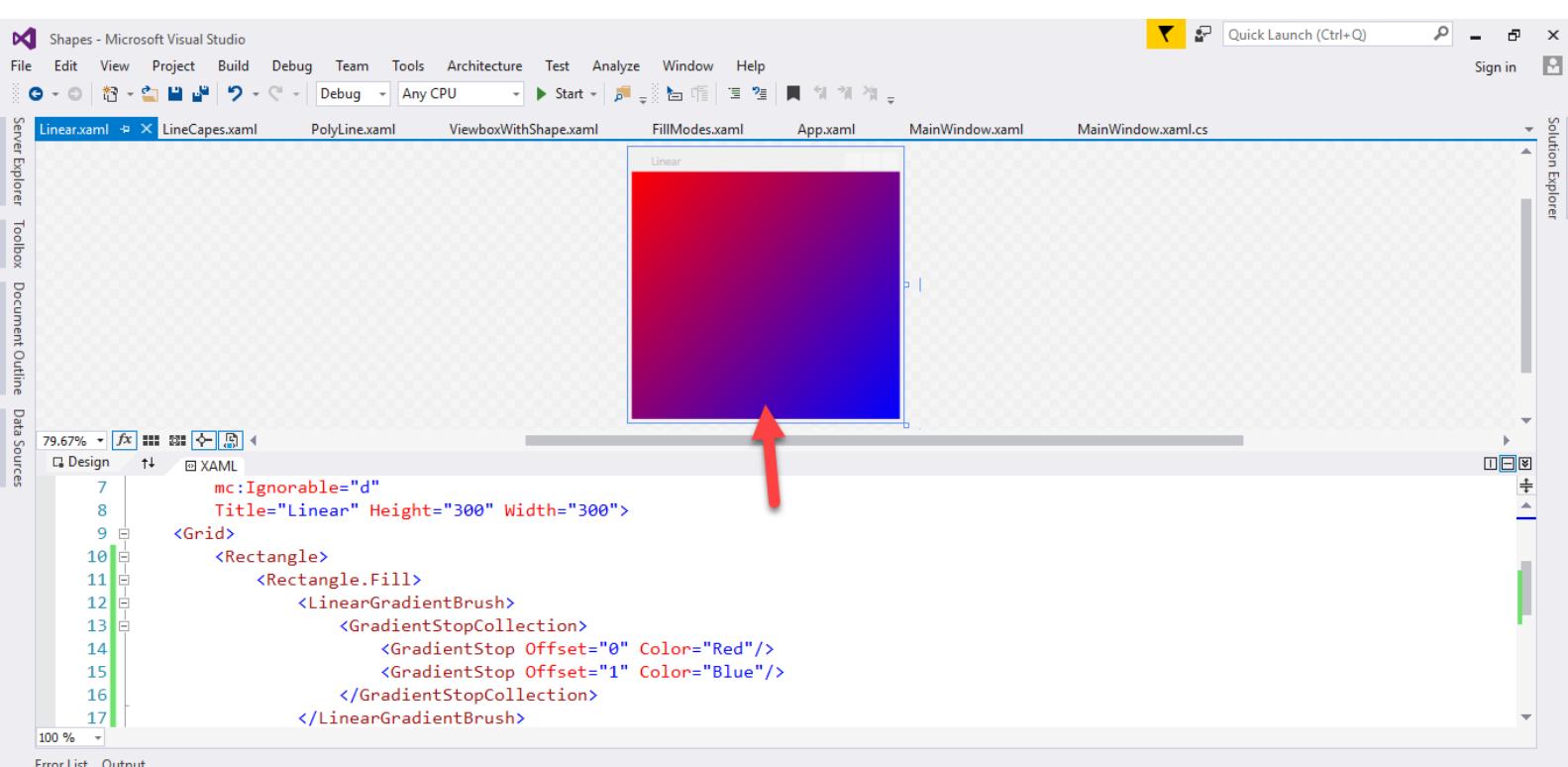
وفى الاخر بختر شكل نهاية الخط

تعالى نشو夫 النتائج النهائية



تمام ظهور باشكال مختلفة لنهاية الخطوط

Linear



كما واضح بسيط وسهل

Image brush

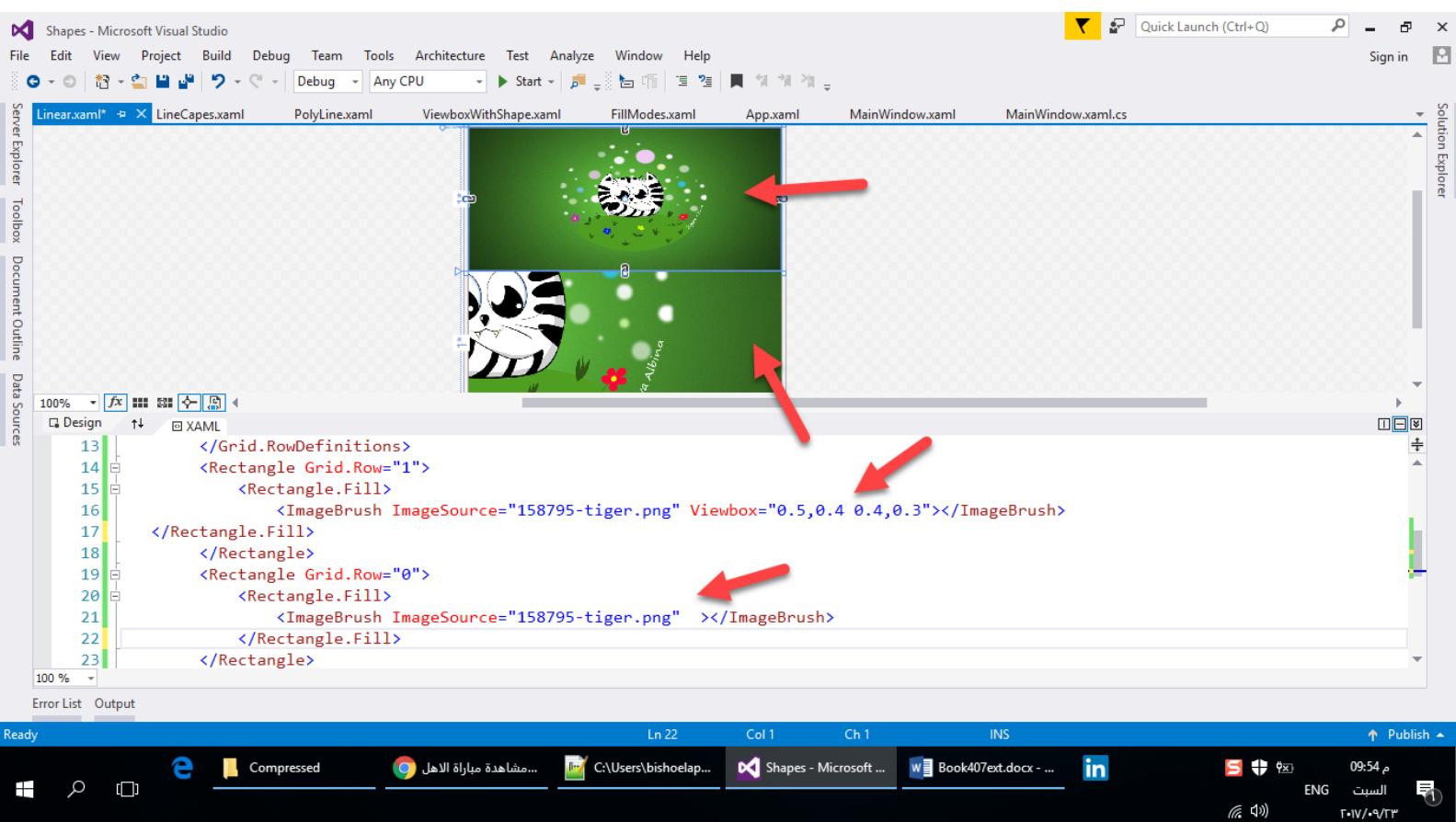
موجودة داخل الـ

Rectangle

بها خاصية

View box

تعالى نسوفها



سوف الخاصية مرت ليها الاحداثيات شوف عملت تكبير على حسب الاحداثيات فى الصورة زى ما طلب حاجة قوية جدا وجميلة

Transforms

بتضبط زواية الكنترول بيكون معمول على زواية 180 واحنا هنغيرها

Transform Classes

- **TranslateTransform**
- **RotateTransform**
- **ScaleTransform**
- **SkewTransform**
- **MatrixTransform**
- **TransformGroup**



1 بتعتمد على x,y

2 ممكن تضبط الزواية وممكن كمان تغير السنتر x والسنتر y

3 بتطول او بتشد الكنترول لفوق او لتحت

4 بتعل اى حاجة فى الكنترول تعطى حته وتوطى حته فى الكنترول وهكذا

5 عملية معقدة بتحتاج بعض الرياضة ودى مش هناخدها

6 بنعمل كذا نوع من الحاجات الى فاتت دى ونحطها فى جروب واحد

نعمل مثال

هيناقش 1 و 2

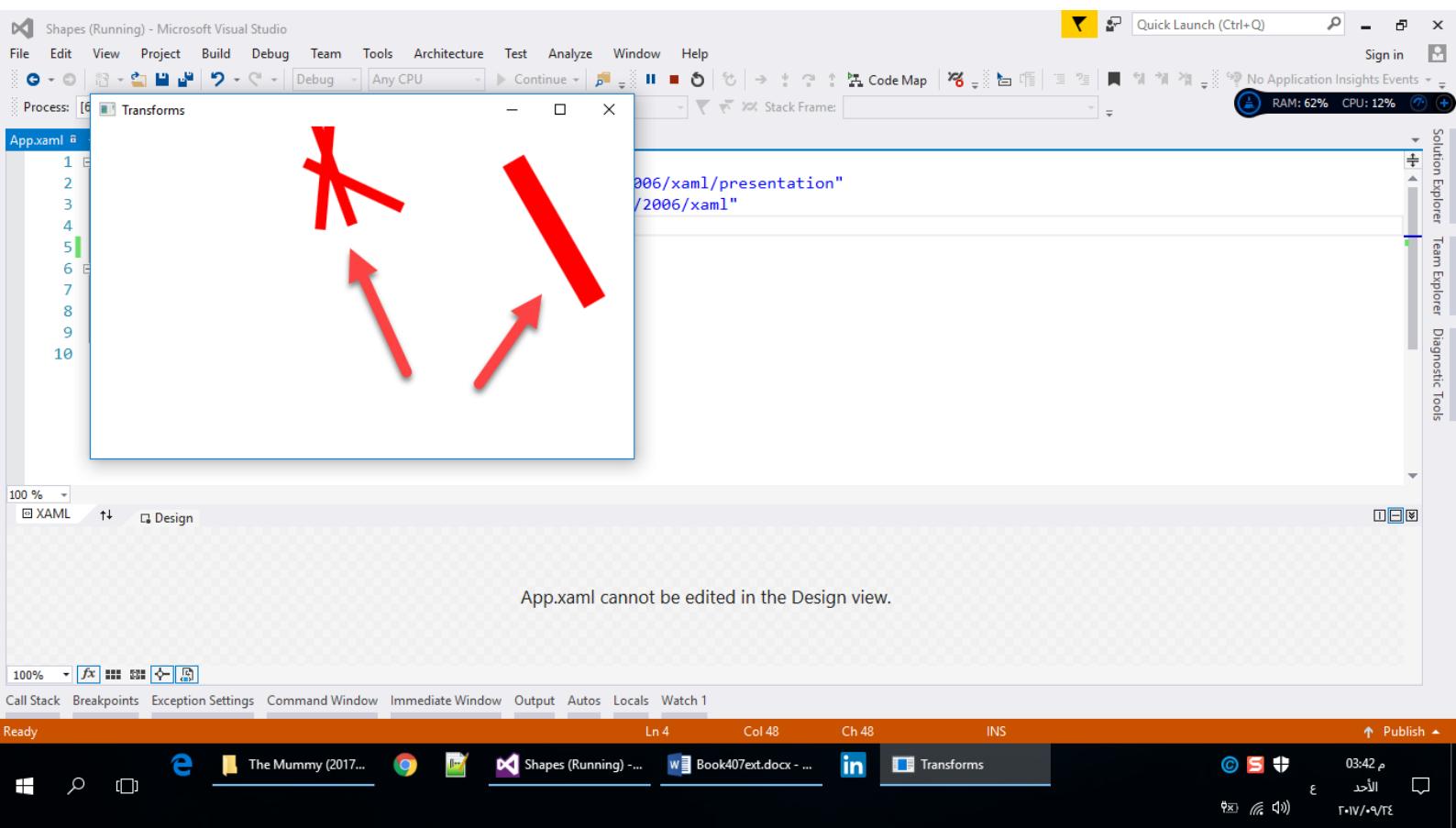
```

1 <Window x:Class="Shapes.Transforms"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Shapes"
7     mc:Ignorable="d"
8     Title="Transforms" Height="350" Width="525">
9     <Canvas>
10    <Rectangle Width="153" Height="23" Fill="Red" Canvas.Left="319" Canvas.Top="57">
11        <Rectangle.RenderTransform>
12            <RotateTransform Angle="60" CenterX="70" CenterY="60"/>
13        </Rectangle.RenderTransform> ←
14
15    </Rectangle>
16    <Rectangle RenderTransformOrigin="0.5,0.5" Fill="Red" Height="10" Width="101" Canvas.Left="196" Canvas.Top="50">
17        <Rectangle.RenderTransform>
18            <RotateTransform Angle="25"/> ←
19        </Rectangle.RenderTransform>
20    </Rectangle>
21
22    <Rectangle RenderTransformOrigin="0.3,0.6" Fill="Red" Height="10" Width="101" Canvas.Left="190" Canvas.Top="20">
23        <Rectangle.RenderTransform>
24            <RotateTransform Angle="95"/> ←
25        </Rectangle.RenderTransform>
26    </Rectangle>
27
28    <Rectangle RenderTransformOrigin="0.3,0.6" Fill="Red" Height="10" Width="101" Canvas.Left="190" Canvas.Top="20">
29        <Rectangle.RenderTransform>
30            <RotateTransform Angle="70"/> ←
31        </Rectangle.RenderTransform>
32    </Rectangle>
33
34 </Canvas>
35 </Window>
36

```

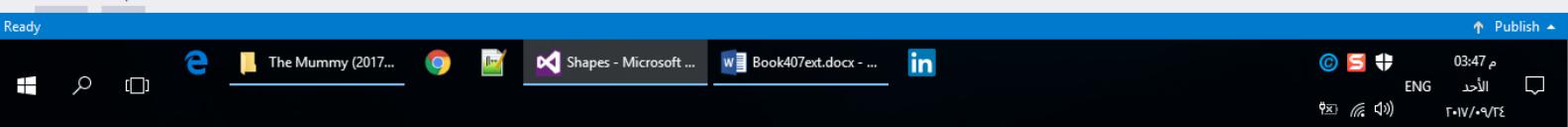
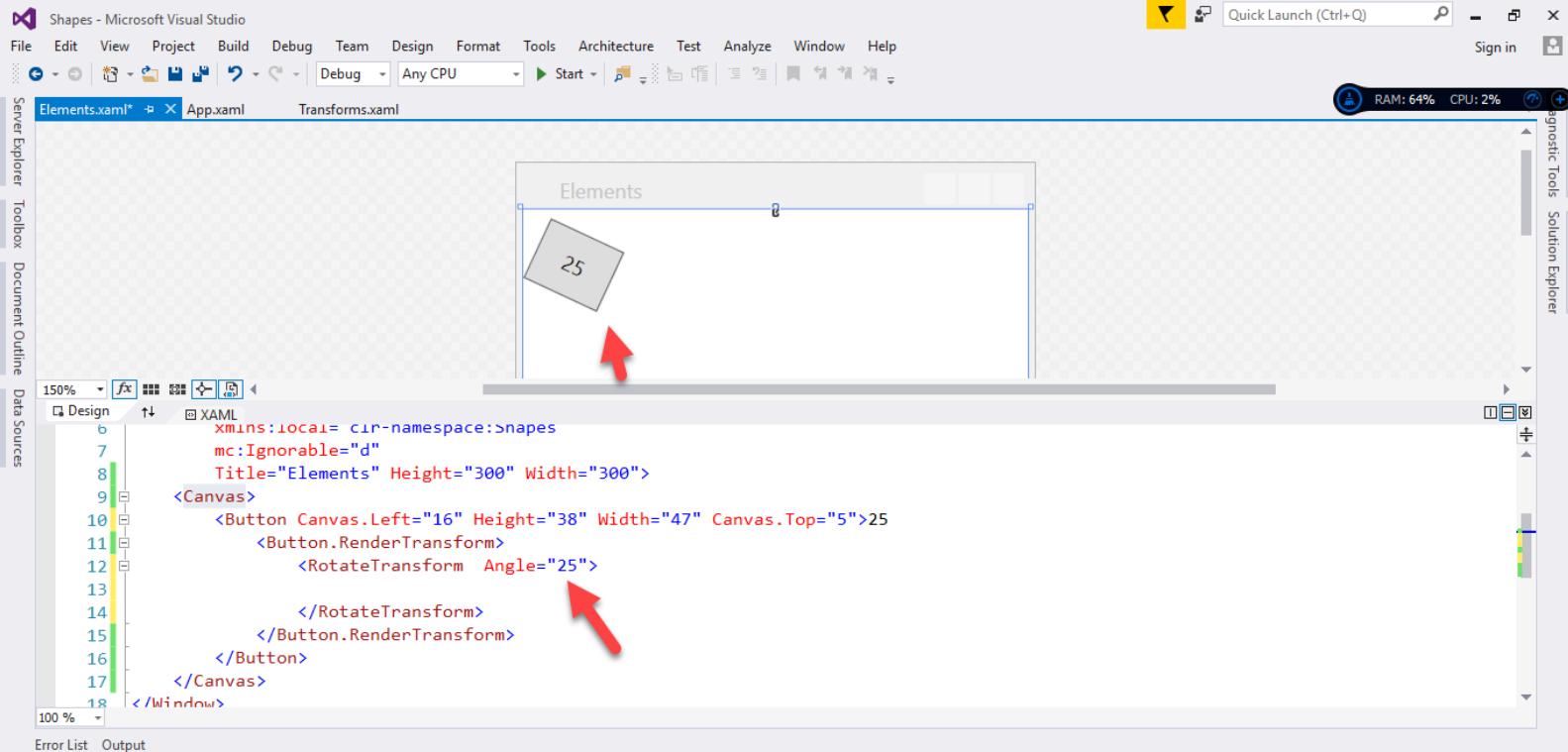
36

الكود بسيط



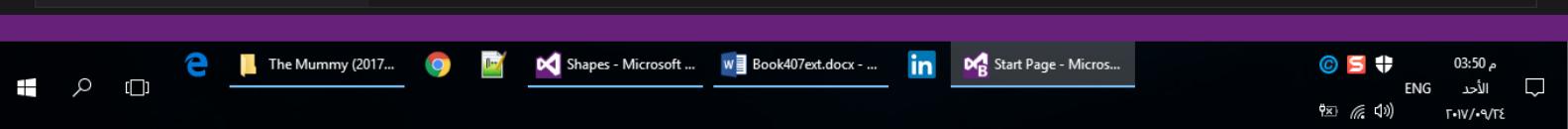
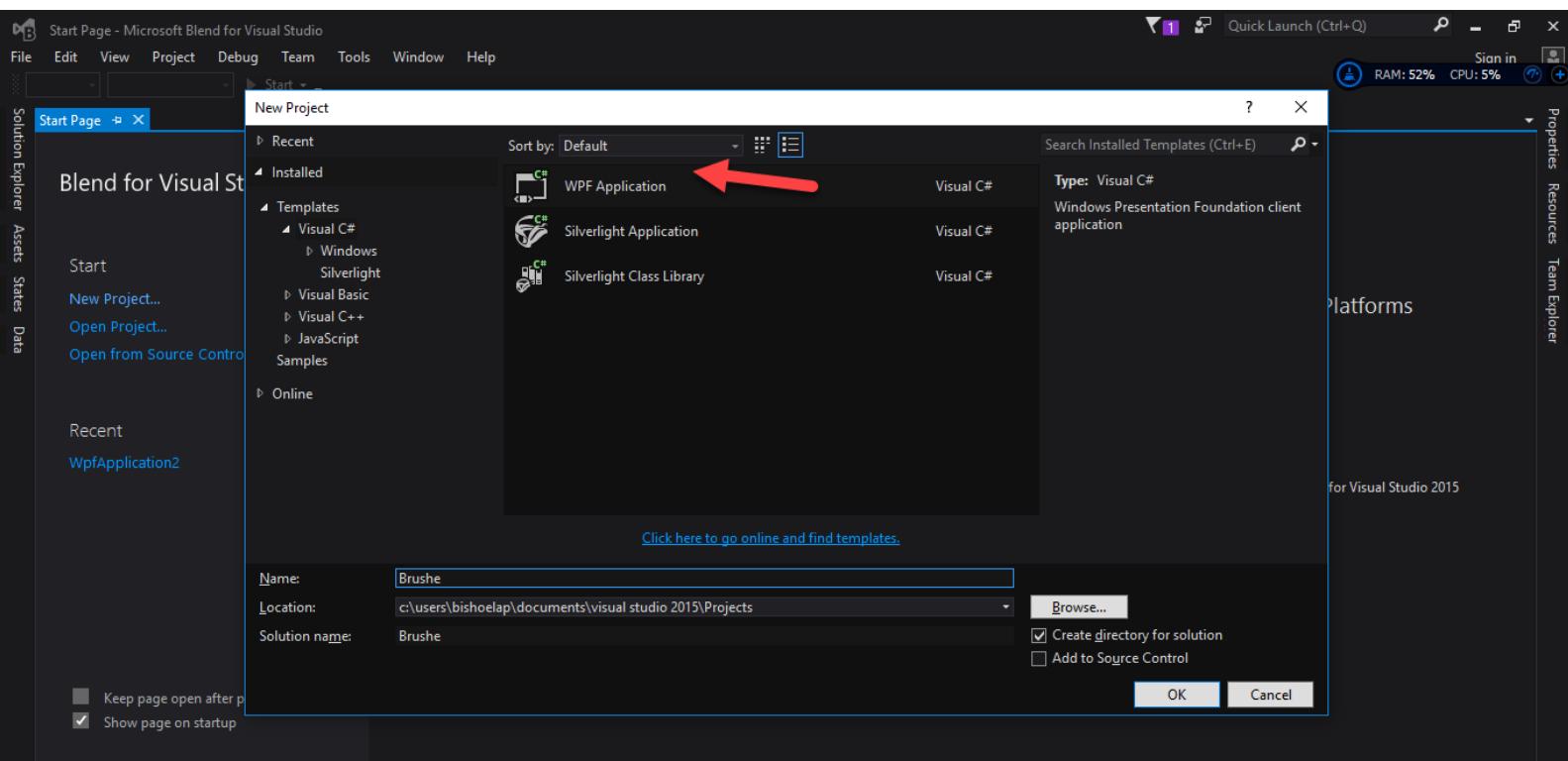
اهو دى النتيجة

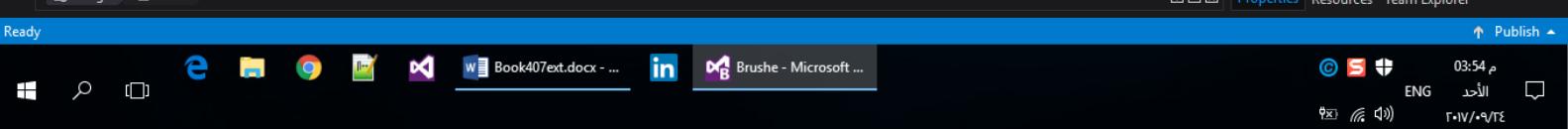
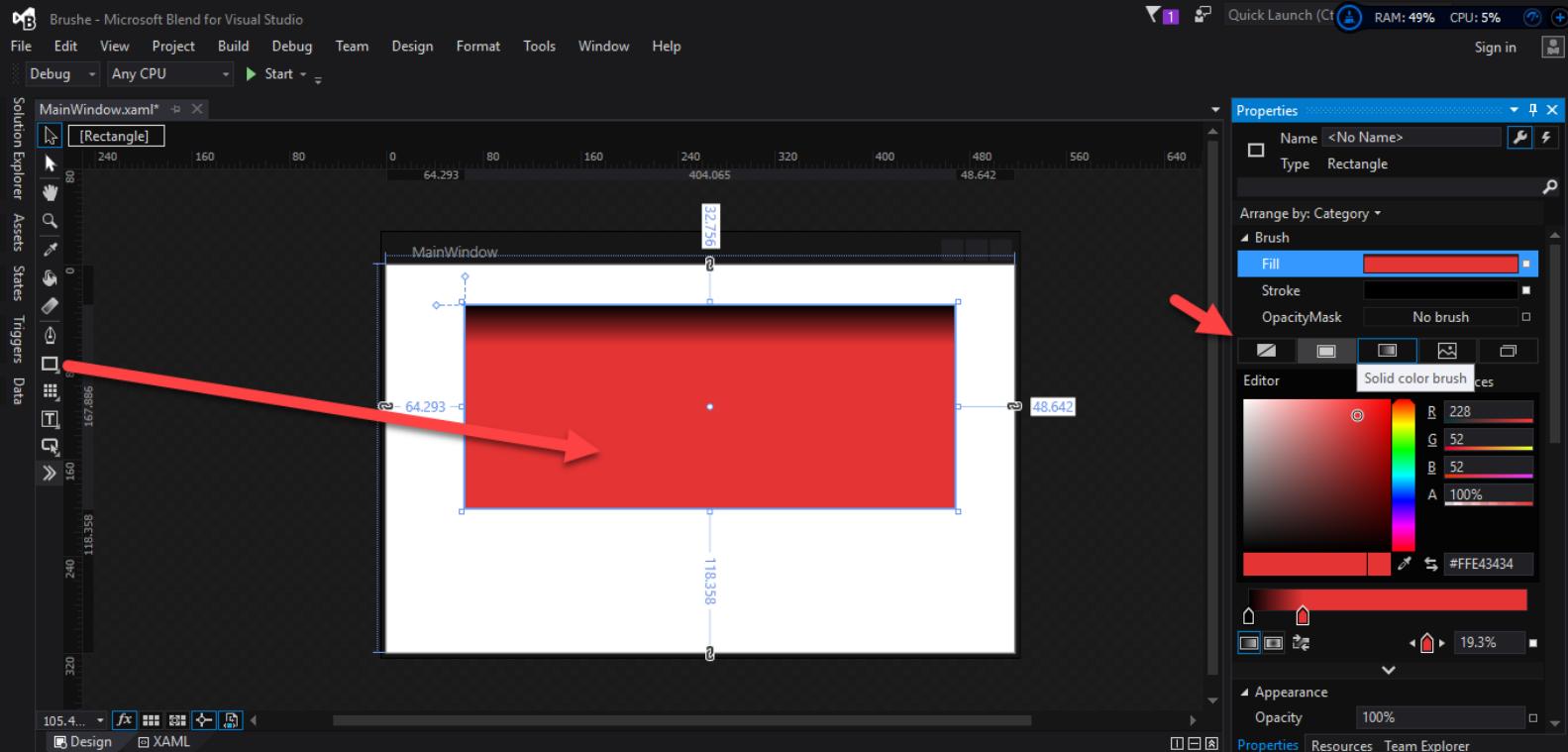
Elements



عملنا قلب للزر بنجاح ونقدر نجرب

Blend





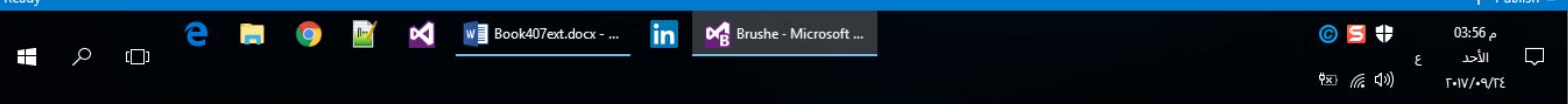
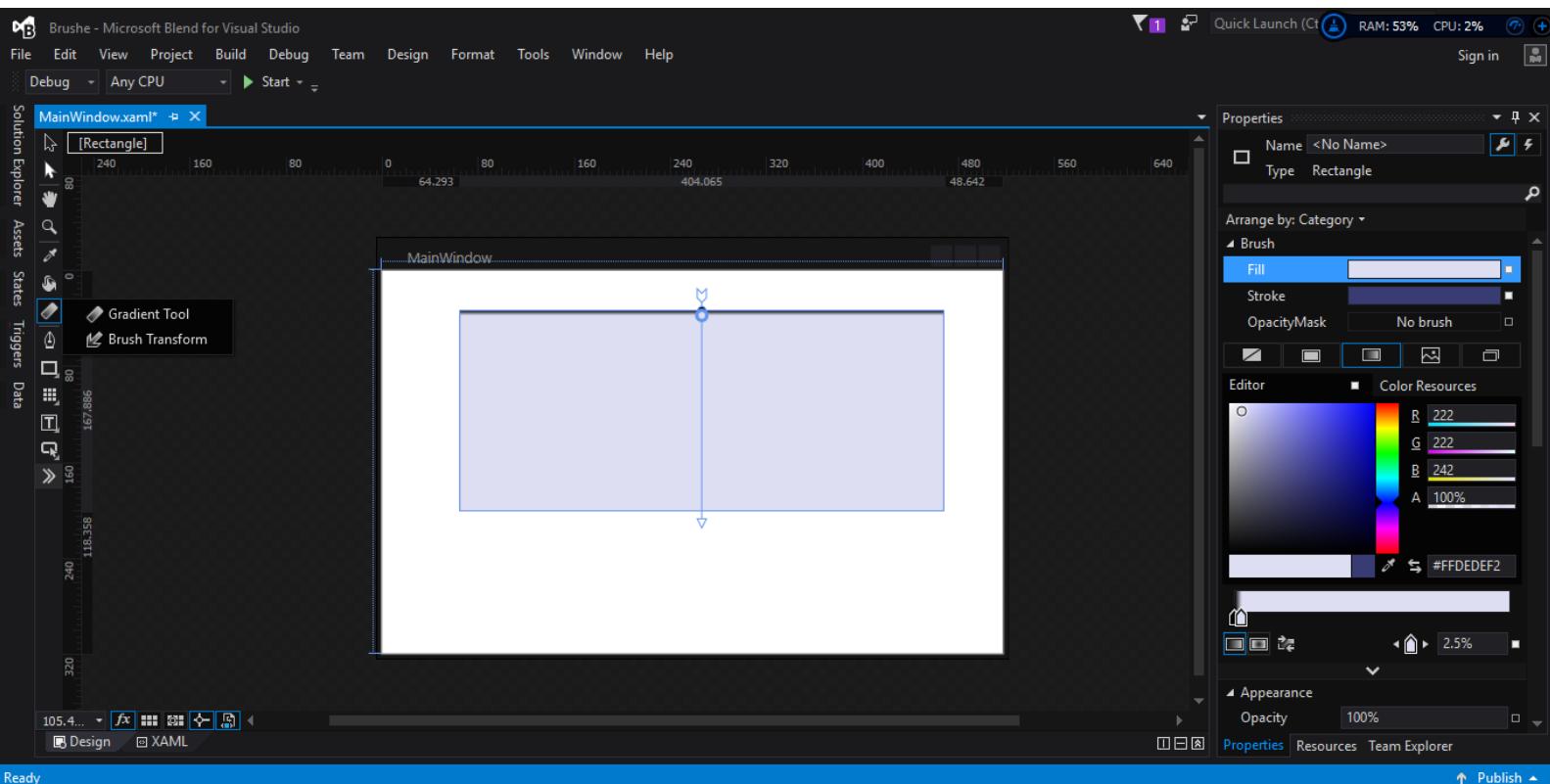
بنزول

Rectangle

ودى انواع ال

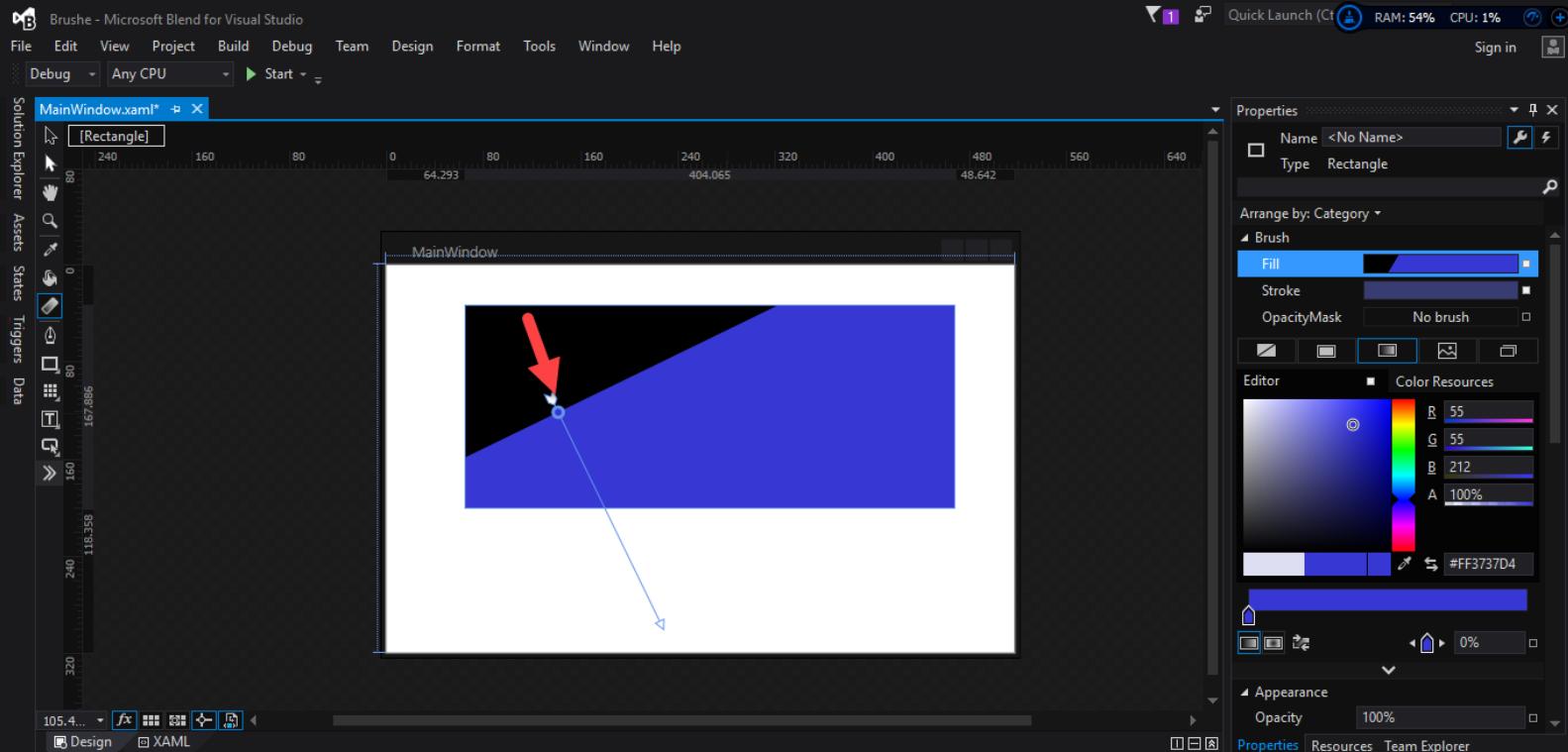
Fill

بنناعته تقدر تختار



Gradient

بنختارها

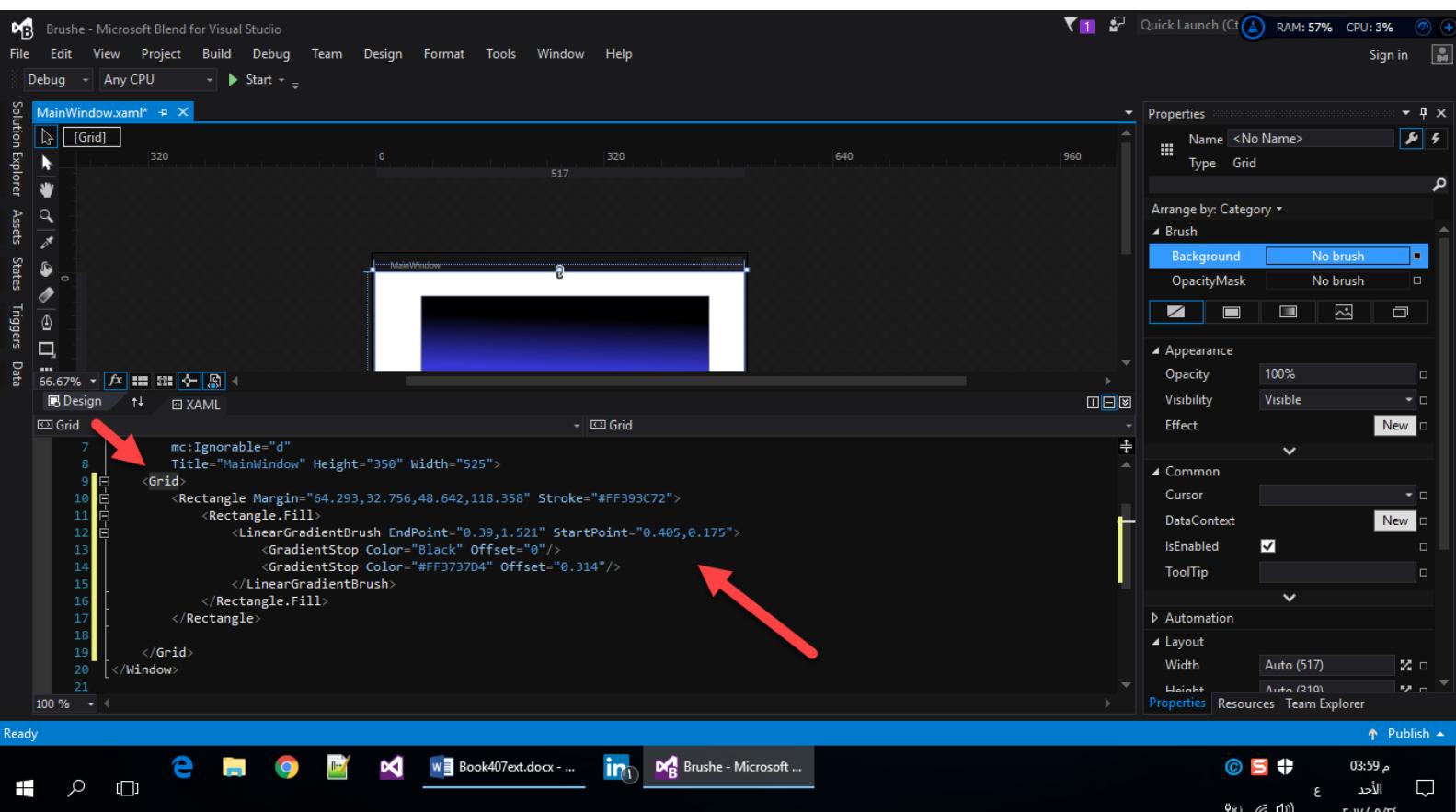


بص بخطها على الريكتجل وبمسك الماوس واتحرك بيها فى اى اتجاه انا عايزه

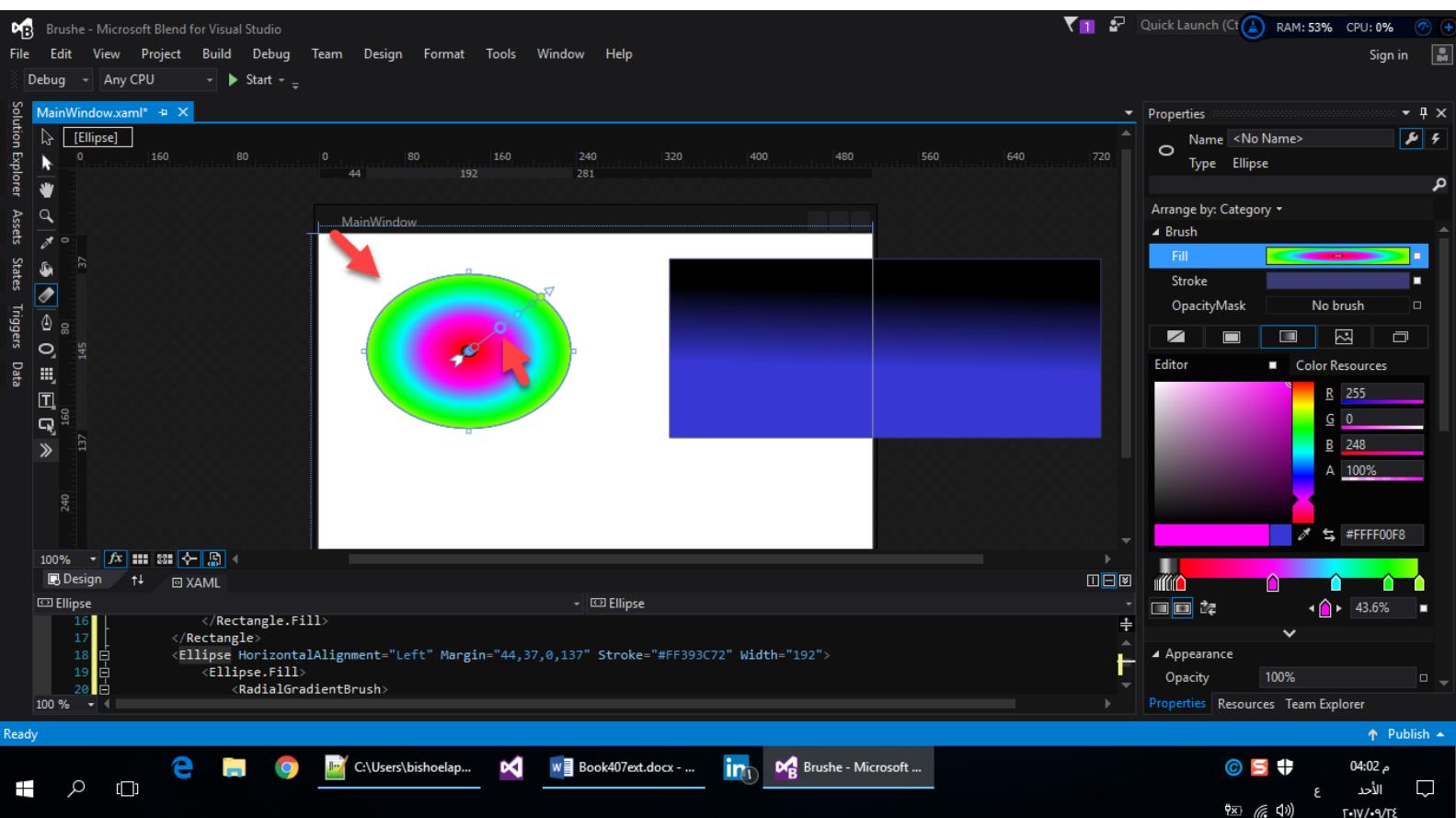
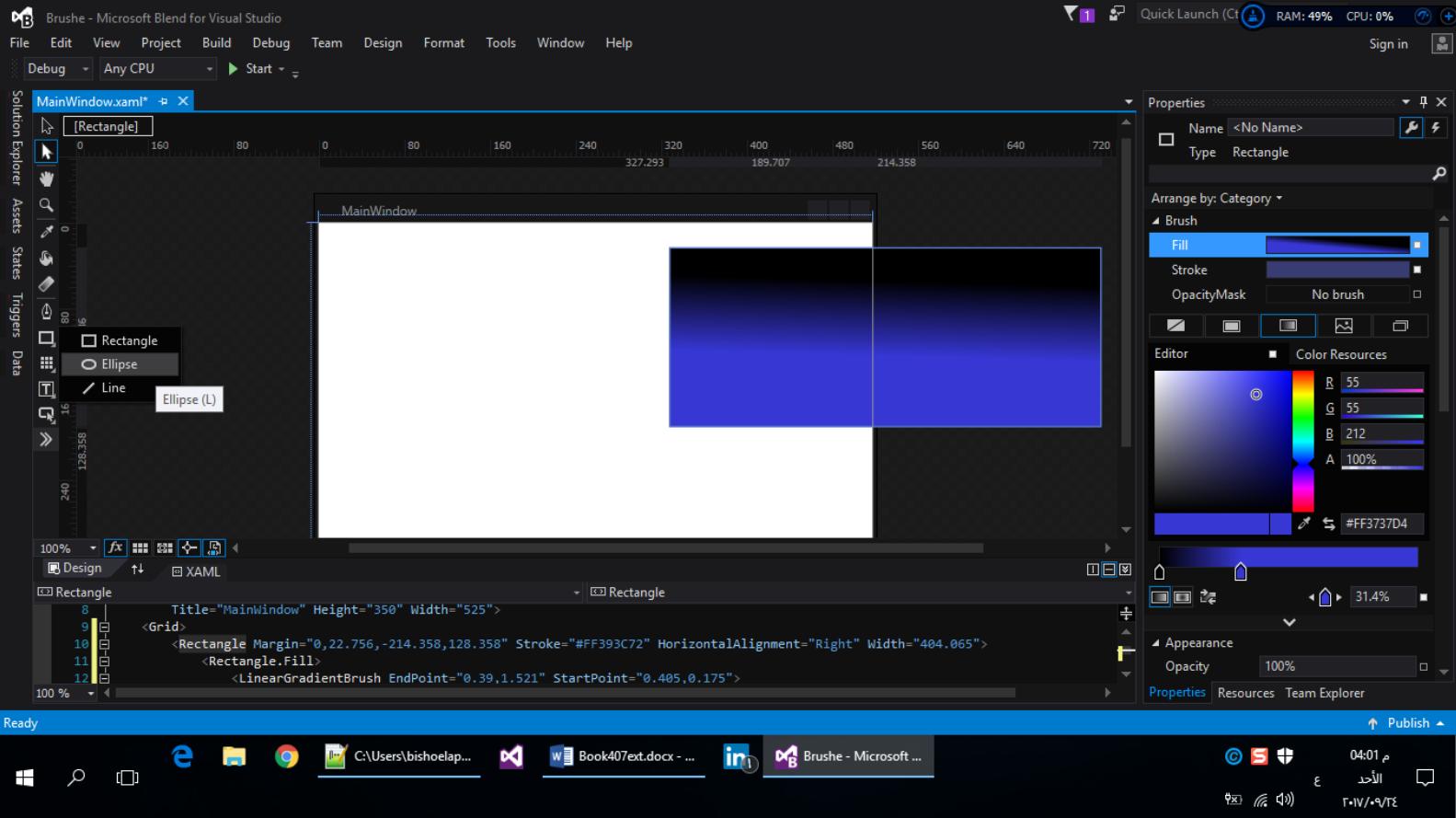
وكل ما انزل بالدائرة اللون بيتغير

تعالى نشوف كود

Xaml



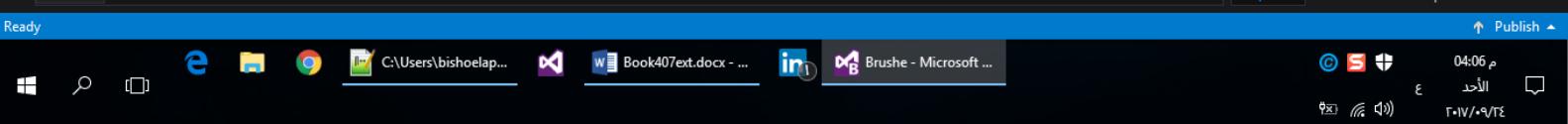
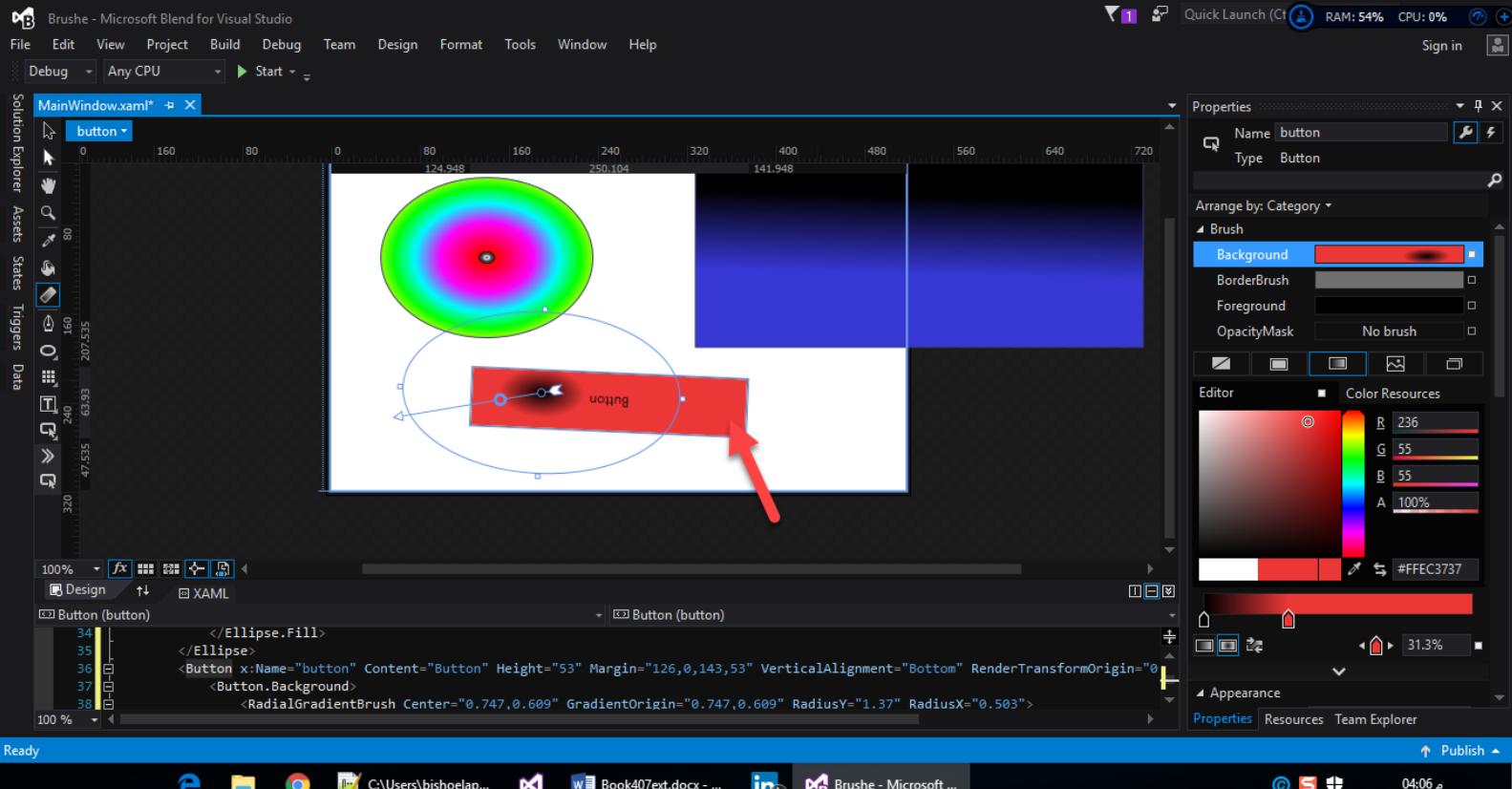
بص كود زى اللي بنكتبها هو كتبه



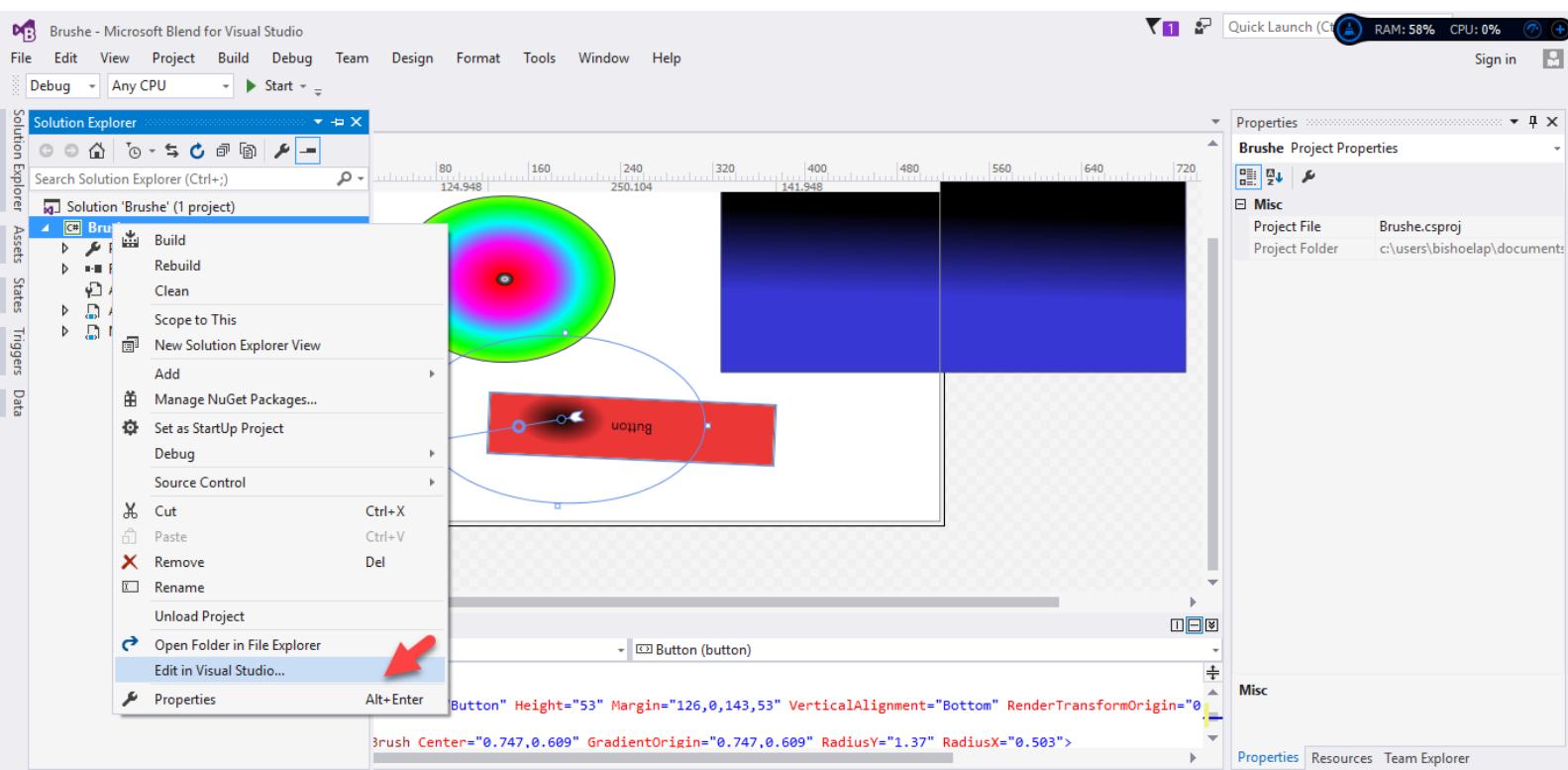
عملت

Ellipse

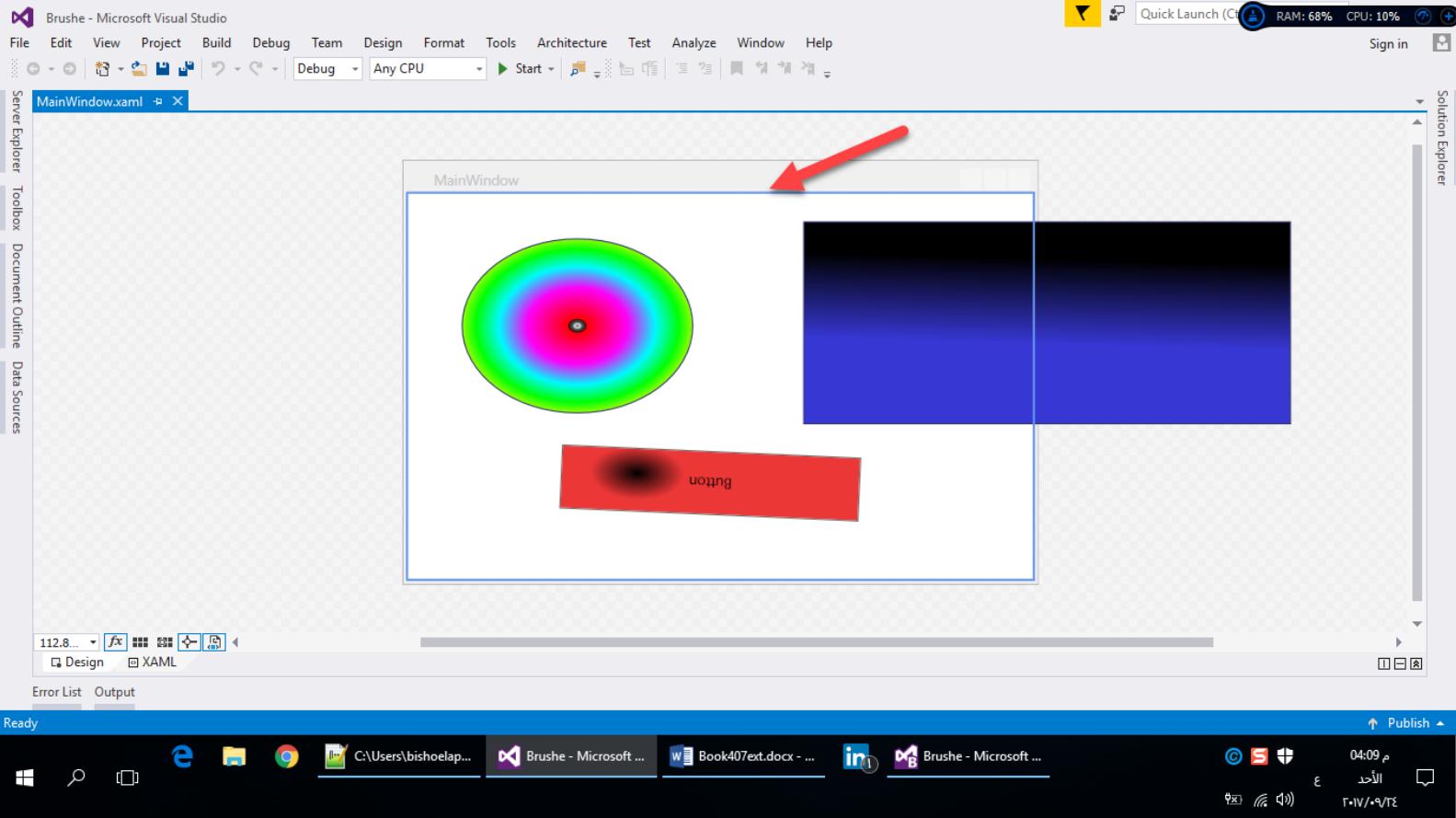
وحطيت عليها اداة الجريدينت شوف وفضلت احرك الداواير اللي بالدخل وطلعت اشكال كما بالصورة
ولو حطيت زر وضيق الاداء هتغير شكل اللون بناء الزر او الشكل اللي من الدخل فقط



زر وبنلعب فيه وببسهل علينا كتابة كود



نتحول المشروع كله لبرنامج الفيجوال استديو



انتقلنا للفيجوال استديو

Transparent

الشفافية

مثال

Transparency (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (C) RAM: 68% CPU: 30%

Sign in

Process: [5248] Transparency.vshost.exe Lifecycle Events Thread: Stack Frame:

```

MainWindow.xaml.cs
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Transparency"
7     mc:Ignorable="d"
8     Title="MainWindow" Height="350" Width="525">
9     <StackPanel Opacity="0.5" >
10    <StackPanel.Background>
11        <ImageBrush ImageSource="images.jpg"/>
12    </StackPanel.Background>
13    <Button Height="90">Semi transpar</Button>
14    <Label FontSize="20">Label</Label>
15    <TextBox>Text box</TextBox>
16    <StackPanel>
17        <Rectangle Width="502" Height="90" Margin="8,0,7,0" >
18            <Rectangle.Fill>
19                <ImageBrush ImageSource="amazing.ico" TileMode="Tile" Viewport="0.4,0.3 0.3,0.3"/>
20            </Rectangle.Fill>
21        </Rectangle>
22    </StackPanel>
23 </StackPanel>
24 </Window>
25

```

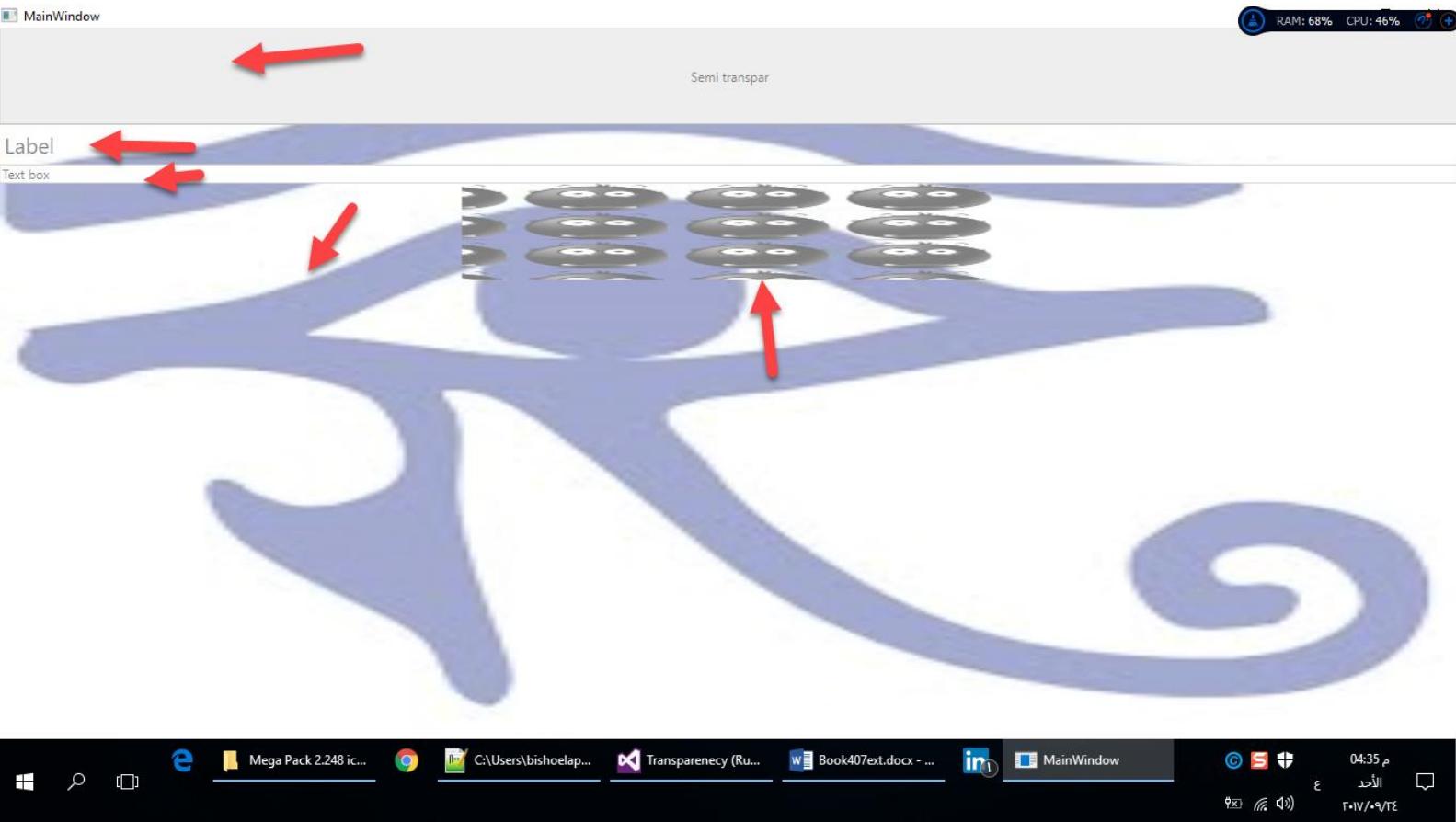
100 % XAML Design

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Autos Locals Watch 1

Ready Ln 3 Col 1 Ch 1 INS

04:33 م الأحد ENG ٢٠١٧/٩/٣

تعالي نشوف

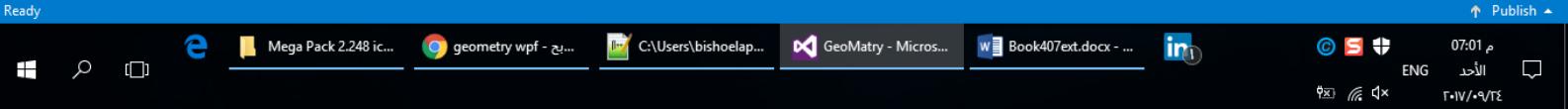
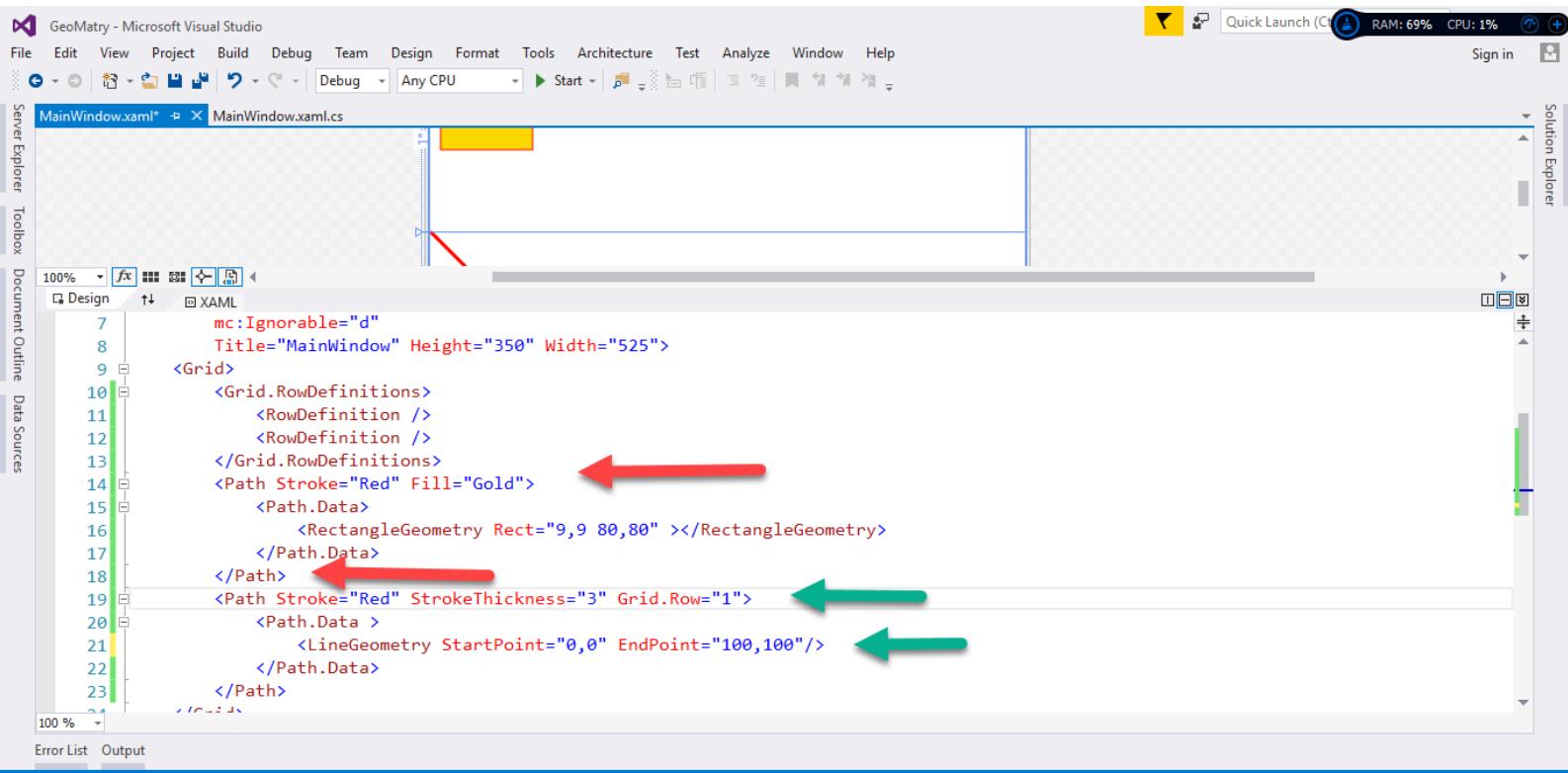
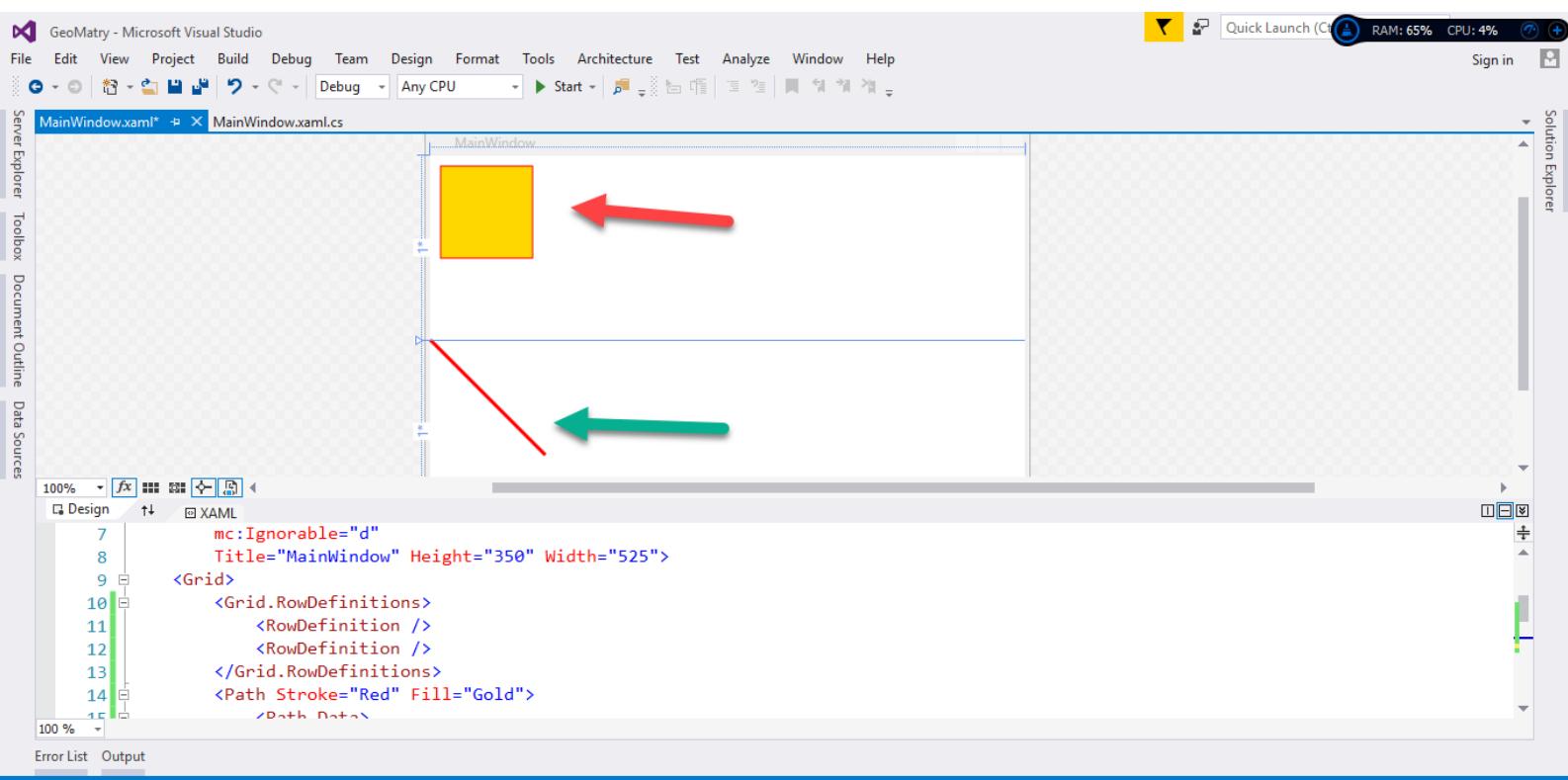


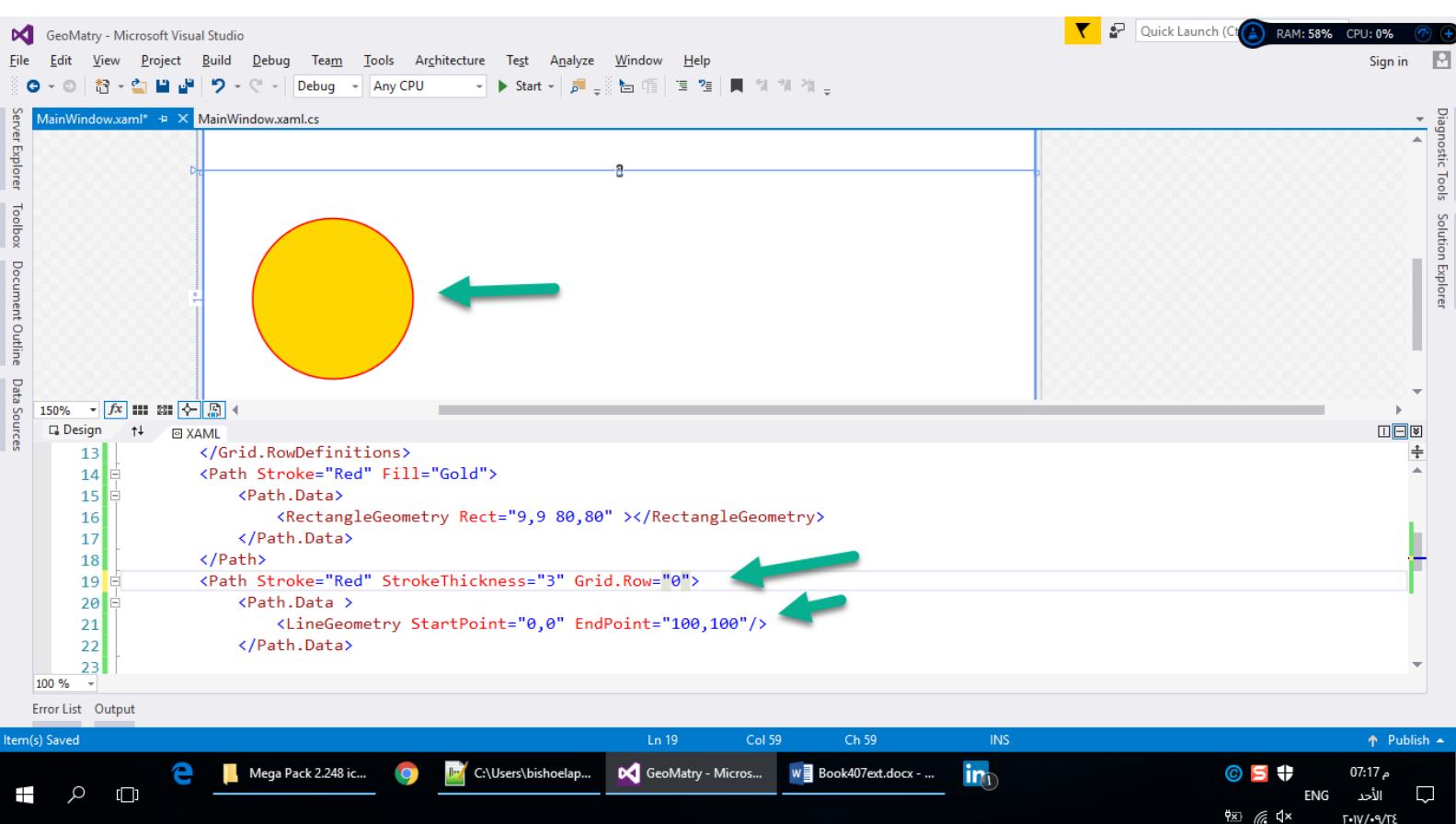
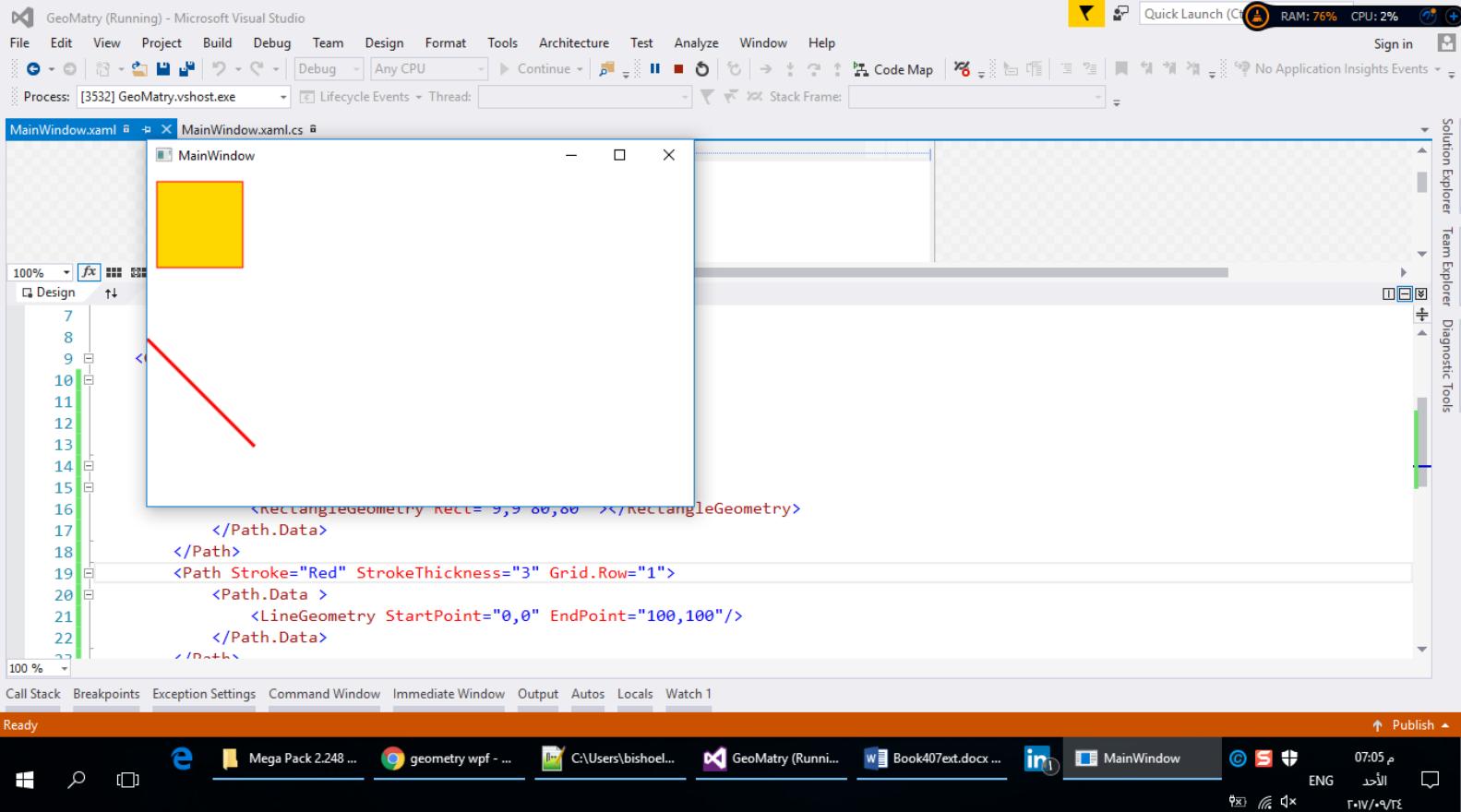
شفاف وفيه كذا تولز موجودة الخلفية شفافة والصورة اللي قدمتها كمان ونقدر نخلع اي حاجة شفافة

Geometry

زیها زی الشیبیس

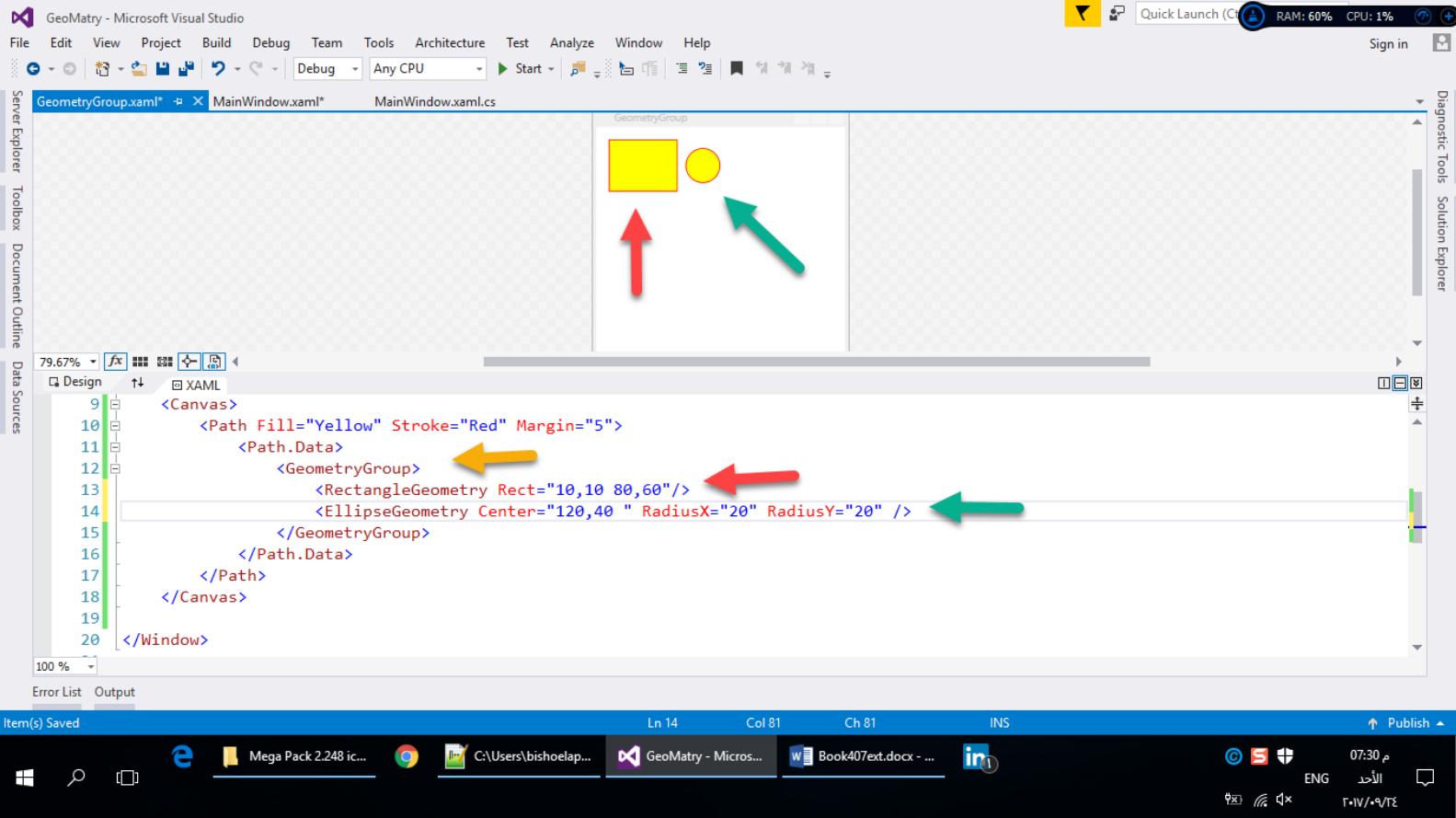
بس امکانیات اکثر



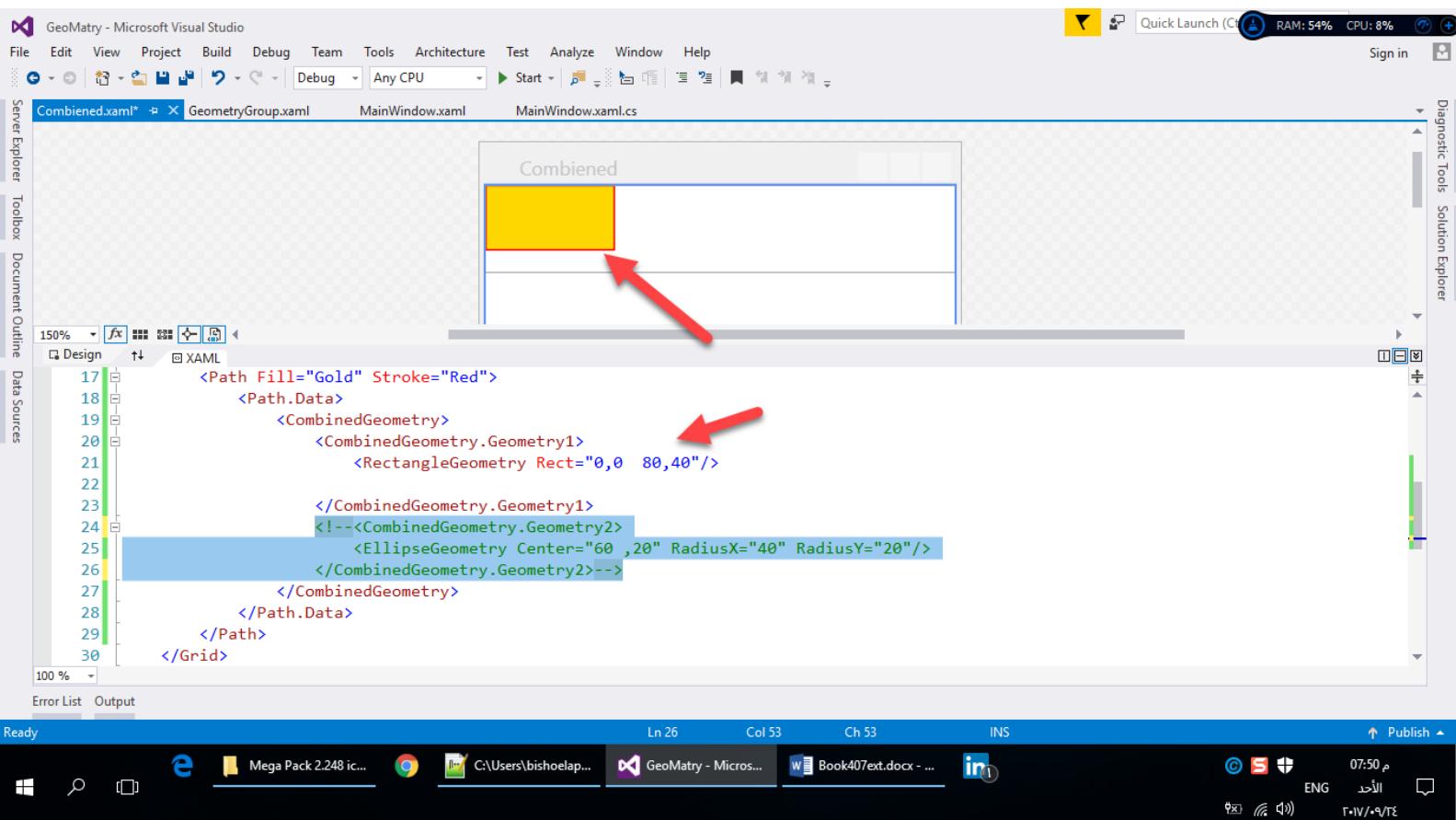


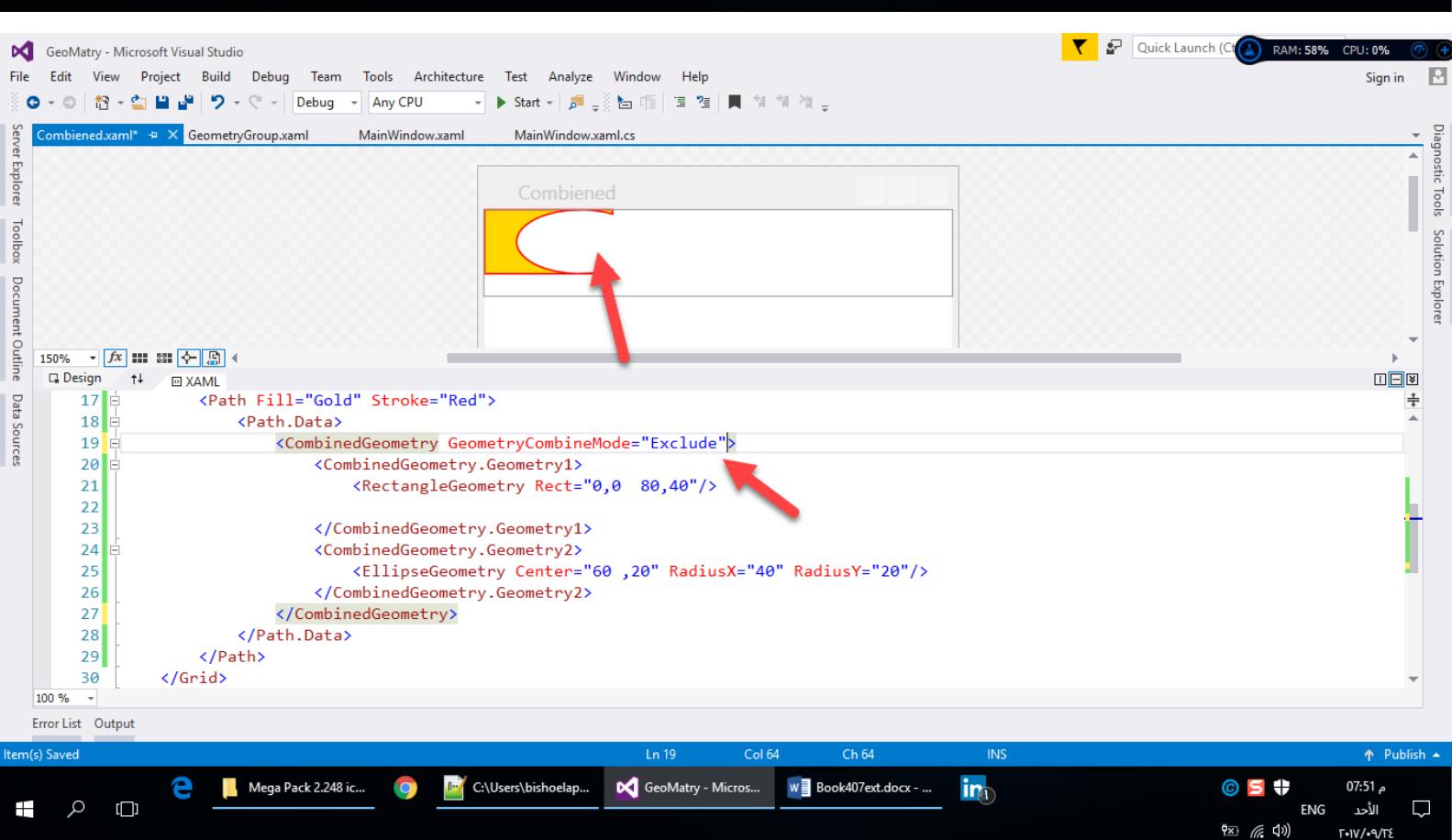
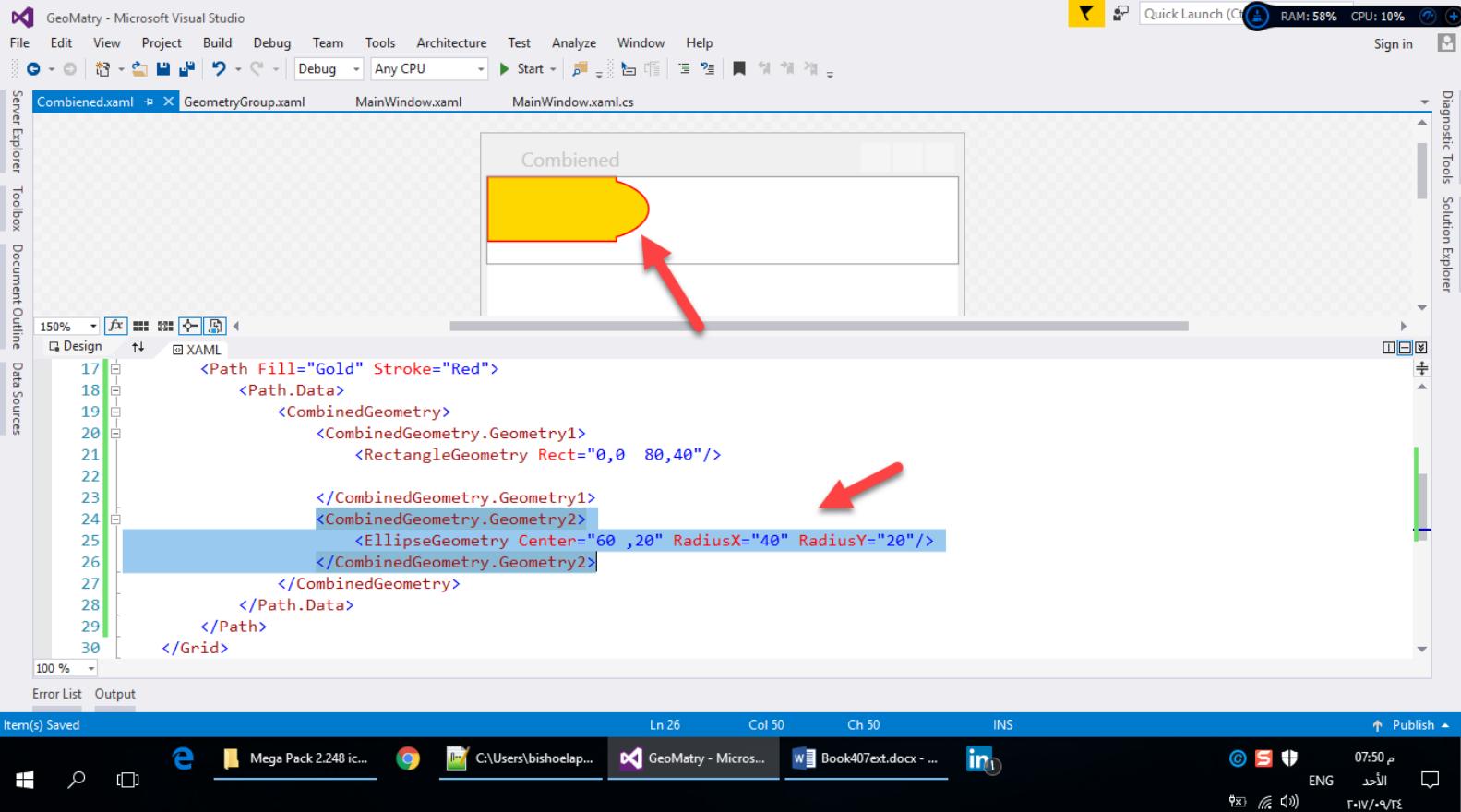
المثال بسيط

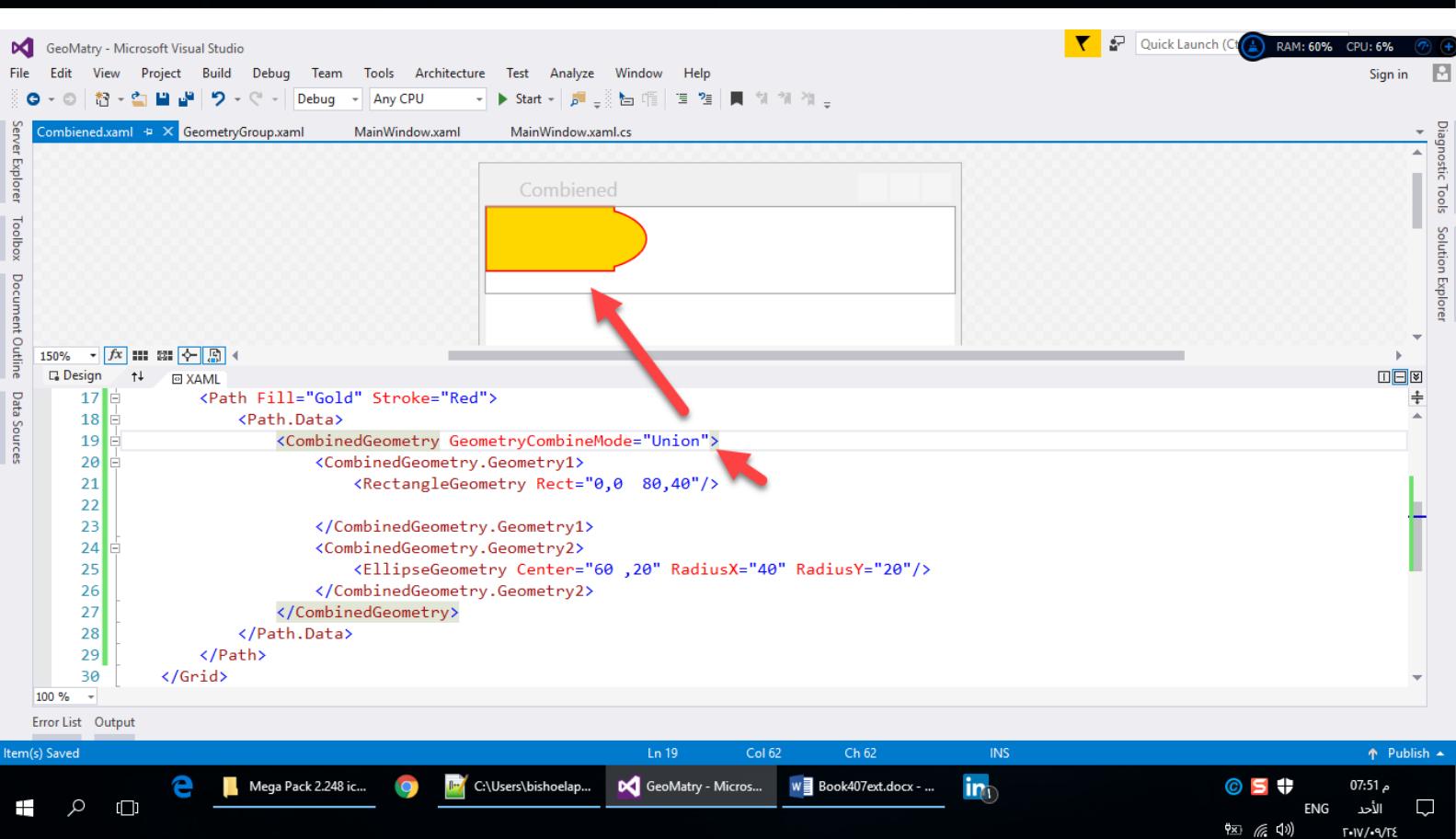
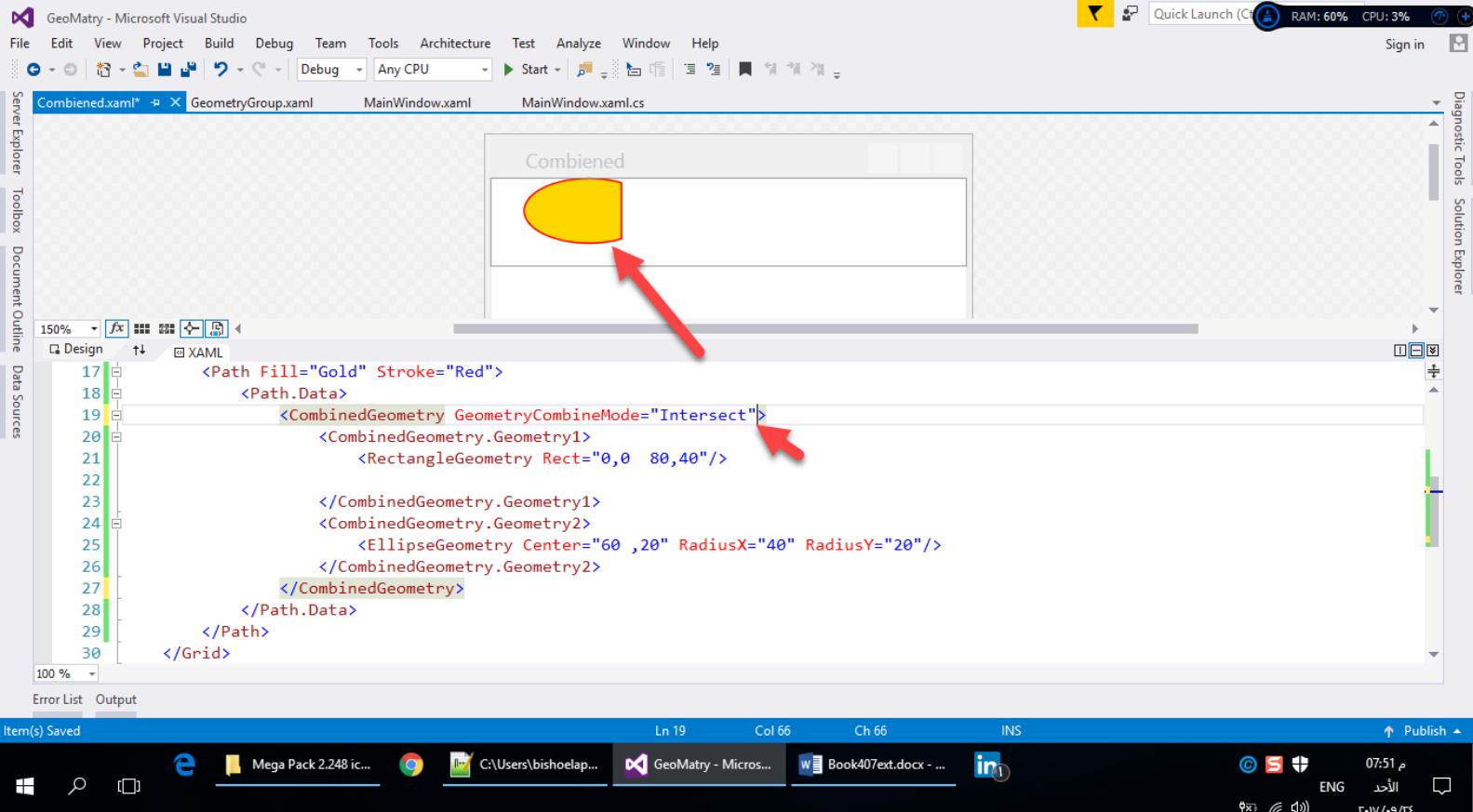
GeometryGroup

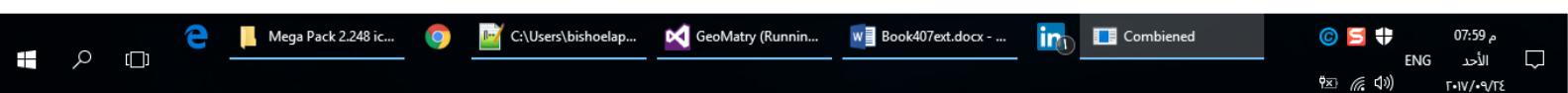
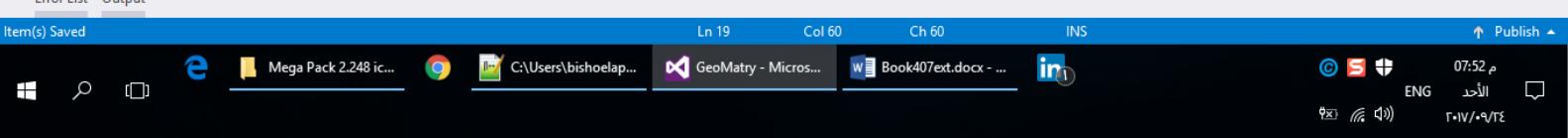
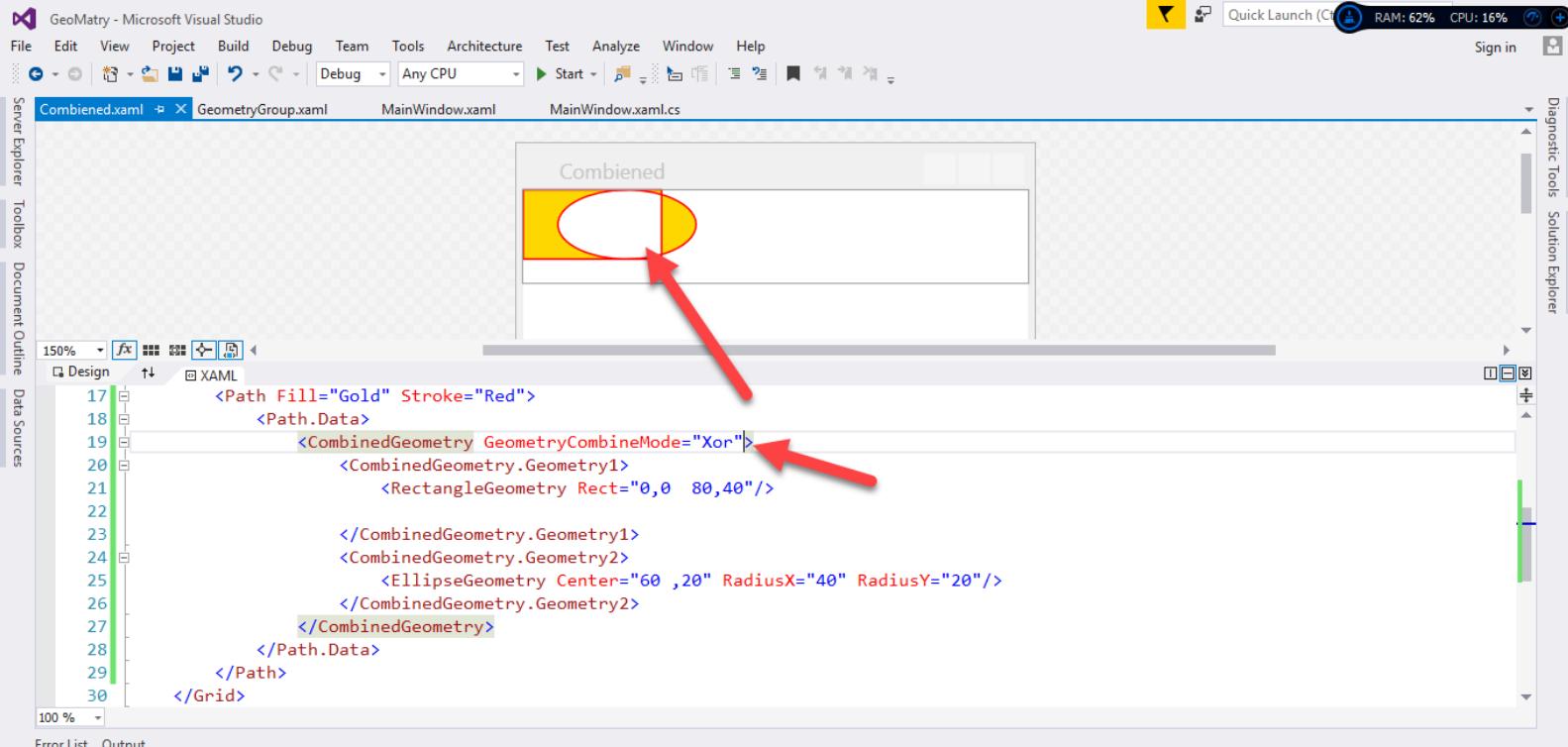


Combiened





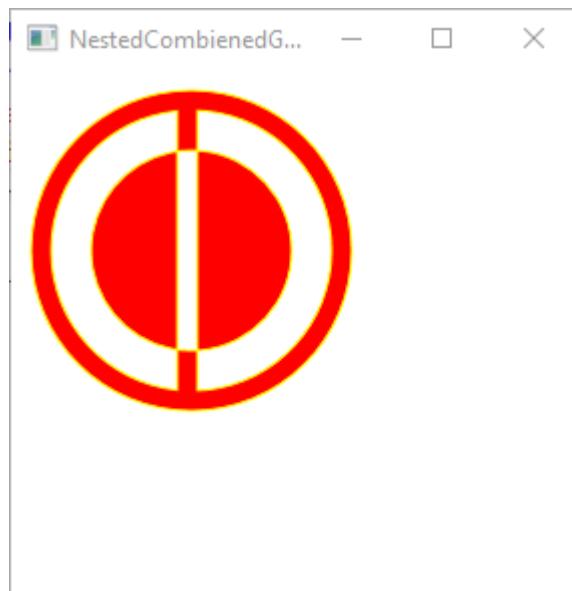




مثال بسيط وسهل

Nested Combined Geometries

هنعمل رسمة مركبة عنصر داخل عنصر بص المثال



هنعمل زيه

Screenshot of Microsoft Visual Studio showing the XAML code for a nested combined geometry.

The XAML code defines a Path element with a red fill and yellow stroke. Inside this Path, there is a CombinedGeometry element. This CombinedGeometry contains two Geometry elements: a CombinedGeometry.Geometry1 element and a CombinedGeometry.Geometry2 element. The CombinedGeometry.Geometry1 element contains an EllipseGeometry element with a center at (90, 90) and radii of 80x80. The CombinedGeometry.Geometry2 element contains a comment .

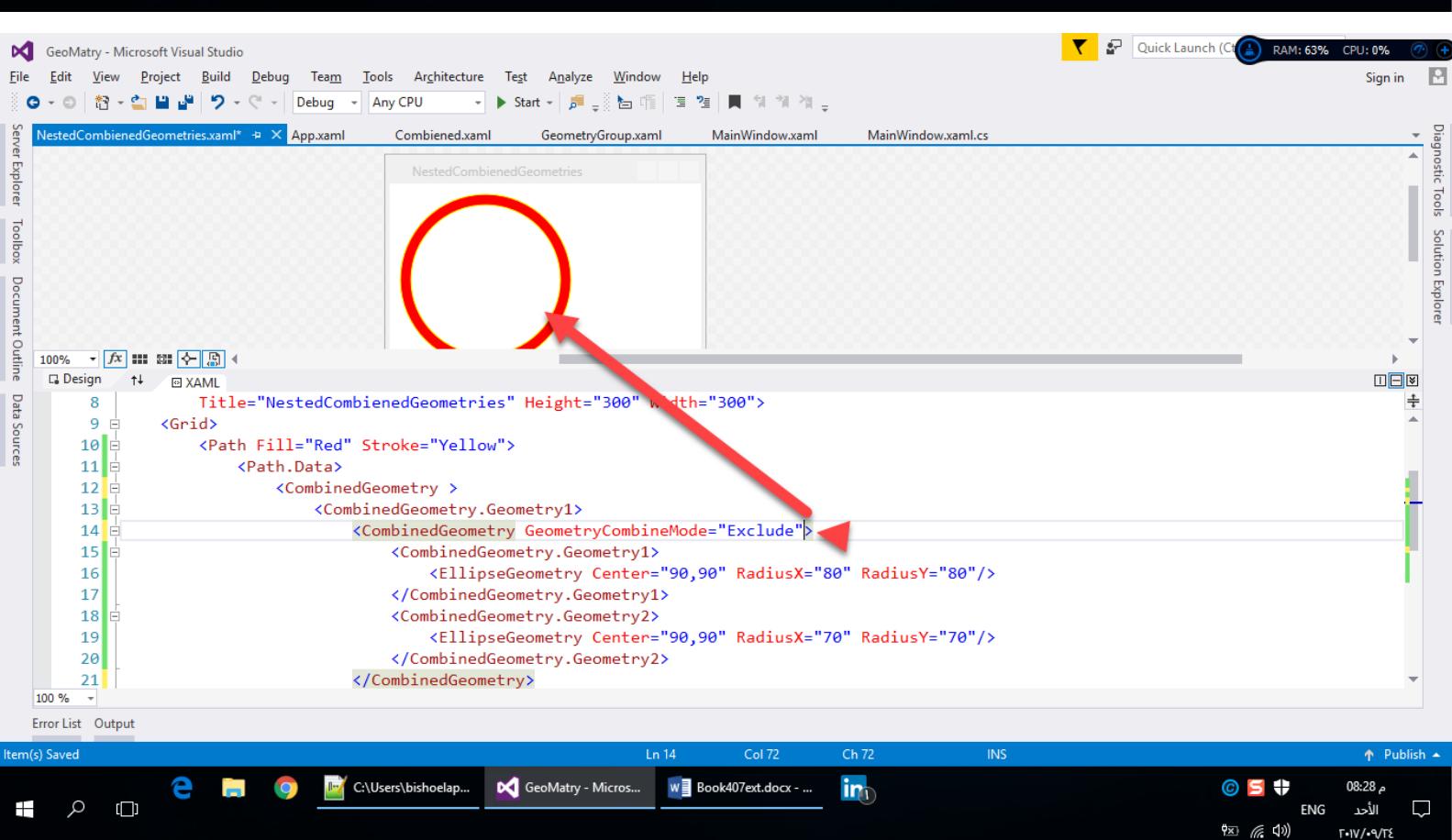
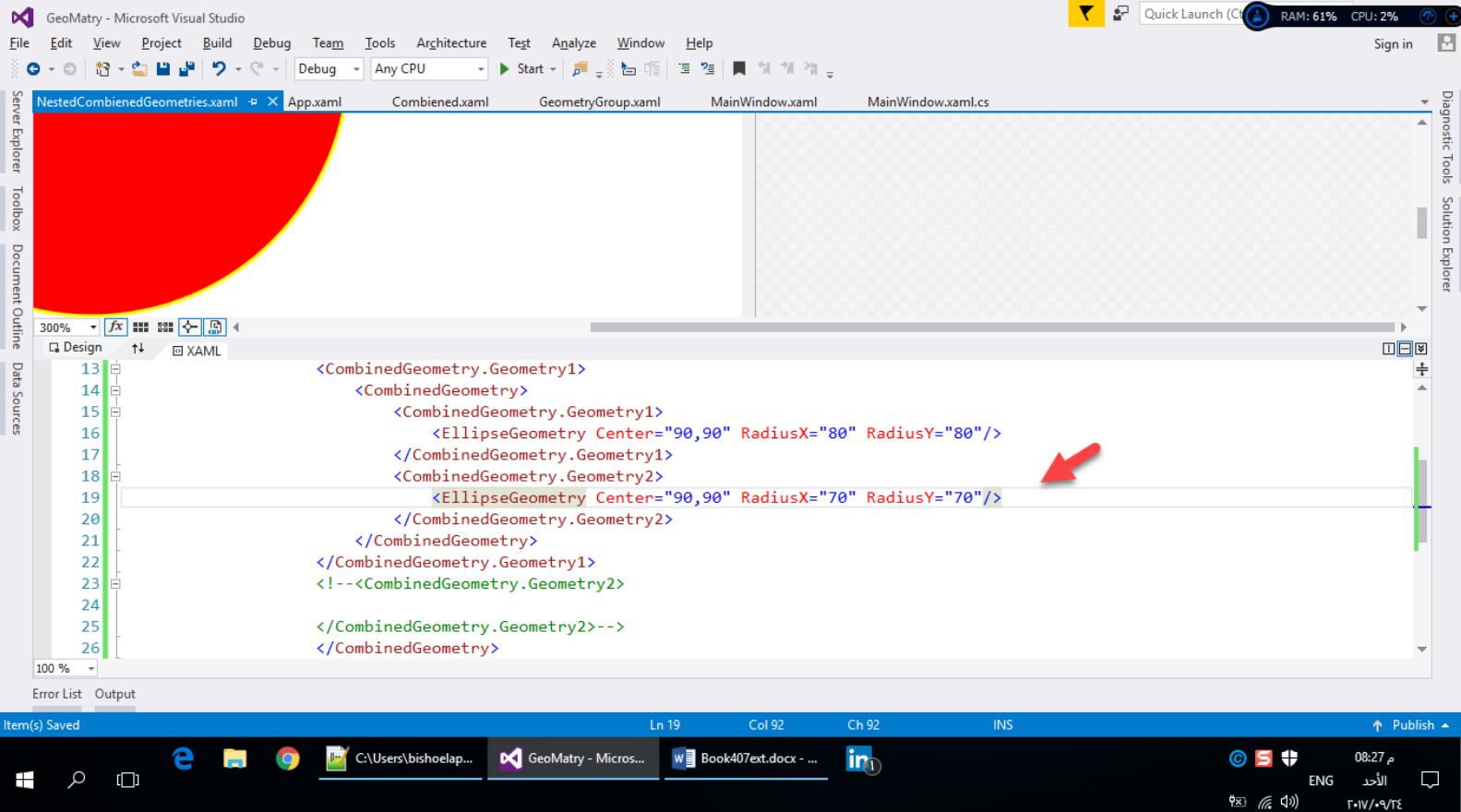
```
79.67% Design XAML
NestedCombinedGeometries.xaml App.xaml Combined.xaml GeometryGroup.xaml MainWindow.xaml MainWindow.xaml.cs
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
NestedCombinedGeometries.xaml
<Path Fill="Red" Stroke="Yellow">
    <Path.Data>
        <CombinedGeometry>
            <CombinedGeometry.Geometry1>
                <CombinedGeometry>
                    <CombinedGeometry.Geometry1>
                        <CombinedGeometry>
                            <CombinedGeometry.Geometry1>
                                <EllipseGeometry Center="90,90" RadiusX="80" RadiusY="80"/>
                            </CombinedGeometry.Geometry1>
                        </CombinedGeometry>
                    </CombinedGeometry.Geometry1>
                </CombinedGeometry>
            </CombinedGeometry.Geometry1>
            <!--<CombinedGeometry.Geometry2>
                <CombinedGeometry>
                    <CombinedGeometry.Geometry2>
                </CombinedGeometry>
            </CombinedGeometry.Geometry2>-->
        </CombinedGeometry>
    </Path.Data>
</Path>
```

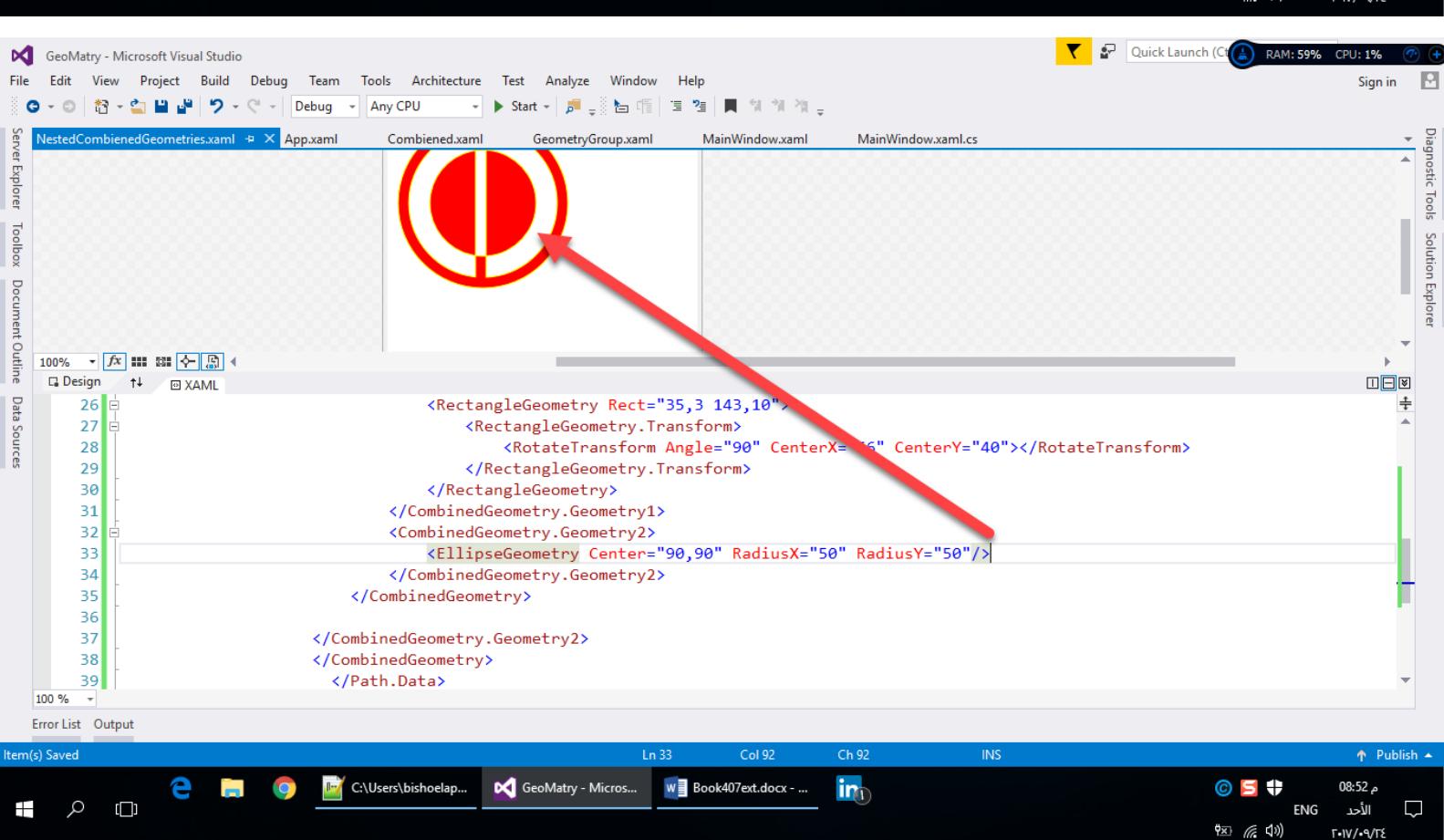
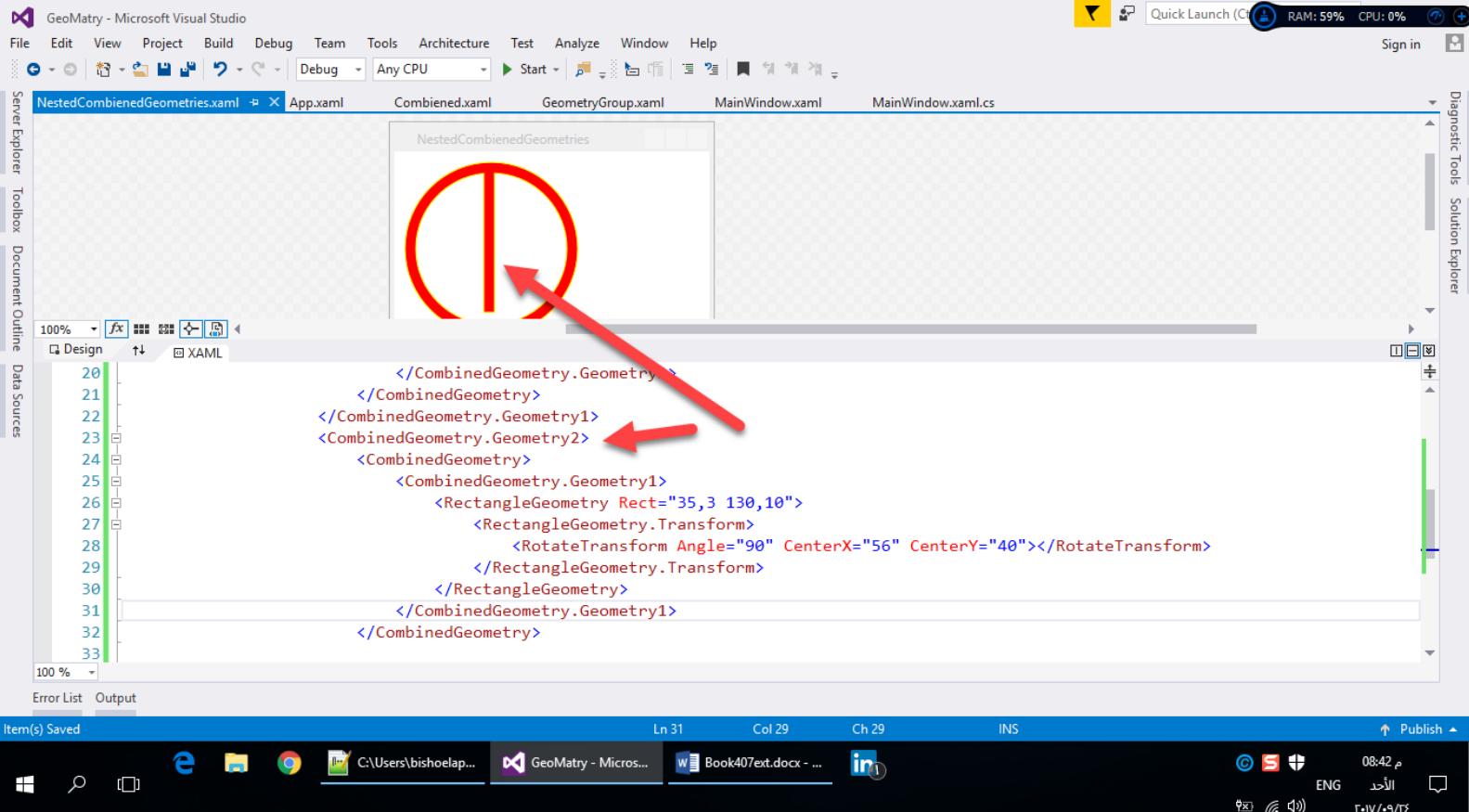
Server Explorer Toolbox Document Outline Data Sources

Diagnostic Tools Solution Explorer

Item(s) Saved Ln 16 Col 90 Ch 90 INS Publish

08:11 PM ENG الأحد ٢٠١٩/٩/٣





الكود كامل

```

1 <Window x:Class="GeoMatry.NestedCombienedGeometries"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:GeoMatry"
7     mc:Ignorable="d"
8     Title="NestedCombienedGeometries" Height="300" Width="300">
9     <Grid>
10    <Path Fill="Red" Stroke="Yellow">
11        <Path.Data>
12            <CombinedGeometry >
13                <CombinedGeometry.Geometry1>
14                    <CombinedGeometry GeometryCombineMode="Exclude">
15                        <CombinedGeometry.Geometry1>
16                            <EllipseGeometry Center="90,90" RadiusX="80" RadiusY="80"/>
17                        </CombinedGeometry.Geometry1>
18                        <CombinedGeometry.Geometry2>
19                            <EllipseGeometry Center="90,90" RadiusX="70" RadiusY="70"/>
20                        </CombinedGeometry.Geometry2>
21                    </CombinedGeometry>
22                </CombinedGeometry.Geometry1>
23                <CombinedGeometry.Geometry2>
24                    <CombinedGeometry GeometryCombineMode="Xor">
25                        <CombinedGeometry.Geometry1>
26                            <RectangleGeometry Rect="35,3 143,10">
27                                <RectangleGeometry.Transform>
28                                    <RotateTransform Angle="90" CenterX="56" CenterY="40"/></RotateTransform>
29                                </RectangleGeometry.Transform>
30                            </CombinedGeometry.Geometry1>
31                            <CombinedGeometry.Geometry2>
32                                <EllipseGeometry Center="90,90" RadiusX="50" RadiusY="50"/>
33                            </CombinedGeometry.Geometry2>
34                        </CombinedGeometry>
35                    </CombinedGeometry.Geometry2>
36                </CombinedGeometry>
37            </CombinedGeometry>
38        </Path.Data>
39    </Path>
40    </Grid>
41 </Window>
42
43
44

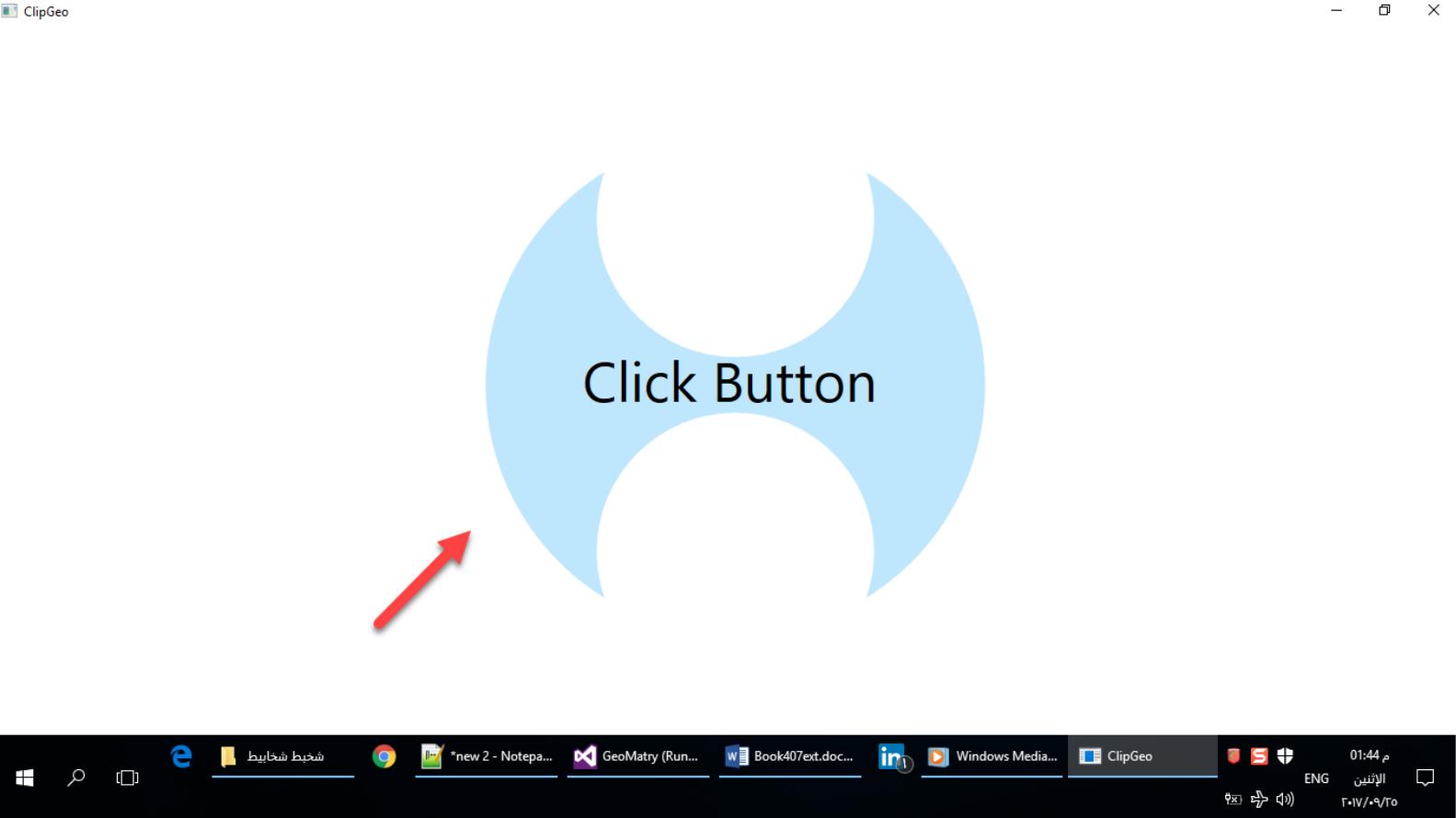
```

هو

Clipping

يتناول حاجة من نوع

Geometries



تعالى نشوف اتعمل ازى

الزرار ده

GeoMatry - Microsoft Visual Studio

```
ClipGeo.xaml.cs ClipGeo.xaml NestedCombinedGeometries.xaml App.xaml Combined.xaml GeometryGroup.xaml MainWindow.xaml MainWindow.xaml.cs
```

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

ClipGeo.xaml.cs

```
8     Title="ClipGeo" Height="300" Width="300">
9     <Window.Resources>
10    <CombinedGeometry x:Key="clp" GeometryCombineMode="Exclude">
11        <CombinedGeometry.Geometry1>
12            <EllipseGeometry Center="140,130" RadiusX="90" RadiusY="90"/>
13        </CombinedGeometry.Geometry1>
14        <CombinedGeometry.Geometry2>
15            <CombinedGeometry>
16                <CombinedGeometry.Geometry1>
17                    <EllipseGeometry Center="140,190" RadiusX="50" RadiusY="50"/>
18                </CombinedGeometry.Geometry1>
19                <CombinedGeometry.Geometry2>
20                    <EllipseGeometry Center="140,70" RadiusX="50" RadiusY="50"/>
21                </CombinedGeometry.Geometry2>
22            </CombinedGeometry>
23        </CombinedGeometry.Geometry2>
24    </CombinedGeometry>
25    </Window.Resources>
26    <Grid>
27        <Viewbox>
28            <Button Clip="{StaticResource clp}" Width="276" Height="256" FontSize="20" Click="Button_Click" >Click Button</Button>
29        </Viewbox>
30    </Grid>
31 ...
```

Quick Launch (Ctrl+Q) Sign in Diagnostic Tools Solution Explorer

ClipGeo.xaml

ClipGeo.xaml.cs

Clipboard

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

ClipGeo.xaml

ClipGeo.xaml.cs

Clipboard

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

ClipGeo.xaml

ClipGeo.xaml.cs

Clipboard

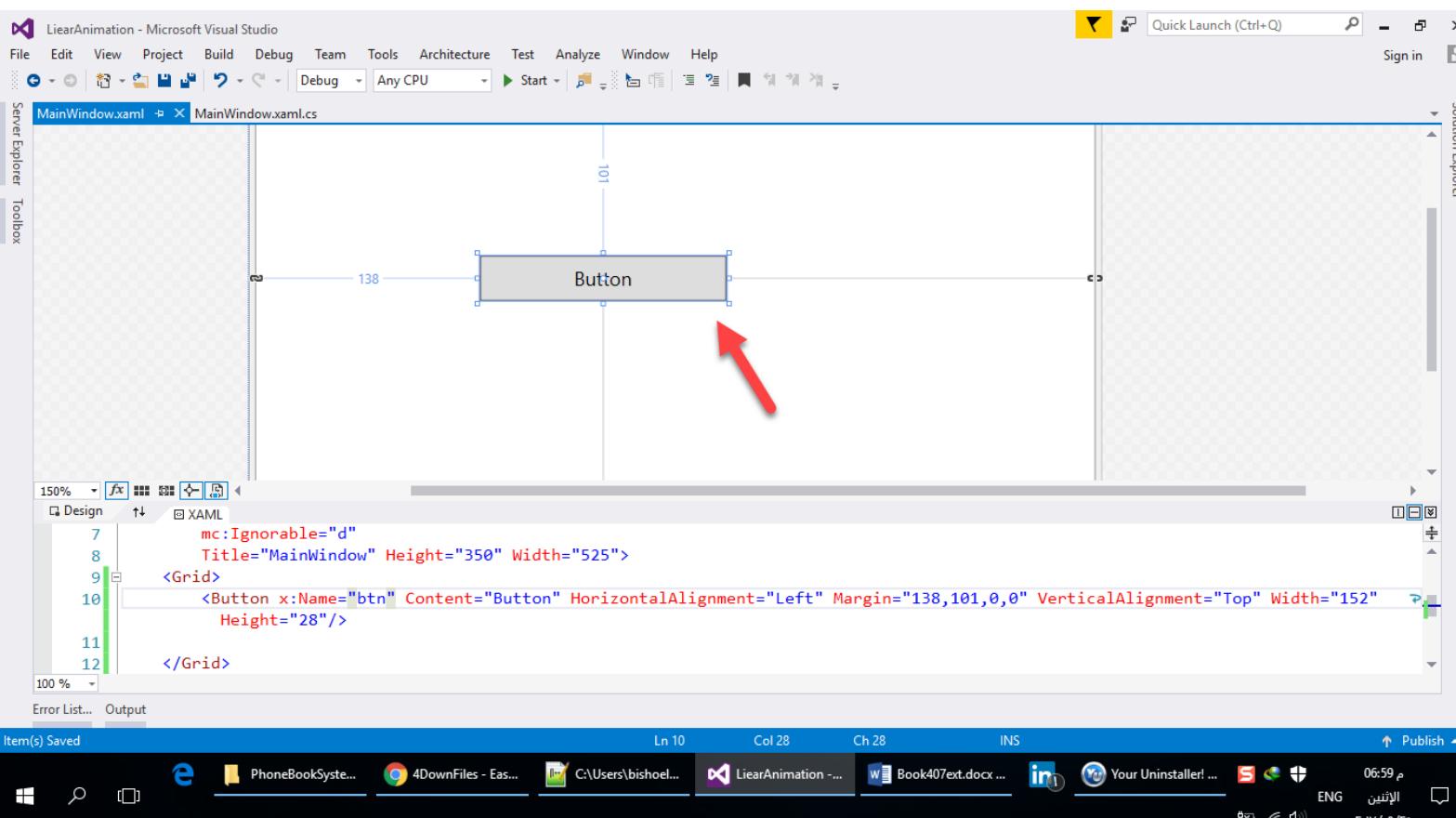
Center

ده هييتدى منين الرسم وبعدين بنمرر y,x

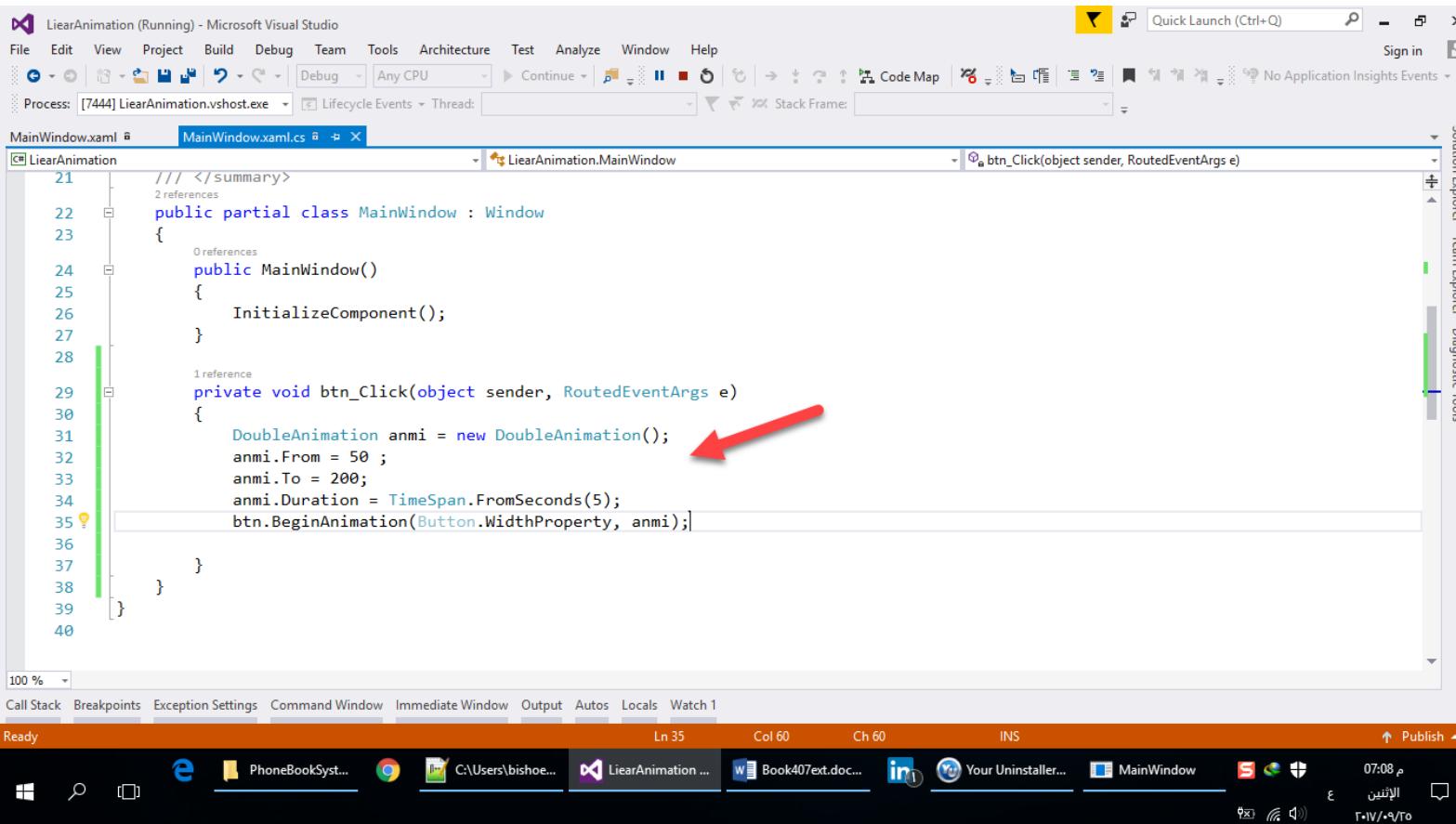
وحطينا الزر فى فيو بوكس عشان الزر لما يكبر الكلام بيروح من عليه فدخل جوه فيو بوكس عشان لما يكبر الزر يحافظ على شكله ومحتواه

وبس

Animation

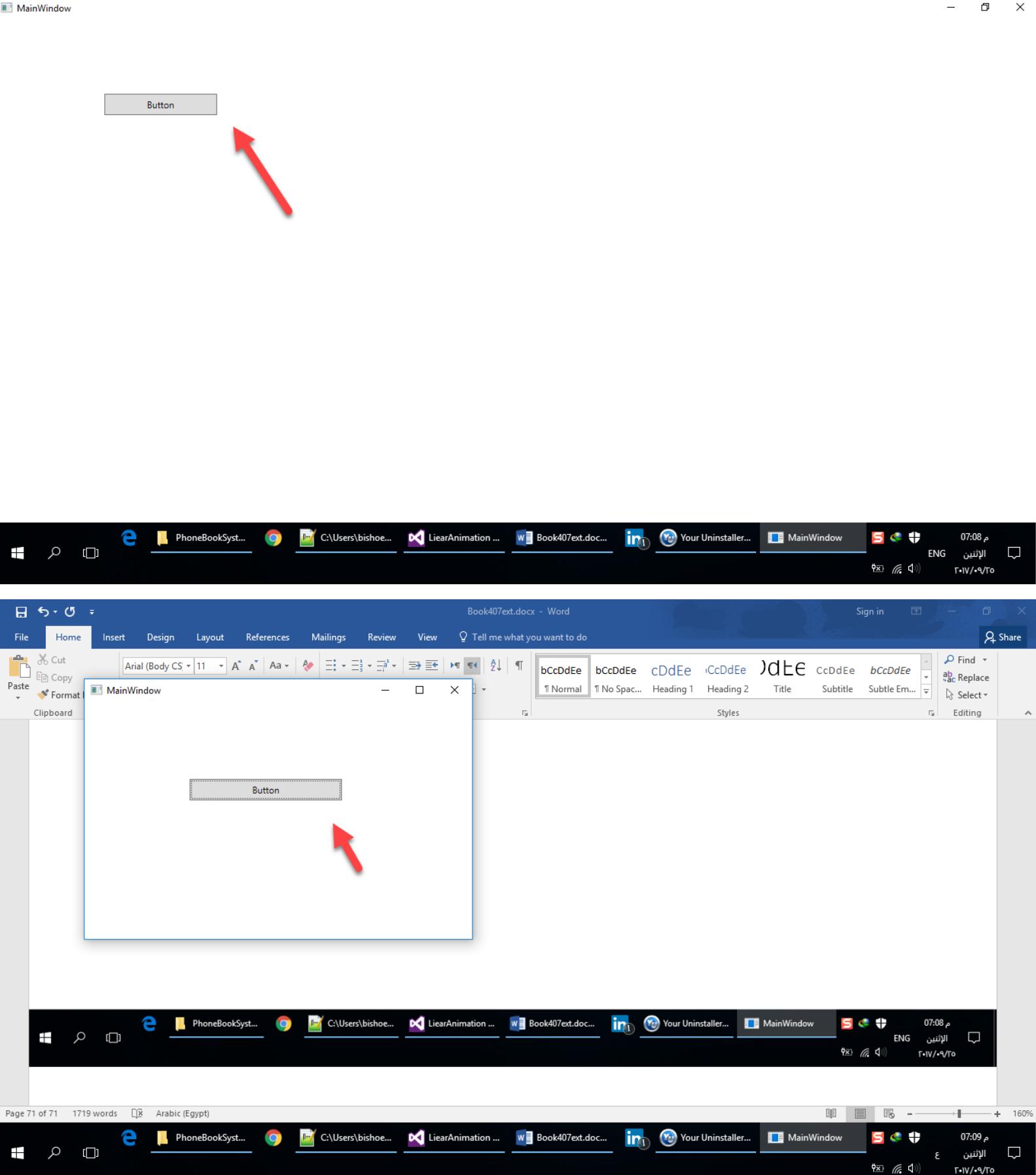


بعمل زر



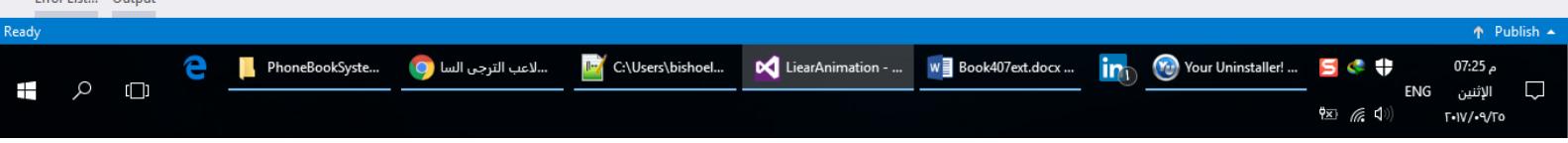
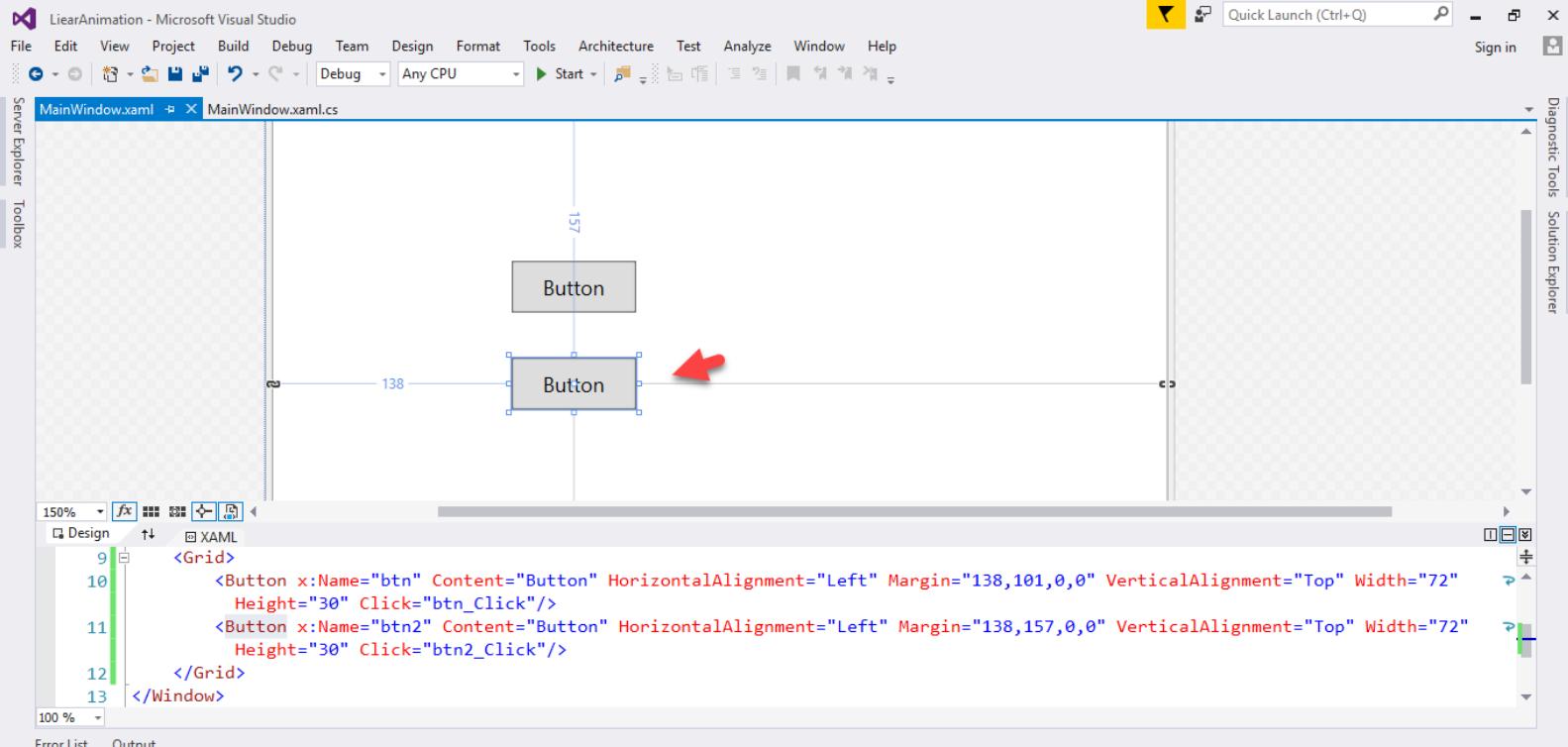
بنكير الزر في 5 ثواني

تجرب

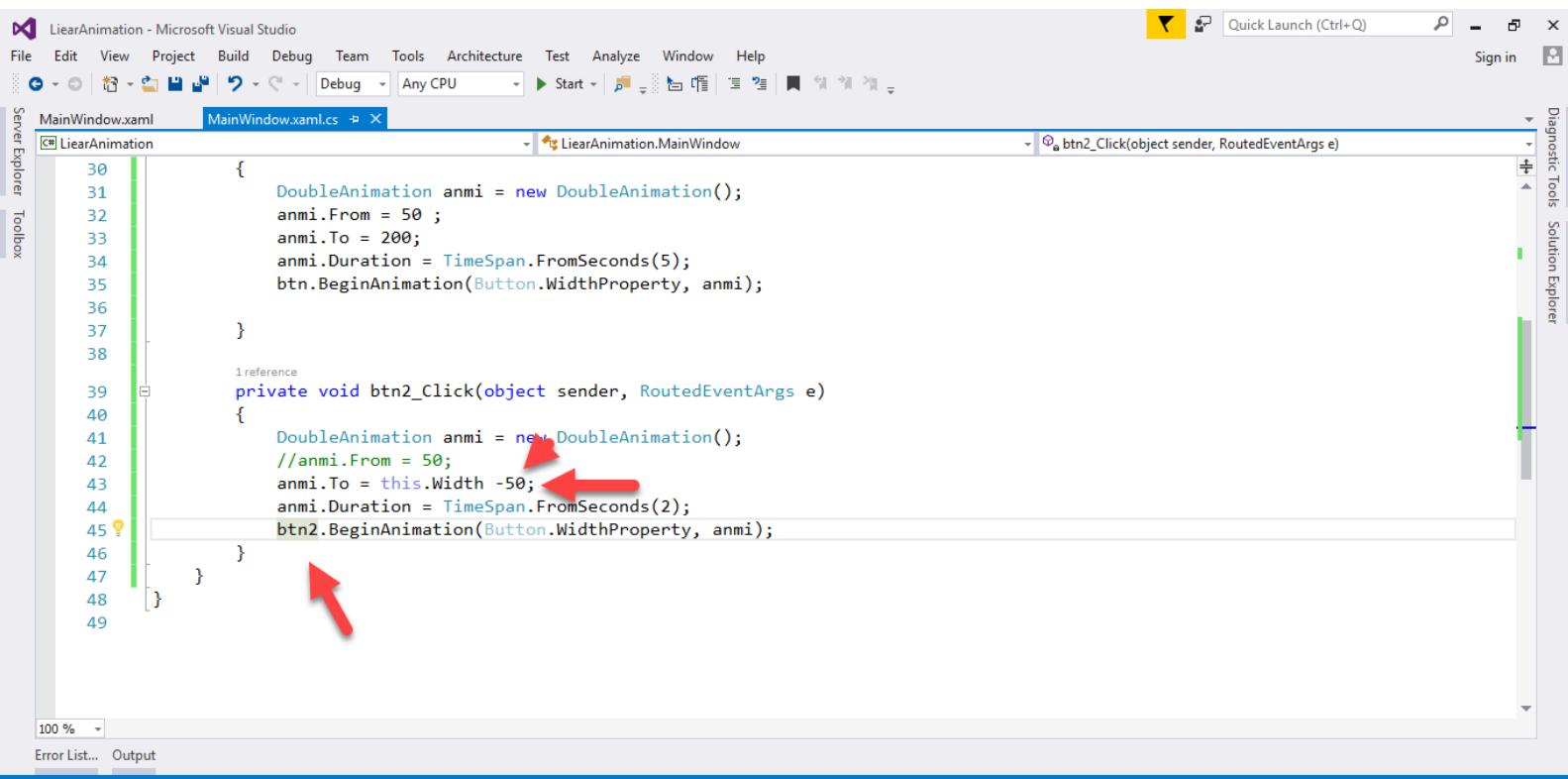


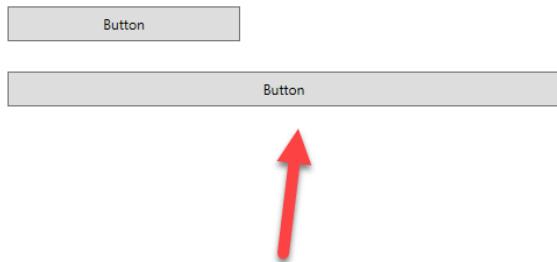
الزر كبر كما موضح الزر بيكبر قدامك فى خلال 5 ثوانى بطريقة
الانيمشين

ولو ضغطت عليه هيرجع يشغل الانيمشين تانى
تعالج المشكلة دى



بضيف زر





كير وبدوس عليه مش بيكر نفسه وافق شغل الانيميشن مره واحدة بس
فيه مشكلة مرحلش لآخر الفورم ليه

LiarAnimation - Microsoft Visual Studio

MainWindow.xaml.cs

MainWindow.xaml

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer

Design XAML

150%

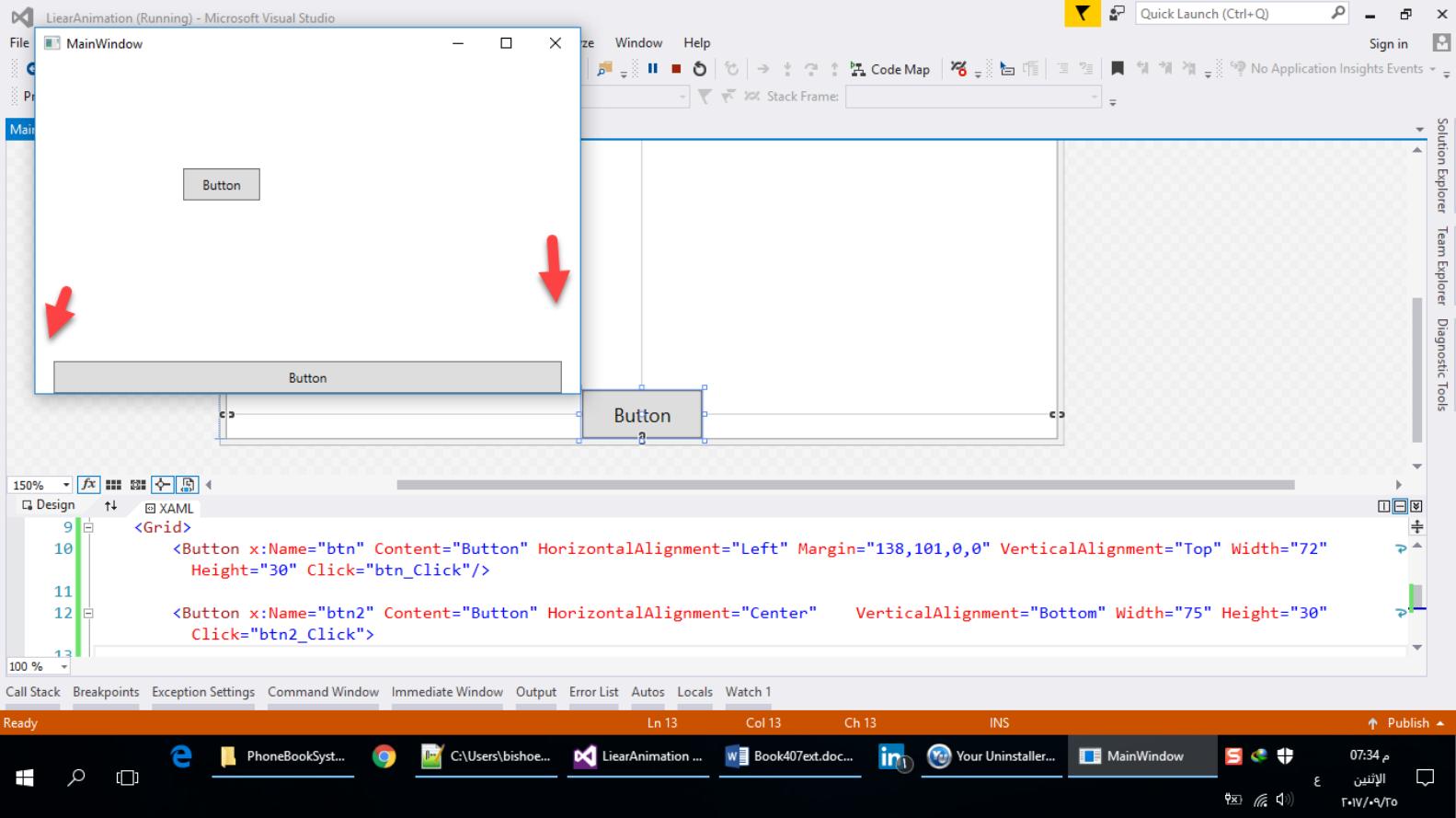
```
<Grid>
    <Button x:Name="btn" Content="Button" HorizontalAlignment="Left" Margin="138,101,0,0" VerticalAlignment="Top" Width="72" Height="30" Click="btn_Click"/>
    <Button x:Name="btn2" Content="Button" HorizontalAlignment="Center" VerticalAlignment="Bottom" Width="75" Height="30" Click="btn2_Click"/>
```

Ln 13 Col 13 Ch 13 INS

Item(s) Saved

PhoneBookSyst... Google... C:\Users\bishoel... LiarAnimation ... Book407ext.docx ... Your Uninstaller! ... ENG 07:32 م الاثنين ٢٠١٧/٩/٢٥

هنا دخلت البروپرتى دى ومسحت المارجين



ا هو ضبط شاف الحجم 300 * 300 راح شال منه 50 من كل جنب وظهر كما موضح هو بيكتب بناء على طول الويندو الـ هو 300*300

Nan problem

The screenshot shows the Microsoft Visual Studio interface. In the center, there is an error dialog box titled "ArgumentException was unhandled". The message says: "An unhandled exception of type 'System.ArgumentException' occurred in WindowsBase.dll". Below that, it says: "Additional information: 'ليس رقمًا' is not a valid value for property 'To'." A red arrow points from the text "ليس رقمًا" to the "To" property in the code below. The code is in the `Nanbox.cs` file:

```
17  {
18      /// <summary>
19      /// Interaction logic for Nanbox.xaml
20      /// </summary>
21      public partial class Nanbox : Window
22      {
23          public Nanbox()
24          {
25              InitializeComponent();
26          }
27
28          private void btn_Click(object sender, RoutedEventArgs e)
29          {
30              DoubleAnimation dob = new DoubleAnimation();
31              dob.To = grd.Width;
32              dob.Duration = TimeSpan.FromSeconds(2);
33              btn.BeginAnimation(Button.WidthProperty, dob);
34              btn.BeginAnimation(Button.HeightProperty, dob);
35          }
36      }
37 }
```

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1
Ready Ln 31 Col 13 Ch 13 INS
Windows Taskbar: Video, C:\Users\bisho..., LlearAnimation ..., Book407ext.docx, Your Uninstaller!, Nanbox, S, 08:05 م, الاثنين, ٢٠١٩/٩/٢٥

خطب زر وبرمجة الانيميشن طلعي ايور ليه لانه الزر ملوش لا طول ولا عرض وكذلك الجريد
ولما محطش انا قيمة الفيجوال بيحط القيمة nan

The screenshot shows the Microsoft Visual Studio interface again. The error dialog box is no longer present. The code in the `Nanbox.cs` file has been modified:

```
20      /// </summary>
21      public partial class Nanbox : Window
22      {
23          public Nanbox()
24          {
25              InitializeComponent();
26          }
27
28          private void btn_Click(object sender, RoutedEventArgs e)
29          {
30              DoubleAnimation dob = new DoubleAnimation();
31              //dob.To = grd.Width;
32              dob.To = grd.ActualWidth;
33              dob.Duration = TimeSpan.FromSeconds(2);
34              btn.BeginAnimation(Button.WidthProperty, dob);
35              btn.BeginAnimation(Button.HeightProperty, dob);
36          }
37      }
38
39 }
```

Error List... Output
Ready Ln 32 Col 38 Ch 38 INS
Windows Taskbar: Video, C:\Users\bisho..., LlearAnimation ..., Book407ext.docx, Your Uninstaller!, Windows Media Player, S, 09:05 م, الاثنين, ٢٠١٩/٩/٢٥

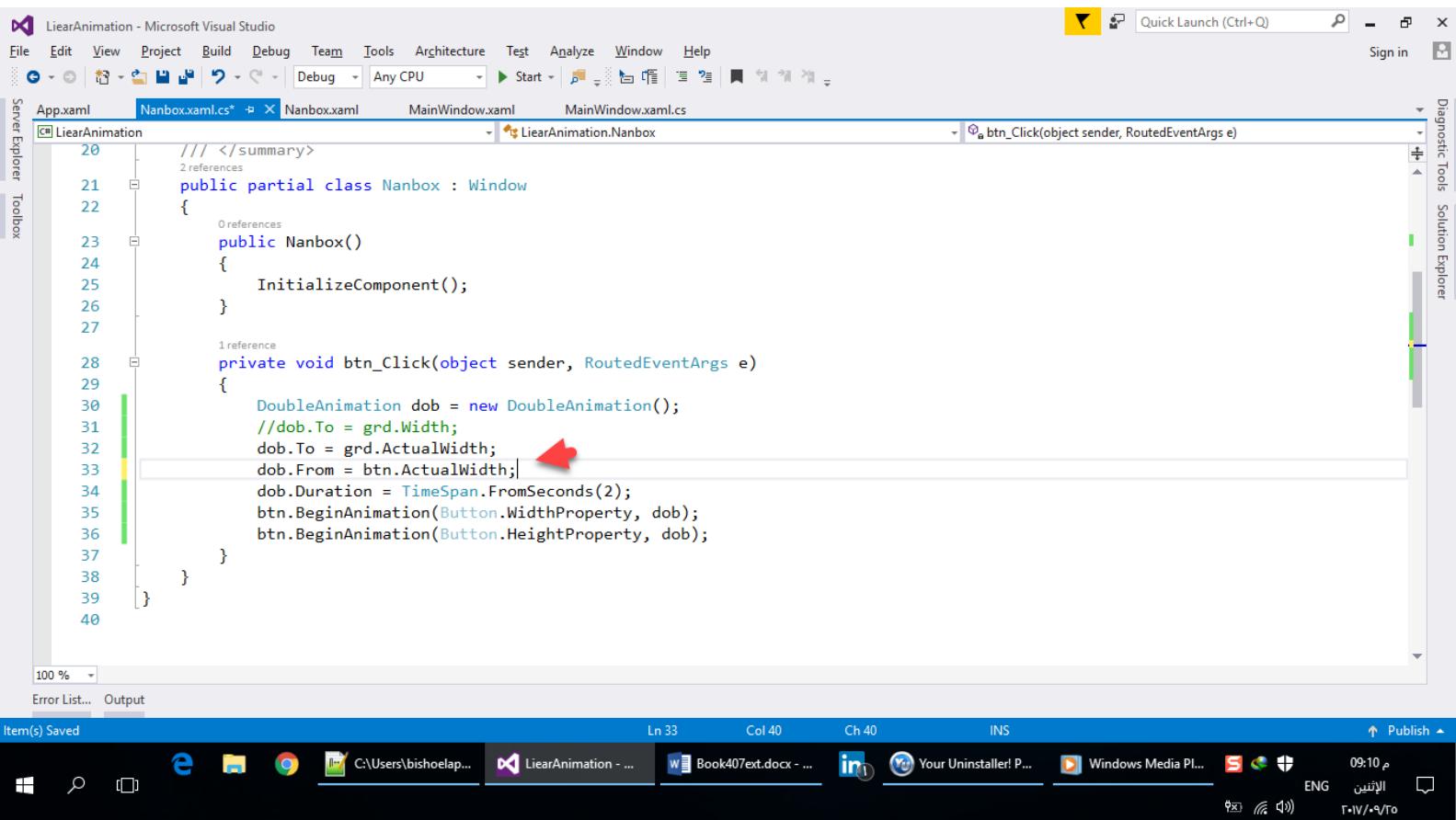
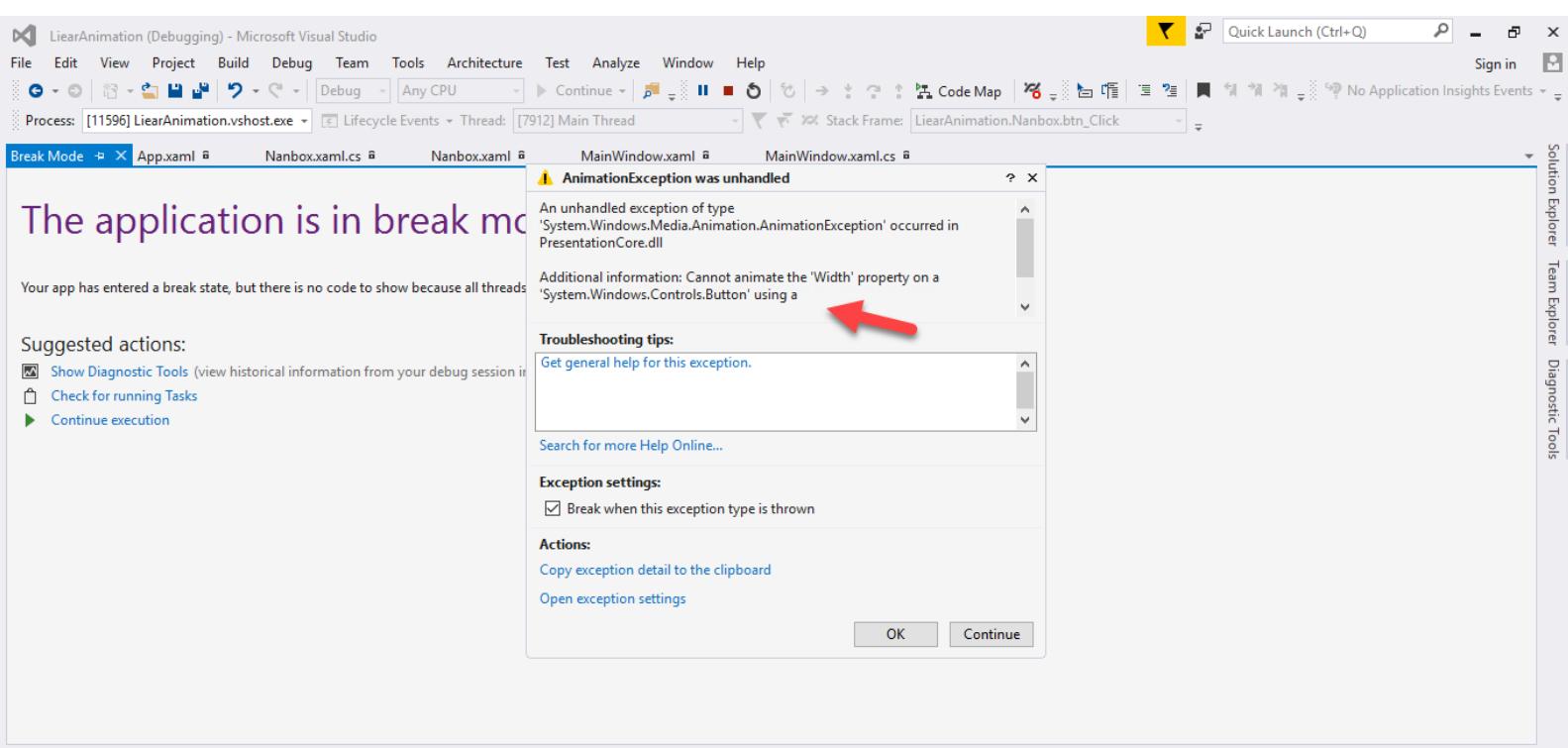
بقوله ال

Actual width

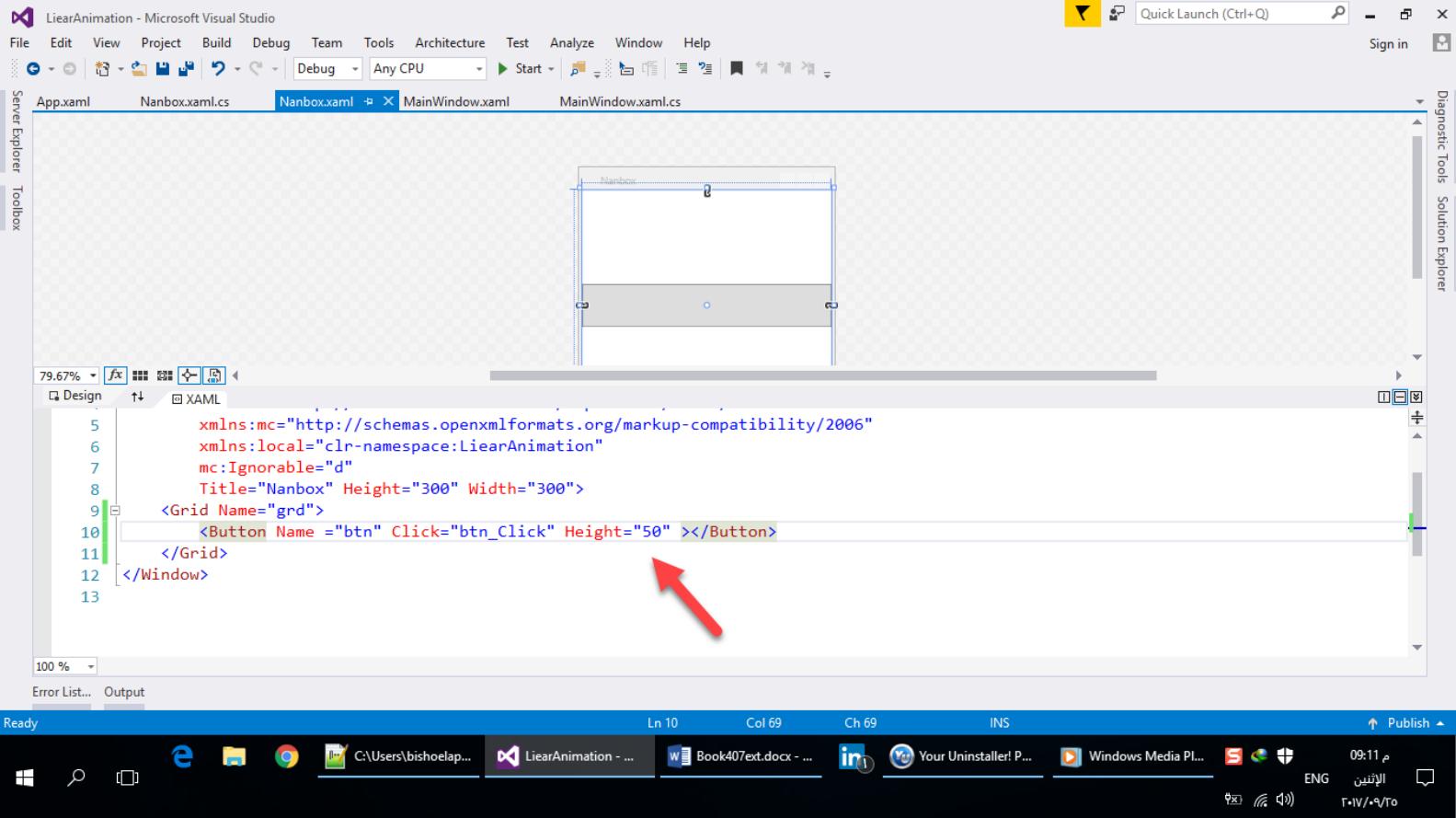
باتج الجريد هتكبر لحده

طب الجريد عامله على الشاشة حفظ القياسات التي تخلي الجريد تملئ الشاشة فين خطها في

Actual width

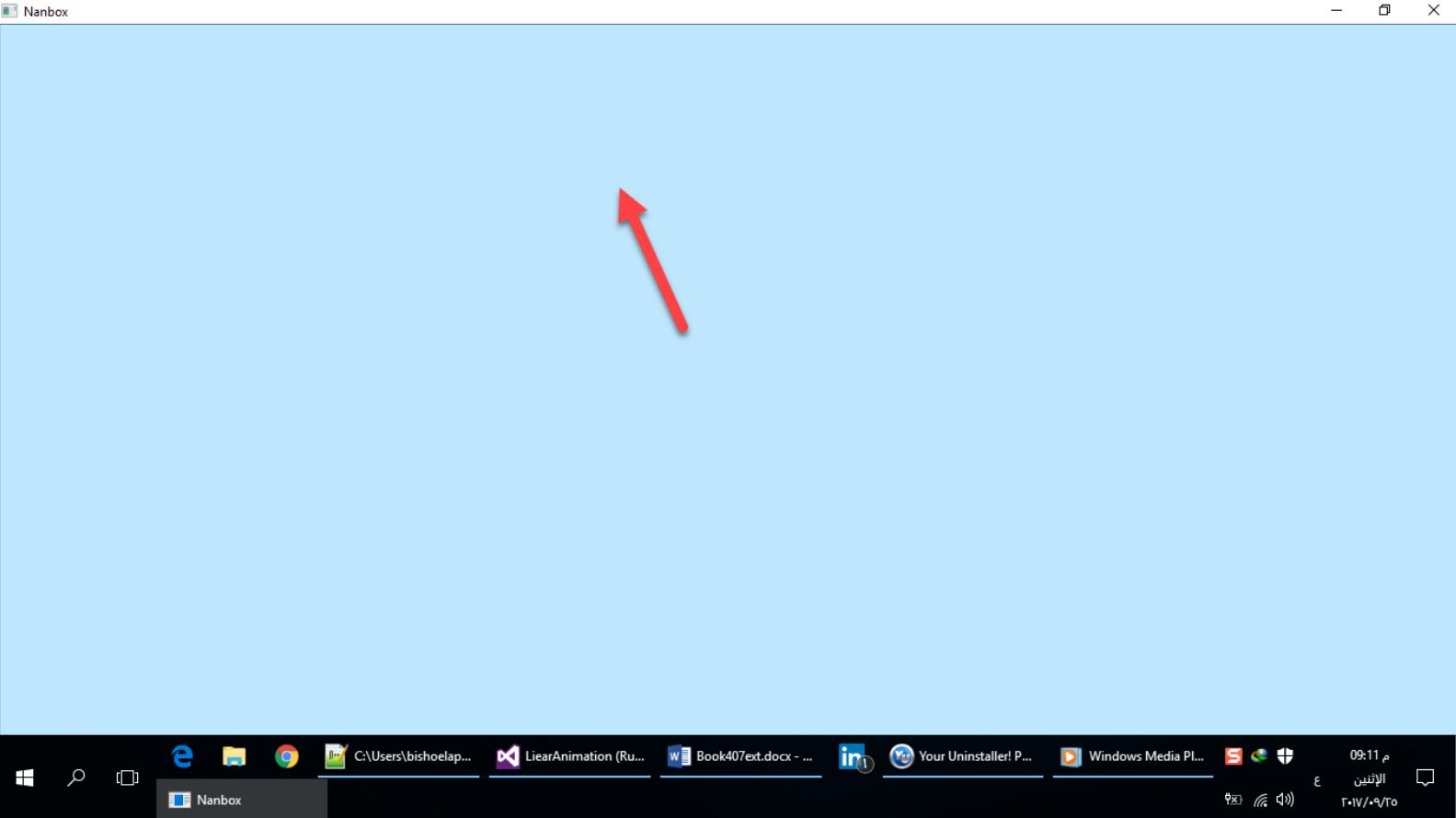


وتعالى نعمل طول للزر



نجرب





الزر على الشاشة كلها

ونعدل الكود ونرفع

تكون الاول

بس فيه مشكلة

نشوف حاجة تانية تعالى نشوف هنشيل قيمة

To

بص معايا

Microsoft Visual Studio

LiearAnimation - Microsoft Visual Studio

File Edit View Project Build Debug Team Design Format Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

App.xaml Nanbox.xaml.cs Nanbox.xaml MainWindow.xaml + X MainWindow.xaml.cs

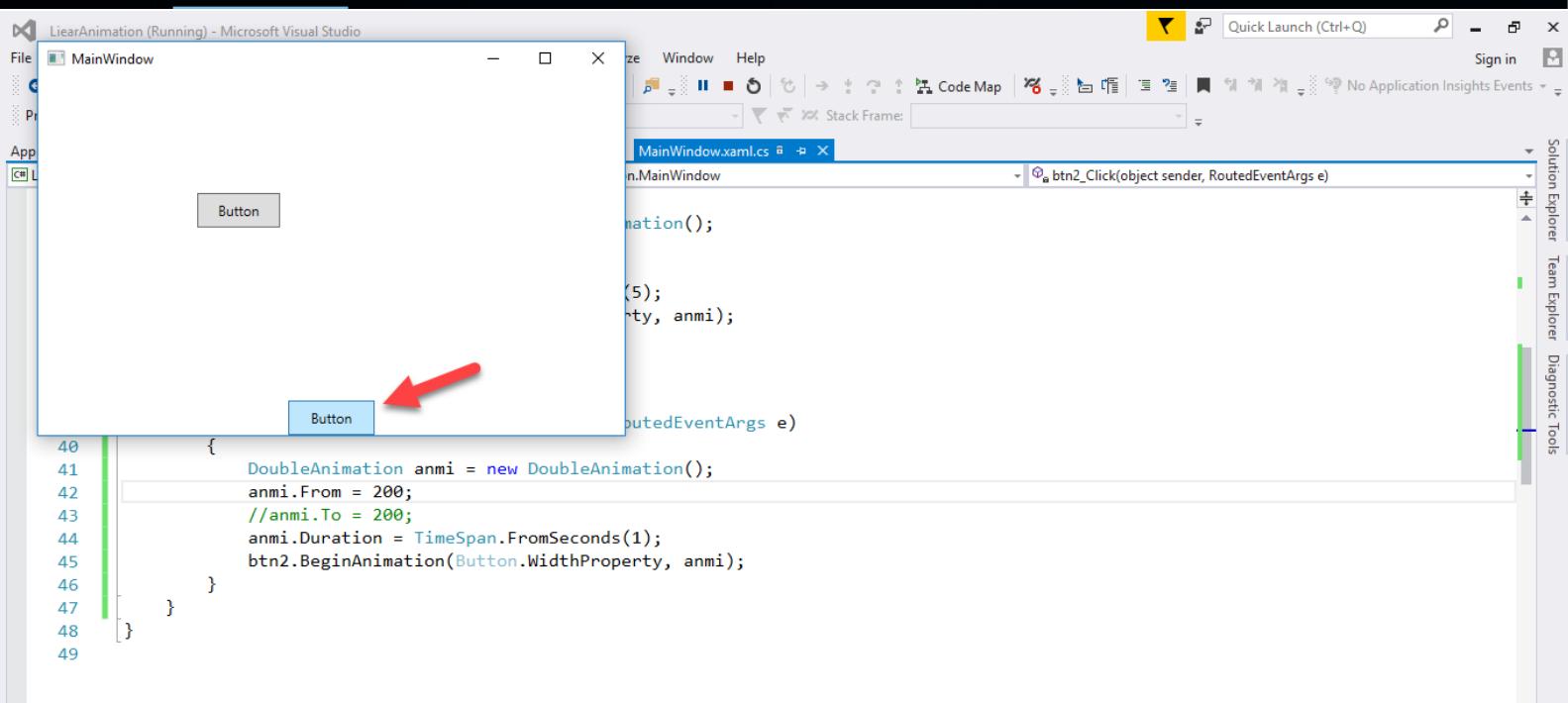
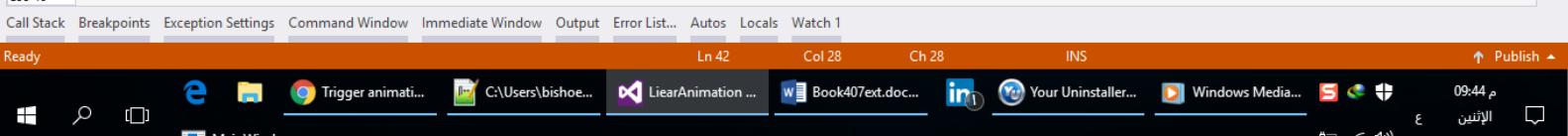
Server Explorer Toolbox Diagnostic Tools Solution Explorer

Design XAML

150% 6 xmlns:local="clr-namespace:LiearAnimation" 7 mc:Ignorable="d" 8 Title="MainWindow" Height="350" Width="525"> 9 <Grid> 10 <Button x:Name="btn" Content="Button" HorizontalAlignment="Left" Margin="138,101,0,0" VerticalAlignment="Top" Width="72" Height="30" Click="btn_Click"/> 11 <Button x:Name="btn2" Content="Button" HorizontalAlignment="Center" VerticalAlignment="Bottom" Width="75" Height="30" Click="btn2_Click"> 12 </Button> 13 </Grid> 14 </Window> 15 16 100 % FrameworkElement.VerticalAlignment

Trigger animations ... LiearAnimation - ... Book407ext.docx - ... Your Uninstaller! P... Windows Media Pl... S E 09:45 م الاثنين ٢٠١٧/٩/٥

```
LiarAnimation (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Process: [11496] LiarAnimation.vhost.exe Lifecycle Events Thread: Stack Frame:
App.xaml Nanbox.xaml.cs Nanbox.xaml MainWindow.xaml MainWindow.xaml.cs
LiarAnimation MainWindow btn2_Click(object sender, RoutedEventArgs e)
30
31     {
32         DoubleAnimation anmi = new DoubleAnimation();
33         anmi.From = 50 ;
34         anmi.To = 200;
35         anmi.Duration = TimeSpan.FromSeconds(5);
36         btn.BeginAnimation(Button.WidthProperty, anmi);
37     }
38
39     1 reference
40     private void btn2_Click(object sender, RoutedEventArgs e)
41     {
42         DoubleAnimation anmi = new DoubleAnimation();
43         anmi.From = 200; //anmi.To = 200;
44         anmi.Duration = TimeSpan.FromSeconds(1);
45         btn2.BeginAnimation(Button.WidthProperty, anmi);
46     }
47 }
48
49
```

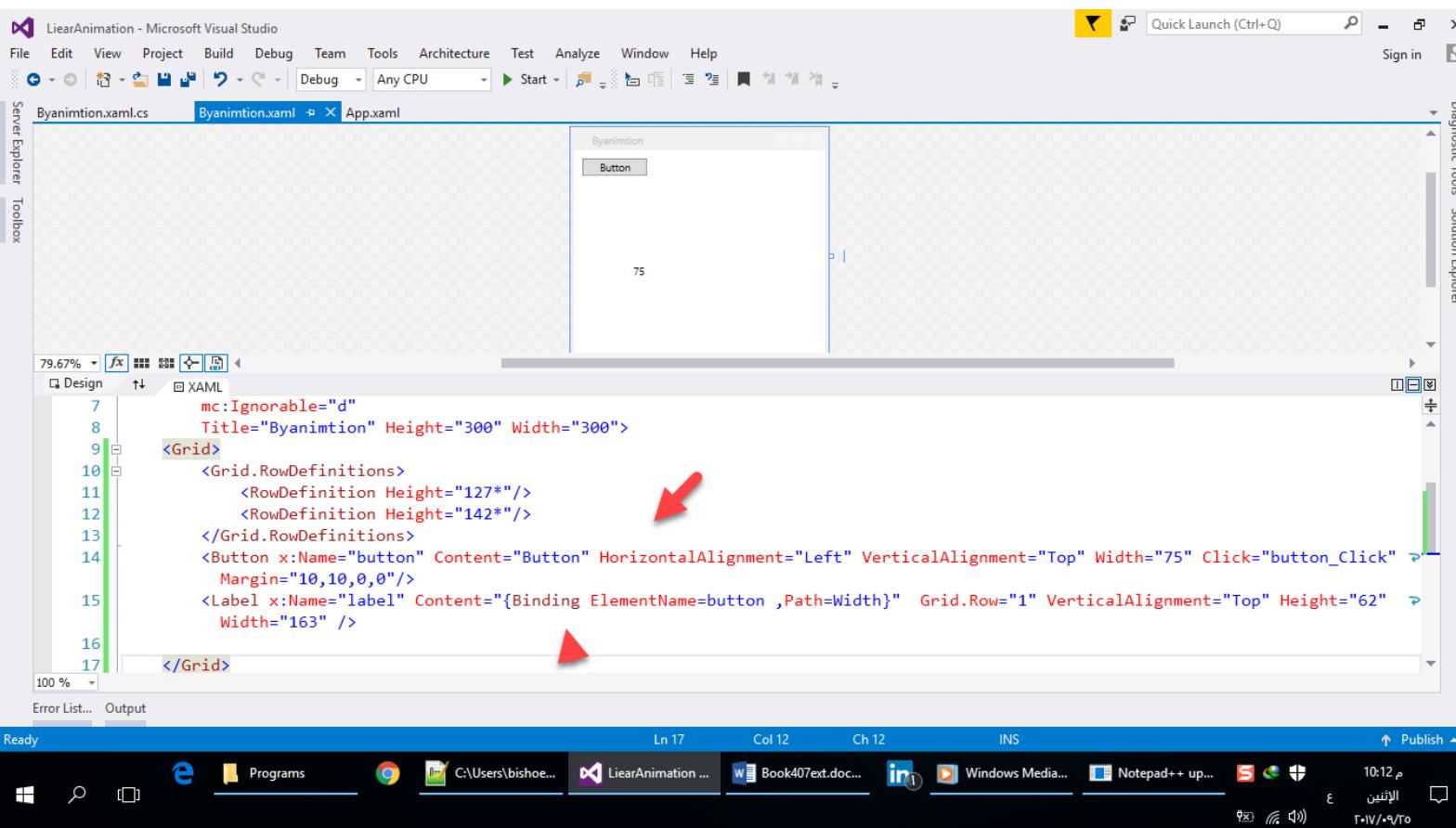


هنا کبر و صغیر تانی پسر عشان شیلت

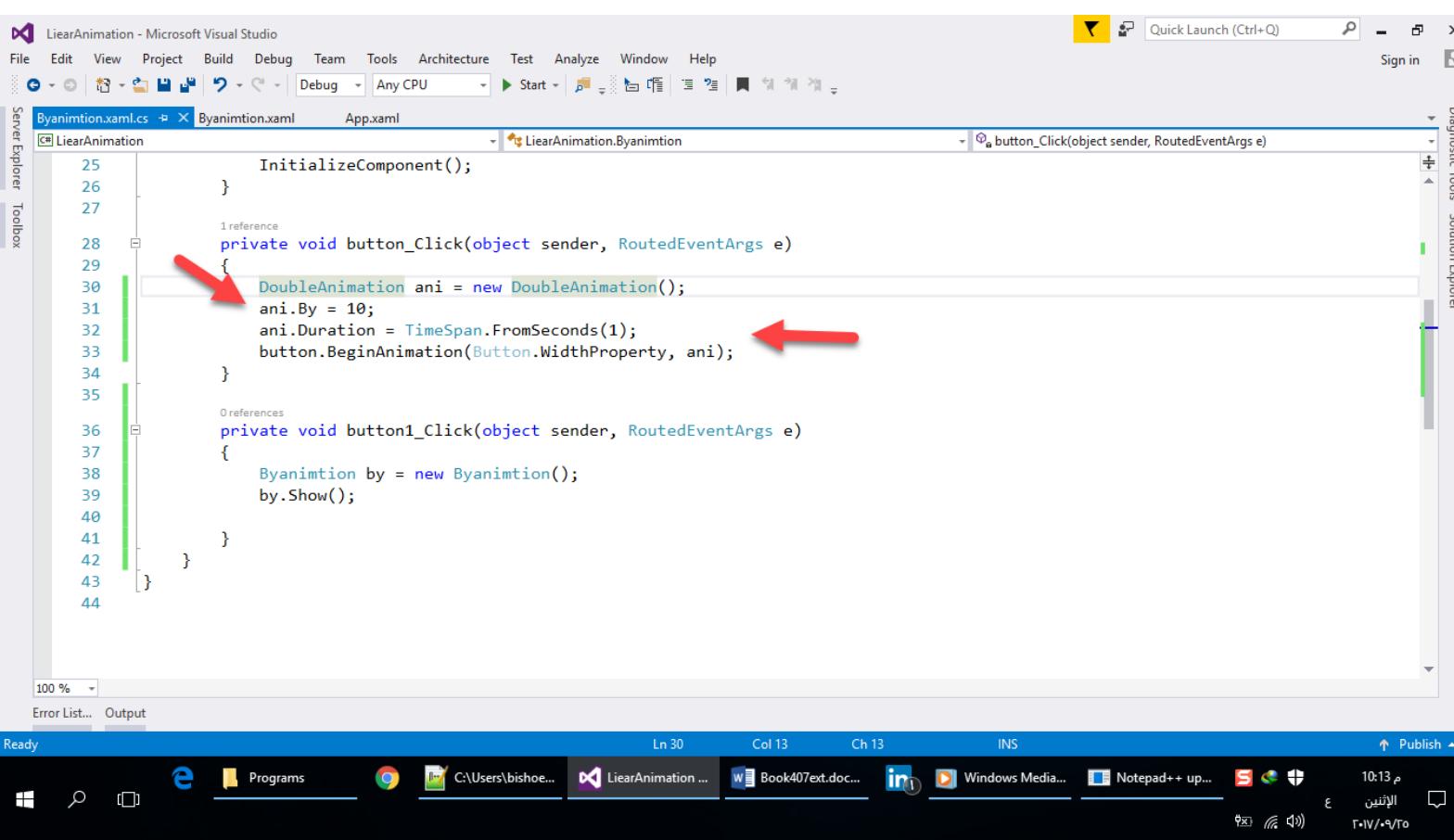
To

By

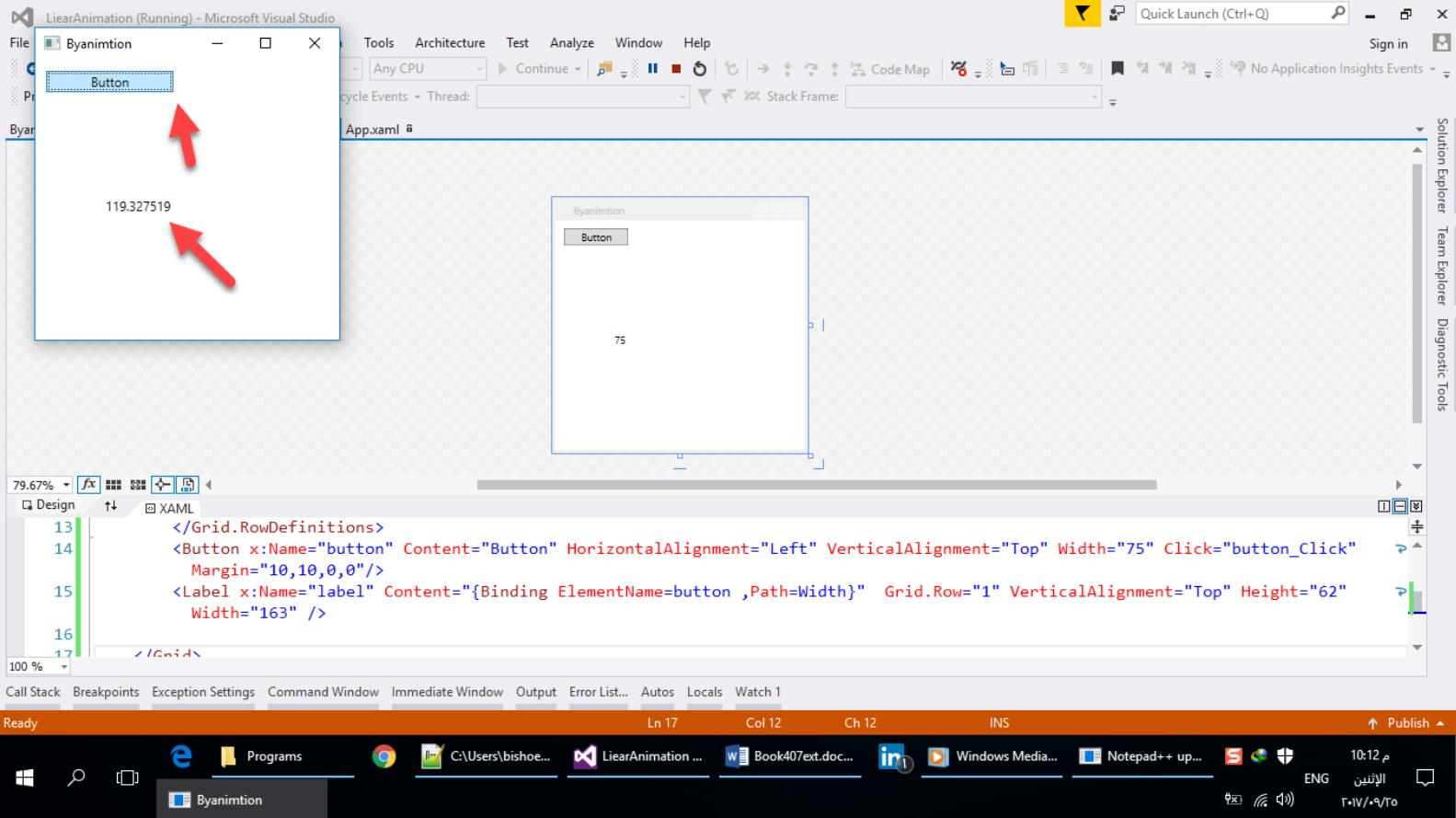
بنزوج على القيمة الحالية كل مرة بـ



بضيف زر ولبيول



نشغل



بص بيكر كل ما بيكر
وبيكتب الرقم الحالى للعرض

لايفضل عمل الكلام ده بال

By

كود بديل افضل

To

```
InitializeComponent();}

private void button_Click(object sender, RoutedEventArgs e)
{
    DoubleAnimation ani = new DoubleAnimation();
    //ani.By = 10;
    ani.To = button.Width + 10;
    ani.Duration = TimeSpan.FromSeconds(1);
    button.BeginAnimation(Button.WidthProperty, ani);
}

private void button1_Click(object sender, RoutedEventArgs e)
{
    Byanition by = new Byanition();
    by.Show();
}
```



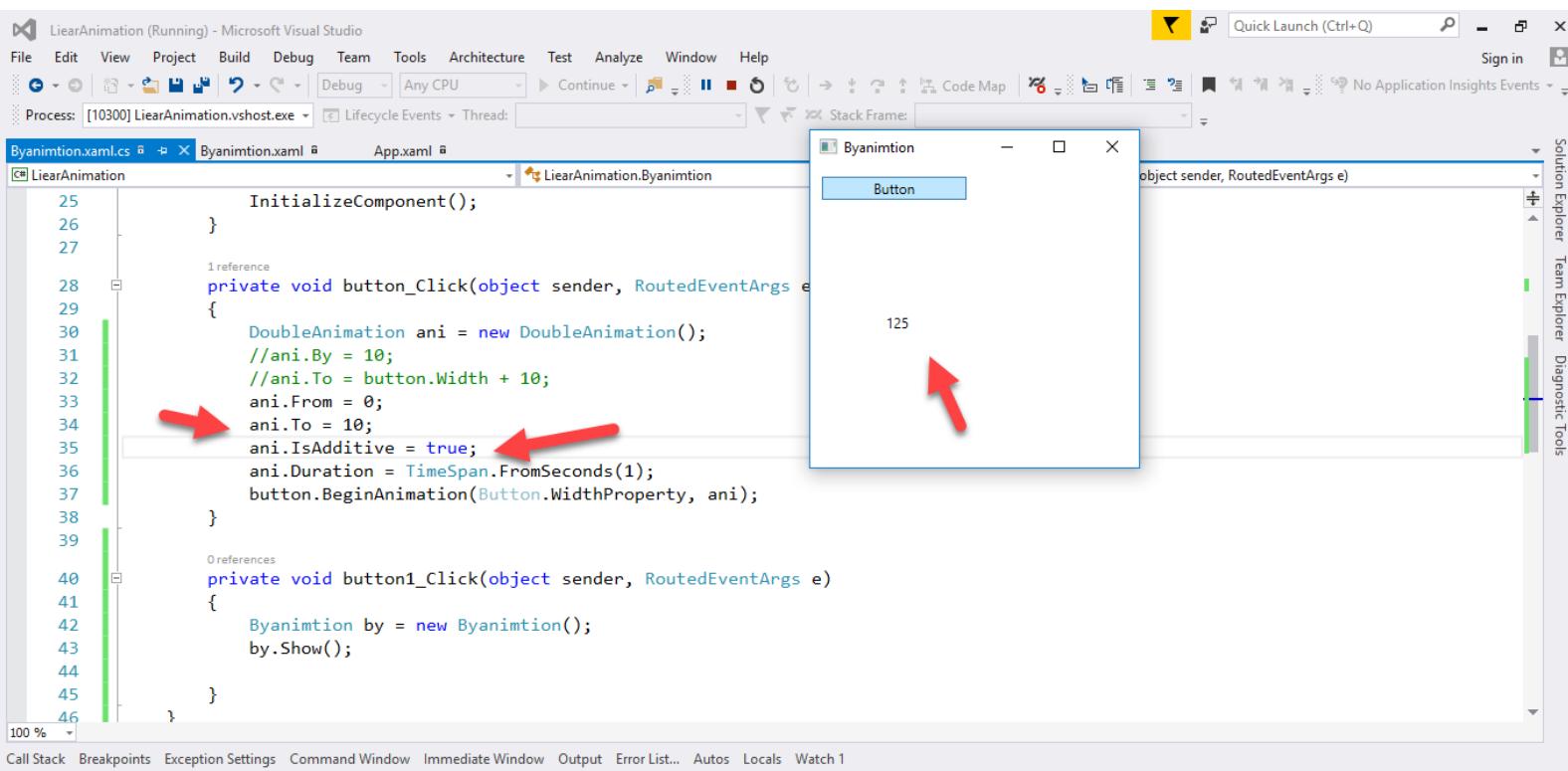
150.90867999999998



نجاح فعلا

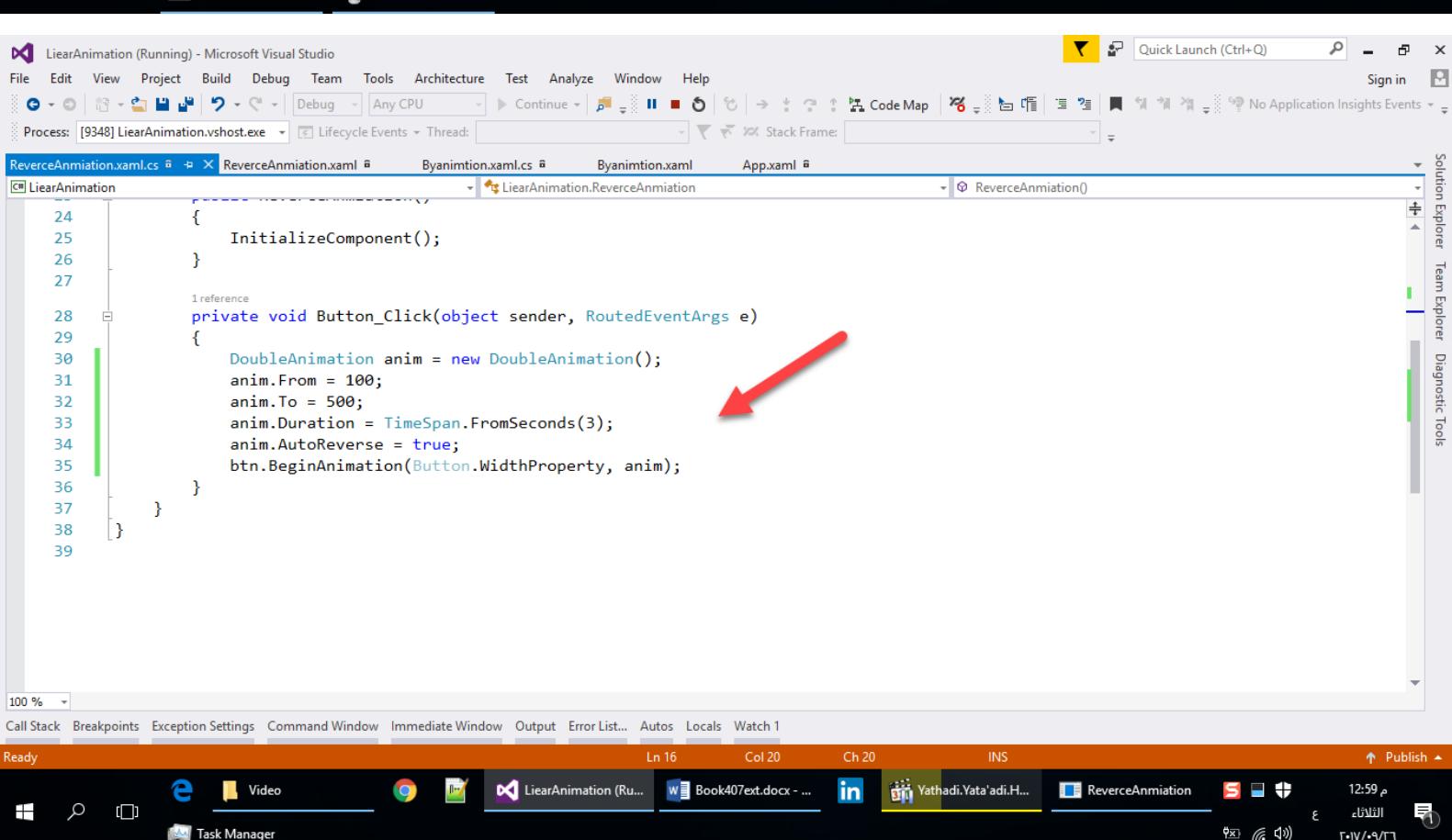
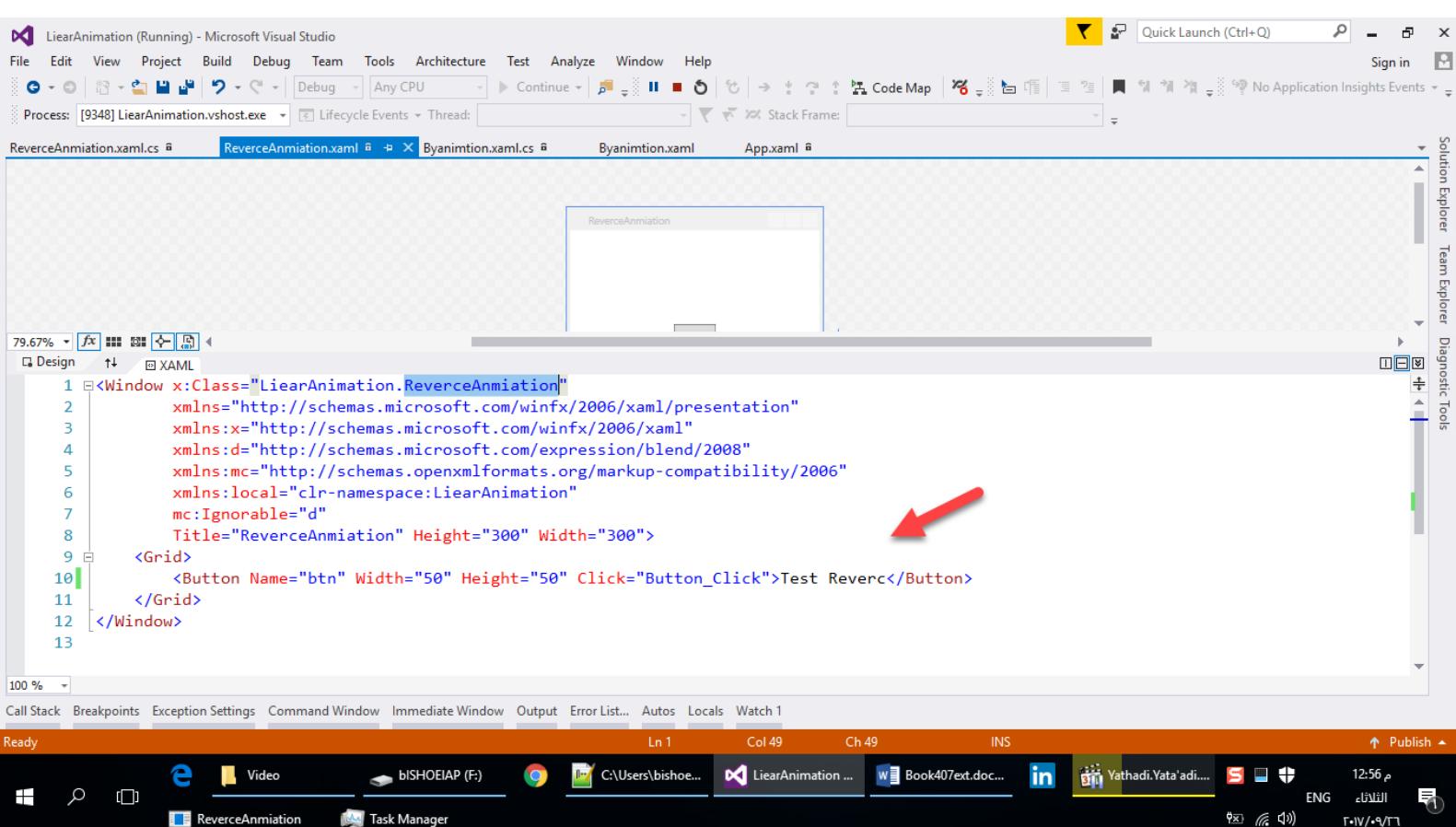
حاجة زيهم برضوه اسمها

IsAdditive



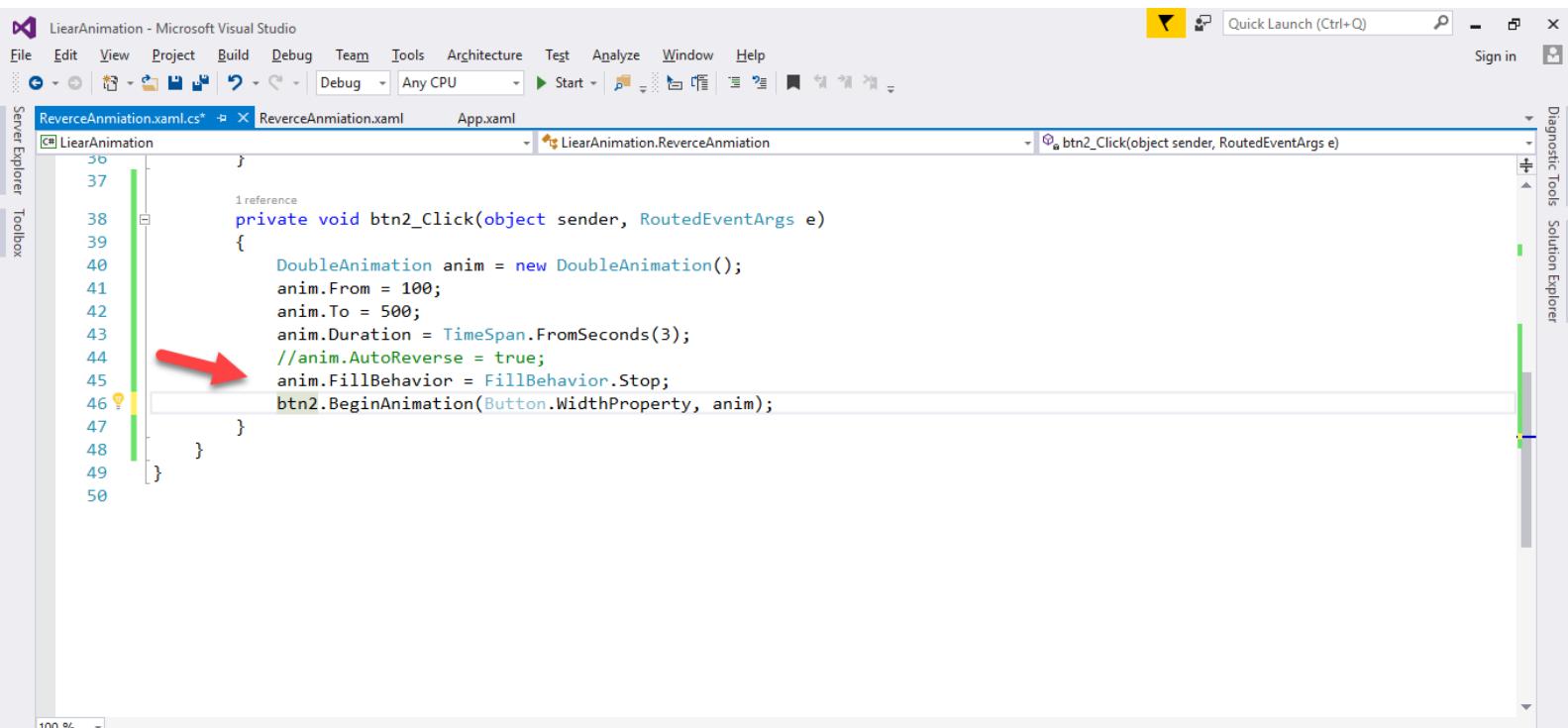
وبمرر نسبة الزيادة في to

Reverse



بنشعل بيكبر ويصغر تانى ويرجع لنوضعه الاصلى فى 3 ثوانى

File behavior



```
LiearAnimation - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
ReverceAnimation.xaml.cs* ReverceAnnimation.xaml App.xaml
LiearAnimation
36
37
38     private void btn2_Click(object sender, RoutedEventArgs e)
39     {
40         DoubleAnimation anim = new DoubleAnimation();
41         anim.From = 100;
42         anim.To = 500;
43         anim.Duration = TimeSpan.FromSeconds(3);
44         //anim.AutoReverse = true;
45         anim.FillBehavior = FillBehavior.Stop;
46         btn2.BeginAnimation(Button.WidthProperty, anim);
47     }
48
49 }
100 %
Error List... Output
Ready
Ln 46 Col 17 Ch 17 INS
01:16 م 01:16 م
Ready
e Video Google Chrome LiearAnimation - ... Book407ext.docx - ... in Yathadi.Yata'adi.H... Task Manager 01:16 م 01:16 م
10/9/2023 10/9/2023
```

بنعمل زر جديد ونضيف الكود الموضح

نشغل



الفرق الاولى وهو بيرجع لوضعه الاصلى بيرجع بانيمشين لكن

ده موقع بيشرح بامثلة الانيميشن

<https://github.com/Microsoft/WPF-Samples/tree/master/Animation>

<https://www.codeproject.com/Articles/23257/Beginner-s-WPF-Animation-Tutorial>

Template

وسيلة تغيير الكنترول بالكامل والمحتوى اللي بداخله

فيه منه انواع

1 control template

2 Data template

3 panel template

الاولى بتغير شكل الكنترول

الثانى بيعير شكل الداتا فى الداتا جريد

الاخيرة لعناصر الباينل او اللي بتكون باينل



A template describes the overall look and visual appearance of a control. For each control, there is a default template associated with it which gives the control its appearance. In WPF applications, you can easily create your own templates when you want to customize the visual behavior and visual appearance of a control.

Connectivity between the logic and the template can be achieved by data binding. The main difference between styles and templates are listed below –

- Styles can only change the appearance of your control with default properties of that control.
- With templates, you can access more parts of a control than in styles. You can also specify both existing and new behavior of a control.

There are two types of templates which are most commonly used –

- Control Template
- Data Template

Control Template

The Control Template defines the visual appearance of a control. All of the UI elements have some kind of appearance as well as behavior, e.g., Button has an appearance and behavior. Click event or mouse hover event are the behaviors which are fired in response to a click and hover and there is also a default appearance of button which can be changed by the Control template.

Example

Let's take a simple example. We will create two buttons (one is with template and the other one is the default button) and initialize them with some properties.

```
<Window x:Class = "TemplateDemo.MainWindow"
xmlns = "http://schemas.microsoft.com/winfx/2006/xaml/presentation"
xmlns:x = "http://schemas.microsoft.com/winfx/2006/xaml"
Title = "MainWindow" Height = "350" Width = "604">

    <Window.Resources>
        <ControlTemplate x:Key = "ButtonTemplate" TargetType = "Button">

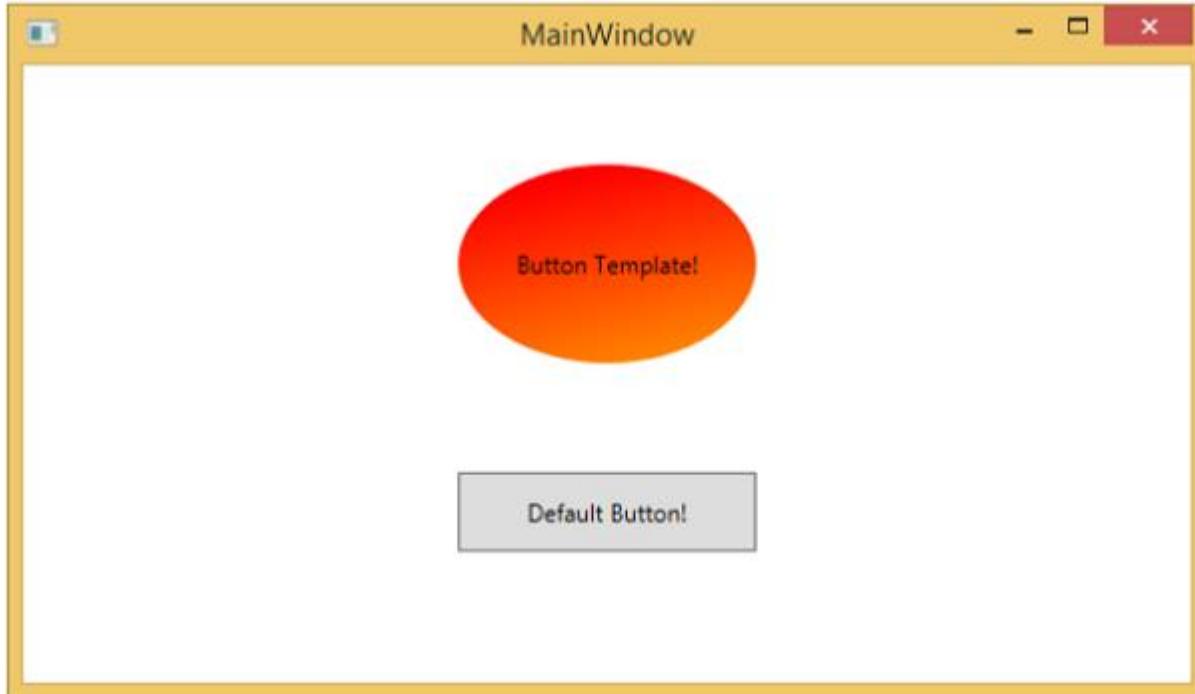
            <Grid>
                <Ellipse x:Name = "ButtonEllipse" Height = "100" Width = "150" >
                    <Ellipse.Fill>
                        <LinearGradientBrush StartPoint = "0,0,2" EndPoint = "0,2,1,4">
                            <GradientStop Offset = "0" Color = "Red" />
                            <GradientStop Offset = "1" Color = "Orange" />
                        </LinearGradientBrush>
                    </Ellipse.Fill>
                </Ellipse>
            </Grid>
            <ContentPresenter Content = "{TemplateBinding Content}" />
        </ControlTemplate>
    </Window.Resources>
</Window>
```

```

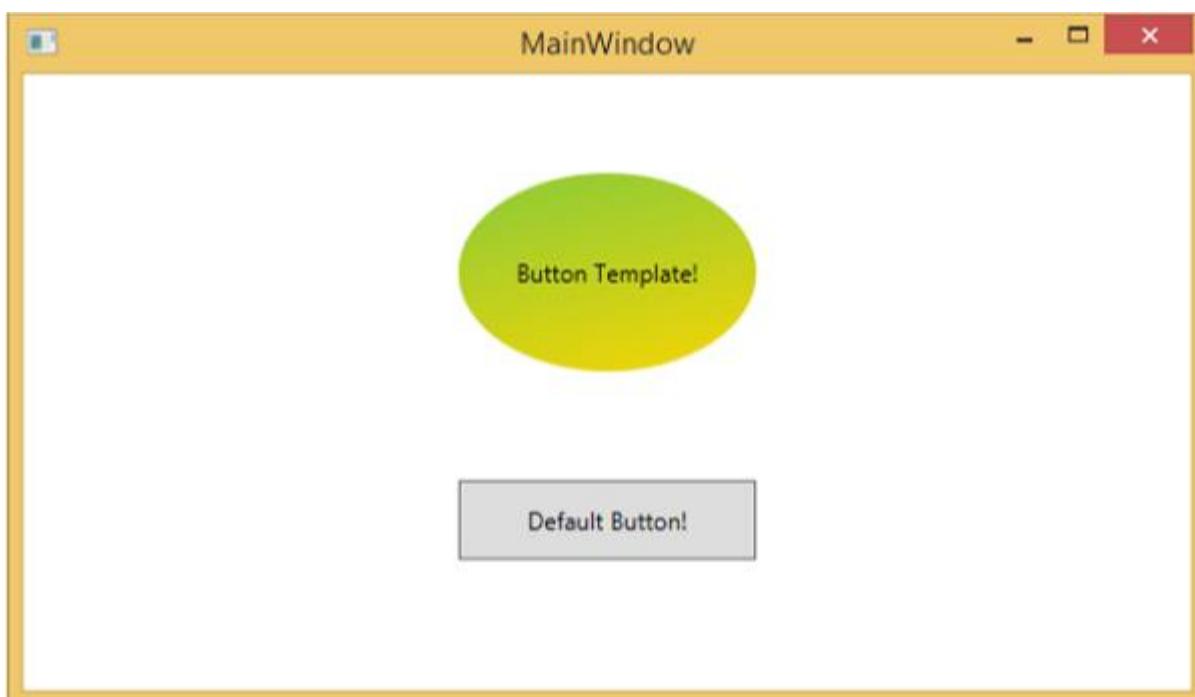


```

When you compile and execute the above code, it will display the following MainWindow.



When you move the mouse over the button with custom template, it will change its color as shown below.



Data Template

A Data Template defines and specifies the appearance and structure of a collection of data. It provides the flexibility to format and define the presentation of the data on any UI element. It is mostly used on data related Item controls such as ComboBox, ListBox, etc.

Example

- Let's take a simple example to understand the concept of data template. Create a new WPF project with the name WPFDatatemplates.
- In the following XAML code, we will create a Data Template as resource to hold labels and textboxes. There is a button and a list box as well which to display the data.

```
<Window x:Class = "WPFDatatemplates.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:WPFDataTemplates"
    xmlns:loc = "clr-namespace:WPFDataTemplates"
mc:Ignorable = "d" Title = "MainWindow" Height = "350" Width = "525">

    <Window.Resources>
        <DataTemplate DataType = "{x:Type loc:Person}">

            <Grid>
                <Grid.RowDefinitions>
                    <RowDefinition Height = "Auto" />
                    <RowDefinition Height = "Auto" />
                </Grid.RowDefinitions>

                <Grid.ColumnDefinitions>
                    <ColumnDefinition Width = "Auto" />
                    <ColumnDefinition Width = "200" />
                </Grid.ColumnDefinitions>

                <Label Name = "nameLabel" Margin = "10"/>
                <TextBox Name = "nameText" Grid.Column = "1" Margin = "10"
                    Text = "{Binding Name}"/>
                <Label Name = "ageLabel" Margin = "10" Grid.Row = "1"/>
                <TextBox Name = "ageText" Grid.Column = "1" Grid.Row = "1" Margin = "10"
                    Text = "{Binding Age}"/>
            </Grid>

        </DataTemplate>
    </Window.Resources>

    <Grid>
        <Grid.RowDefinitions>
            <RowDefinition Height = "Auto" />
            <RowDefinition Height = "*" />
        </Grid.RowDefinitions>

        <ListBox ItemsSource = "{Binding}" />
        <StackPanel Grid.Row = "1" >
            <Button Content = "_Show..." Click = "Button_Click" Width = "80" HorizontalAlignment = "Left" Margin = "10"/>
        </StackPanel>
    </Grid>

```

Here is implementation in C# in which a list of Person objects are assigned to DataContext, implementation of Person class and button click event.

```
using System.Collections.Generic;
using System.Windows;

namespace WPFDataTemplates {

    public partial class MainWindow : Window {

        Person src = new Person { Name = "Ali", Age = 27 };
        List<Person> people = new List<Person>();

        public MainWindow() {
            InitializeComponent();
            people.Add(src);
            people.Add(new Person { Name = "Mike", Age = 62 });
            people.Add(new Person { Name = "Brian", Age = 12 });
            this.DataContext = people;
        }

        private void Button_Click(object sender, RoutedEventArgs e) {
            string message = src.Name + " is " + src.Age;
            MessageBox.Show(message);
        }
    }

    public class Person {
        private string nameValue;

        public string Name {
            get { return nameValue; }
            set { nameValue = value; }
        }

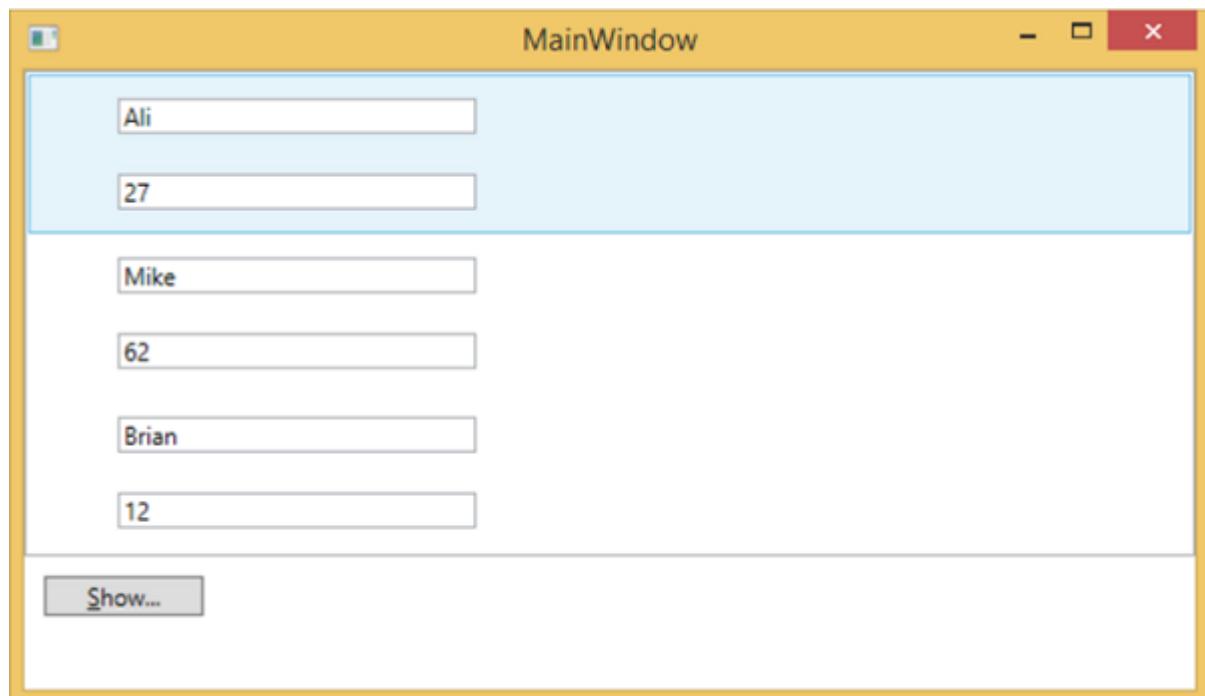
        private double ageValue;

        public double Age {
            get { return ageValue; }
            set {
                if (value != ageValue) {

```

```
ageValue = value;  
    }  
}  
}  
}  
}  
}
```

When you compile and execute the above code, it will produce the following window. It contains one list and inside the list box, each list box item contains the Person class object data which are displayed on Labels and Text boxes.



Binding

DESKTOP-2LH14AS.DataBinding - dbo.Table_1DESKTOP-2LH14AS.DataBinding - dbo.Categories - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Tools Window Help

Object Explorer

Connect ▾

- DESKTOP-2LH14AS (SQL Server 12.0.2000)
 - Databases
 - System Databases
 - Database Snapshots
 - DataBinding
 - Database Diagrams
 - Tables
 - Views
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - ReportServer
 - ReportServerTempDB
 - Security
 - Server Objects
 - Replication
 - AlwaysOn High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent (Agent XPs disabled)

Item(s) Saved

DESKTOP-2LH14AS.DataBinding - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Tools Window Help

Object Explorer

Connect ▾

- DESKTOP-2LH14AS (SQL Server 12.0.2000)
 - Databases
 - System Databases
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 - ReportServerTempDB
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 - AlwaysOn High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent (Agent XPs disabled)

DESKTOP-2LH14AS.D... - dbo.Categories

Column Name	Data Type	Allow Nulls
CategoryID	int	<input type="checkbox"/>
CategoryName	nvarchar(50)	<input checked="" type="checkbox"/>

Column Properties

(Identity)

[Tbl] dbo.Categories

(Name)	Categories
Database Name	DataBinding
Description	
Schema	dbo
Server Name	desktop-2lh14as

Table Designer

Identity Column	CategoryID
Indexable	Yes
Lock Escalation	Table
Regular Data Spac	PRIMARY
Replicated	No
Row GUID Column	
Text/Image Filegr	PRIMARY

DESKTOP-2LH14AS... - Microsoft SQL Server Management Studio

03:20 م ENG ٢٠١٧/٩/٣١

DESKTOP-2LH14AS.DataBinding - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Tools Window Help

Object Explorer

Connect ▾

- DESKTOP-2LH14AS (SQL Server 12.0.2000)
 - Databases
 - System Databases
 - Database Snapshots
 - DataBinding
 - Database Diagrams
 - Tables
 - Views
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - ReportServer
 - ReportServerTempDB
 - Security
 - Server Objects
 - Replication
 - AlwaysOn High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent (Agent XPs disabled)

DESKTOP-2LH14AS.D... - dbo.Table_1*

Column Name	Data Type	Allow Nulls
ModelID	int	<input type="checkbox"/>
ModelName	nvarchar(50)	<input checked="" type="checkbox"/>
ModelColor	nvarchar(50)	<input checked="" type="checkbox"/>
ModelImage	nvarchar(50)	<input checked="" type="checkbox"/>
ModelSpeed	nvarchar(50)	<input checked="" type="checkbox"/>
ModelPrise	nvarchar(50)	<input checked="" type="checkbox"/>
CategoryID	int	<input checked="" type="checkbox"/>

Choose Name

Enter a name for the table:

Model

OK Cancel

Column Properties

(General)

(Name) CategoryID

Allow Nulls Yes

Data Type int

Default Value or Binding

Table Designer

(General)

DESKTOP-2LH14AS.D... - dbo.Categories

Column Name	Data Type	Allow Nulls
CategoryID	int	<input type="checkbox"/>
CategoryName	nvarchar(50)	<input checked="" type="checkbox"/>

Properties

[Tbl] dbo.Table_1

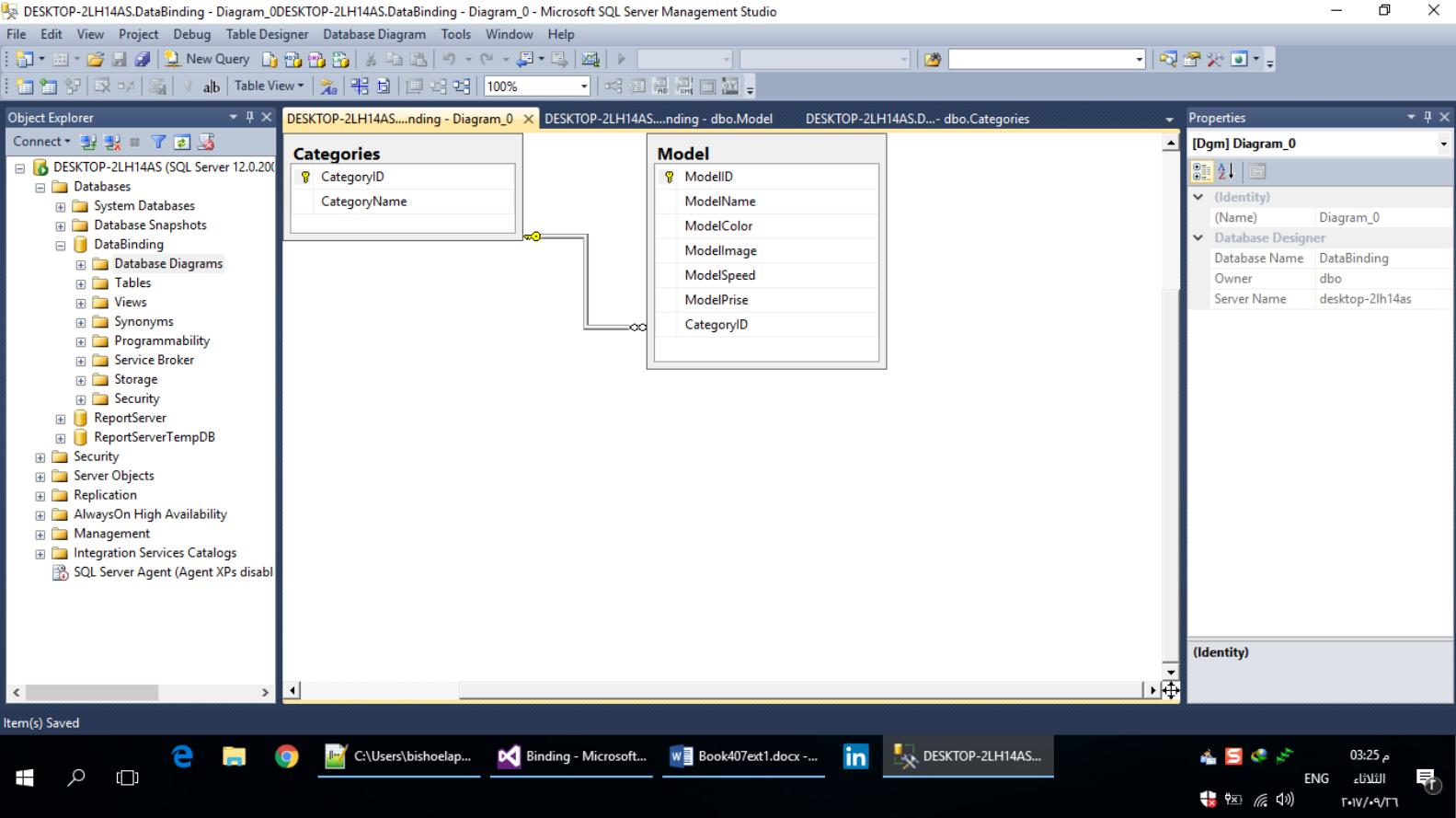
(Name)	Table_1
Database Name	DataBinding
Description	
Schema	dbo
Server Name	desktop-2lh14as

Table Designer

Identity Column	ModelID
Indexable	Yes
Lock Escalation	Table
Regular Data Spac	PRIMARY
Replicated	No
Row GUID Column	
Text/Image Filegr	PRIMARY

DESKTOP-2LH14AS... - Microsoft SQL Server Management Studio

03:24 م ENG ٢٠١٧/٩/٣١



Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Model.cs

```

using System.Threading.Tasks;

namespace Binding.Properties
{
    class Model
    {
        private string modelName;
        public string ModelName
        {
            get { return modelName; }
            set { modelName = value; }
        }

        private string modelColor;
        private int modelSpeed;
        private float modelprise;
        private string modelImage;
    }
}

```

Quick Launch (Ctrl+Q)

Sign in

Server Explorer

Toolbox

Model.cs

Binding

Binding.Properties.Model

modelImage

110 %

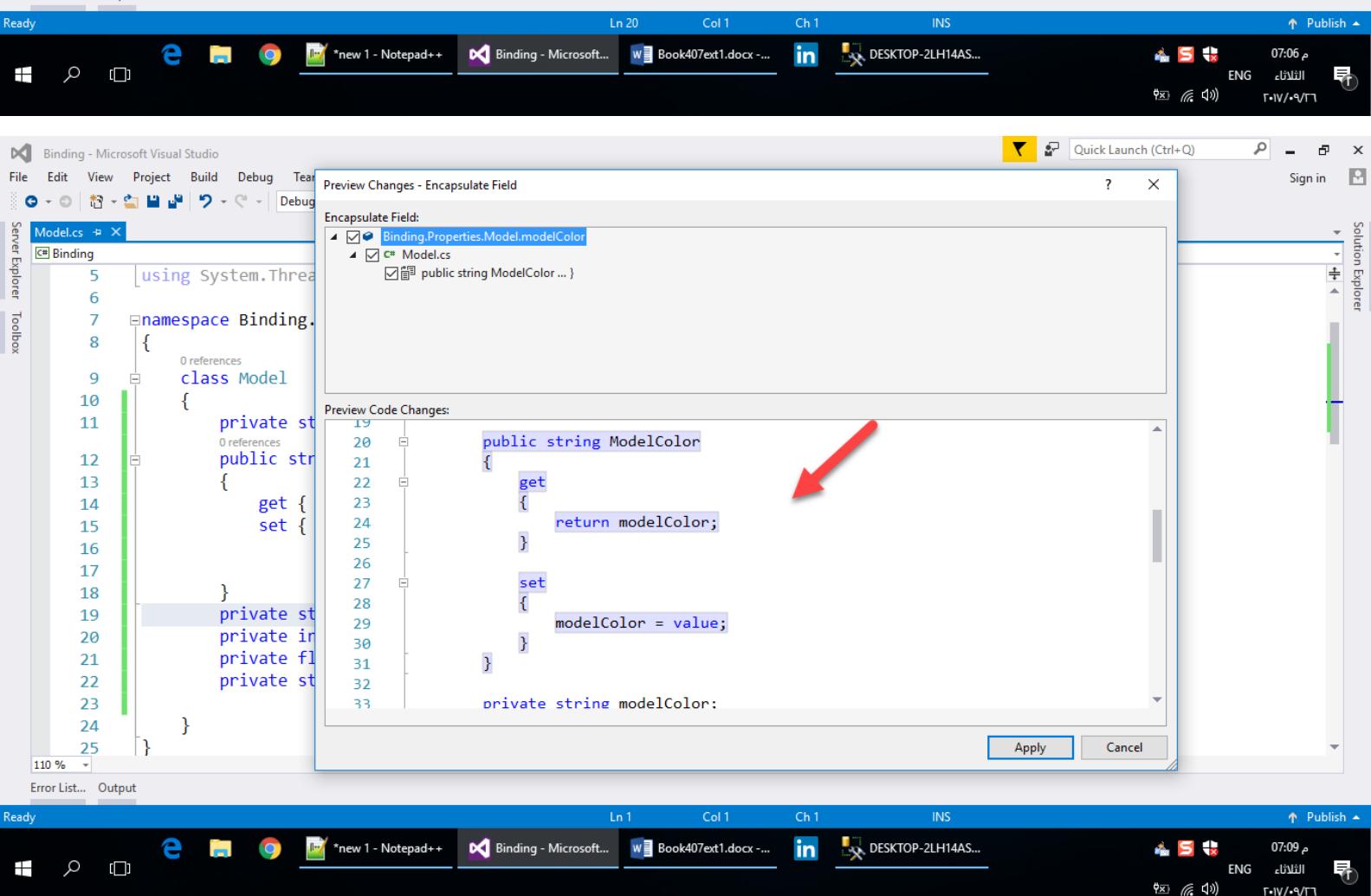
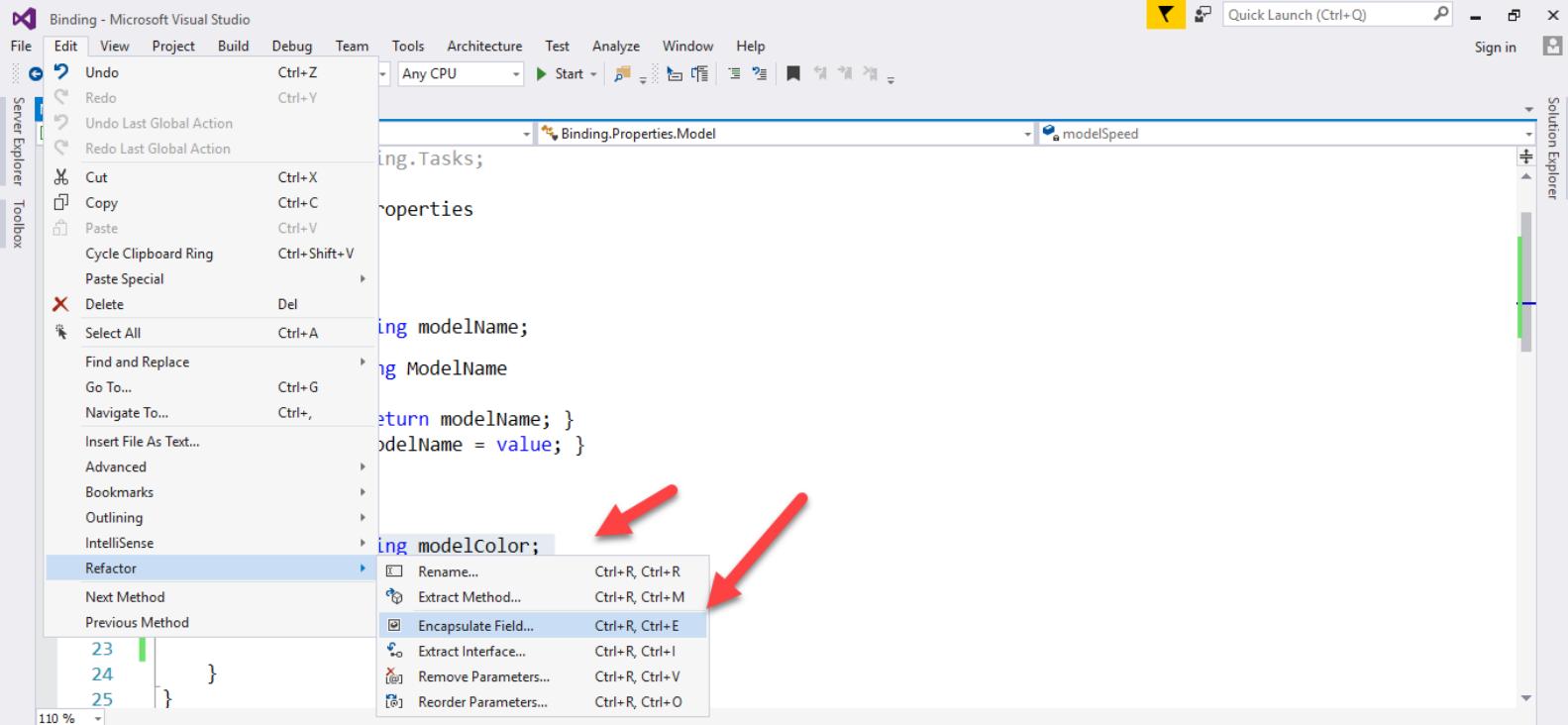
Error List... Output

Ln 22 Col 34 Ch 34 INS

Windows Taskbar:

- e
- *new 1 - Notepad +
- Binding - Microsoft...
- Book407ext1.docx -...
- DESKTOP-2LH14AS...
- 07:02 م ENG ٢٠١٧/٩/٢٦

بنعمل كلاس



كده بنخل الفيجوال يكريت البروبرتي بناء المتغير يسهل علينا

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Solution Explorer

Model.cs* Binding Properties Model

```
16
17
18
19
20 public string ModelColor { get { return modelColor; }
21     set { modelColor = value; }
22 }
23
24 private string modelColor;
25 private int modelSpeed;
26 private float modelprise;
27 private string modelImage;
```

0 references

110 % Error List... Output

Ln 26 Col 13 Ch 13 INS

Ready

Windows Taskbar: *new 1 - Notepad++, Binding - Microsoft..., Book407ext1.docx - ..., DESKTOP-2LH14AS...

07:10 م ٢٠١٧/٩/٣

بص عمل البروبرتي

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Solution Explorer

ModelDataAccess.cs # Model.cs

Binding

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Data.SqlClient;
7 namespace Binding.Properties
8 {
9     class ModelDataAccess
10    {
11        static string connectionString =
12            Properties.Settings.Default.BindingConn;
13
14        public static Model GetData(int id)
15        {
16            catch
17            {
18
19            }
20
21            SqlParameter p = new SqlParameter("@id", id);
22            SqlCommand comm = new SqlCommand();
23            comm.CommandText = "select * from [Model] where modelid = @id";
24            comm.Connection = conn;
25            conn.Open();
26            // return single row || One Row
27            // هنا انا مش عايز منه غير يرجعلي سجل واحد فقط في قوله كده كما هو موضح
28            SqlDataReader rd = comm.ExecuteReader(System.Data.CommandBehavior.SingleRow);
29
30            if (rd.Read())
31            {
32                ModelName = rd["ModelName"].ToString(),
33                ModelColor = rd["ModelColor"].ToString(),
34                ModelImage = rd["ModelImage"].ToString(),
35                Modelprise = float.Parse(rd["Modelprise"].ToString()),
36                ModelSpeed = int.Parse(rd["ModelSpeed"].ToString())
37            };
38
39            conn.Close();
40            return null;
41        }
42
43    }
44
45 }
```

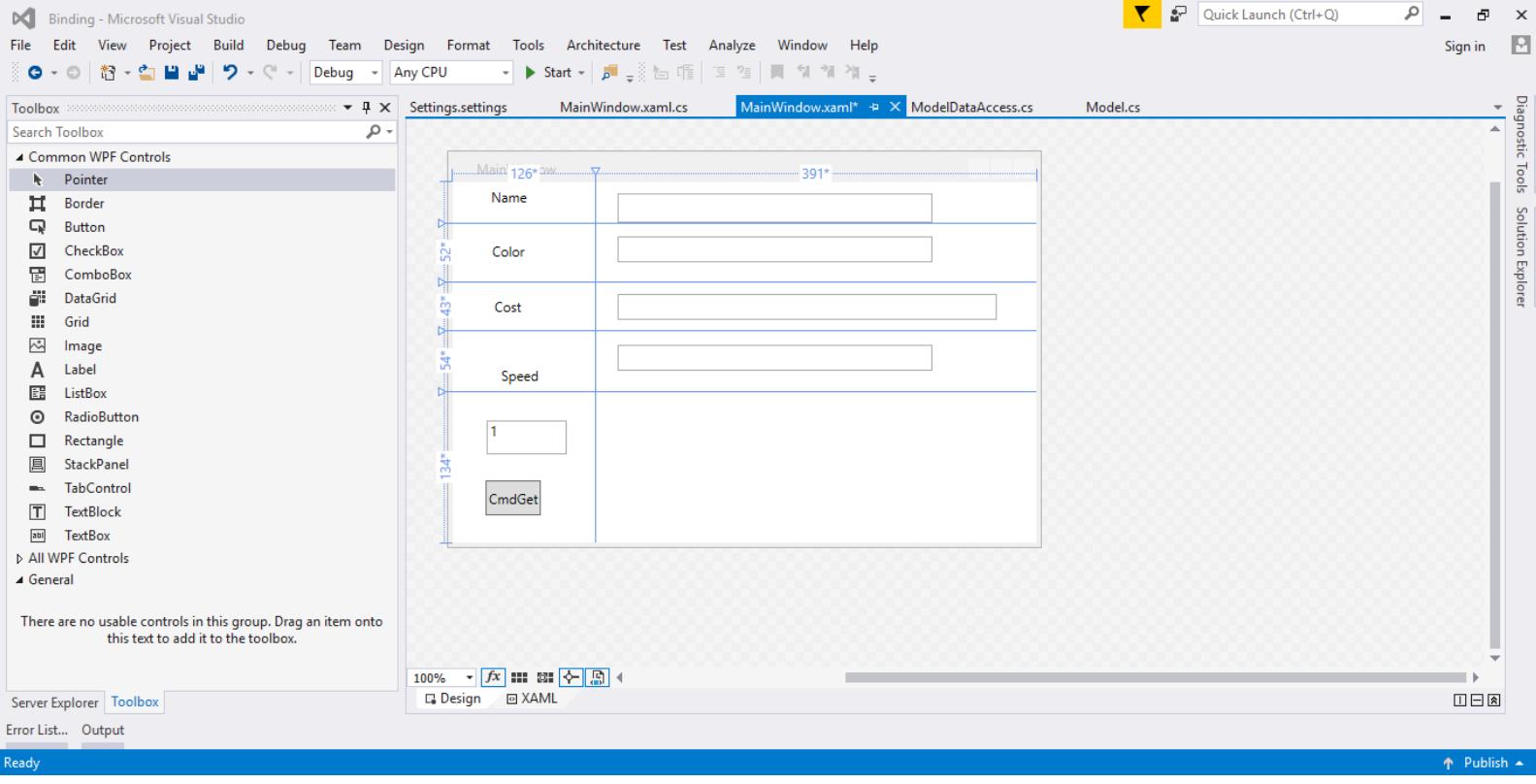
100 %

Error List... Output

Item(s) Saved

Ln 20 Col 30 Ch 30 INS

↑ Publish ▾



```
<Window x:Class="Binding.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        xmlns:mc="http://schemas.microsoft.com/expression/blend/2008"
        xmlns:local="clr-namespace:Binding"
        mc:Ignorable="d"
        Title="MainWindow" Height="350" Width="525">
    <Grid Height="319" VerticalAlignment="Bottom" Name="grd">
        <Grid.ColumnDefinitions>
            <ColumnDefinition Width="126*"/>
            <ColumnDefinition Width="391*"/>
        </Grid.ColumnDefinitions>
        <Grid.RowDefinitions>
            <RowDefinition Height="36*"/>
            <RowDefinition Height="52*"/>
            <RowDefinition Height="43*"/>
            <RowDefinition Height="54*"/>
            <RowDefinition Height="134*"/>
        </Grid.RowDefinitions>
        <Label x:Name="label" Content="Name" HorizontalAlignment="Left" VerticalAlignment="Top" Margin="29,0,0,0"/>
        <Label x:Name="label1" Content="Color" HorizontalAlignment="Left" Margin="30,12,0,0" Grid.Row="1" VerticalAlignment="Top" Height="26"/>
        <Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="32,9,0,0" Grid.Row="2" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5"/>
        <Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="38,27,0,0" Grid.Row="3" VerticalAlignment="Top"/>
        <TextBox x:Name="textBox" Text="{Binding Path=ModelName}" Grid.Column="1" HorizontalAlignment="Left" Margin="20,10,0,0" VerticalAlignment="Top" Width="279"/>
        <TextBox x:Name="textBox1" Text="{Binding Path=ModelColor}" HorizontalAlignment="Left" Height="23" Margin="20,11,0,0" TextWrapping="Wrap"/>
        <TextBox x:Name="textBox2" Text="{Binding Path=ModelPrice}" HorizontalAlignment="Left" Height="23" Margin="20,12,0,0" TextWrapping="Wrap"/>
        <TextBox x:Name="textBox3" Text="{Binding Path=ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="20,13,0,0" Grid.Column="1" TextWrapping="Wrap"/>
        <Image x:Name="image" Source="{Binding Path=ModelImage}" HorizontalAlignment="Left" Height="100" Margin="20,10,0,0" VerticalAlignment="Top" Width="361"/>
        <Button x:Name="CmdGet" Content="CmdGet" HorizontalAlignment="Left" Height="31" Margin="29,79,0,0" Grid.Row="4" VerticalAlignment="Top" Width="49"/>
        <TextBox x:Name="txtid" HorizontalAlignment="Left" Height="30" Margin="30,26,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="71"/>
    </Grid>
</Window>
```

Binding

التبيّن بـ

CmdGet

```

19  /// <summary>
20  /// Interaction logic for MainWindow.xaml
21  /// </summary>
22  public partial class MainWindow : Window
23  {
24      public MainWindow()
25      {
26          InitializeComponent();
27      }
28
29      private void CmdGet_Click(object sender, RoutedEventArgs e)
30      {
31          Model m = ModelDataAccess.GetData(int.Parse(txtid.Text));
32          grd.DataContext = m;
33      }
34  }
35
36

```

نمرج

تم جلب البيانات بنجاح

تحديث البيانات

Update

عيوب نخل التيكستات تحس باى نص نكتبه ونغيره ويظهر قدامك ويتحفظ فى الداتا بيز

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

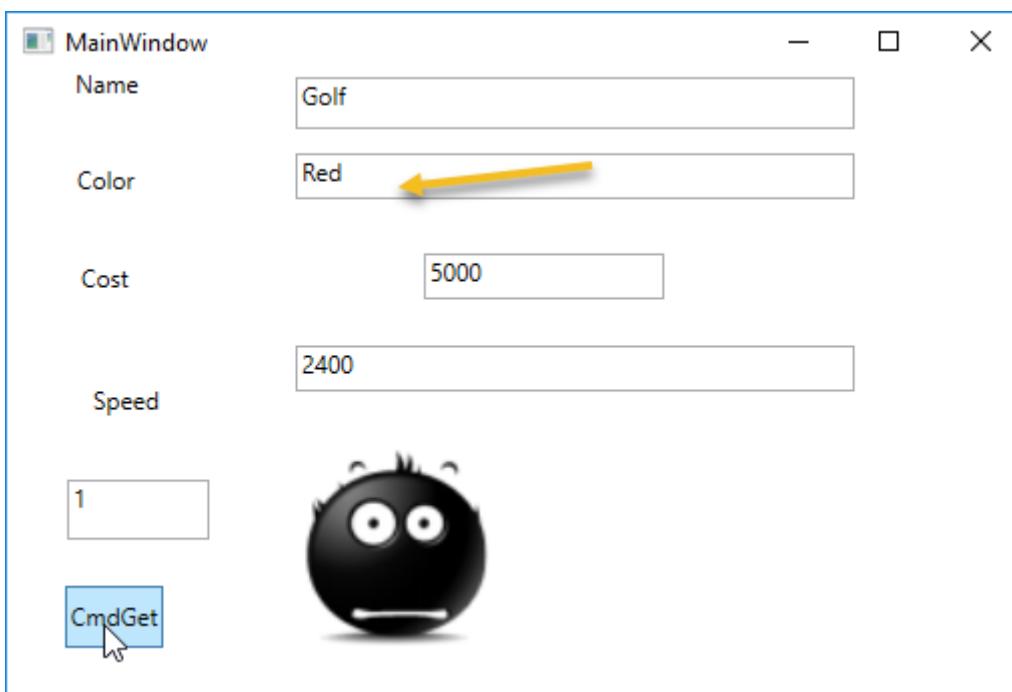
MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs Binding

```
24 public MainWindow()
25 {
26     InitializeComponent();
27 }
28
29     reference
30     private void CmdGet_Click(object sender, RoutedEventArgs e)
31     {
32         Model m = ModelDataAccess.GetData(int.Parse(txtid.Text));
33         grd.DataContext = m;
34         m.ModelColor += "Changed";
35     }
36 }
37
```

100 % Error List... Output

Ln 33 Col 39 Ch 39 INS

بقوله حطى كلمه اتشينج بجاتب قيمة حقل اللون تعالى نشوف



مكتبيش حاجة ولا حس باي تغيرات طب نخلية يحس بالتغييرات ازاي عن طريق

Change Notification

اللى اتعملناها قبل كده

تعالى نعملها

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs Binding Properties Model

```

5  using System.Threading.Tasks;
6  using System.Windows;
7  namespace Binding.Properties
8  {
9
10 class Model : DependencyObject
11 {
12     private string modelName;
13     public string ModelName { ... }
14
15     DependencyProperty ModelColorProperty = DependencyProperty.Register("ModelColor", typeof(string), typeof(Model));
16
17     public string ModelColor
18     {
19         set { SetValue(ModelColorProperty, value); }
20         get { return GetValue(ModelColorProperty) as string; }
21     }
22
23     // public string ModelColor
24     // {
25     //     get
26     //     {
27     //         return modelColor;
28     //     }
29     // }
30
31
32
33

```

100 % Error List... Output

Ln 27 Col 10 Ch 10 INS

بنورث الكلاس

Dependency object

وبعدين بننزل تحت نعمل البروبرتى اللي من نوع dependency

ونديها اسم ونقول لها حقل اللون والتلوّن بتاعه استرينج وال

Owner

بتاعه كلاس

Model

وبننزل تحت نعمل

Set

Get

وتعالى نجرب

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Process: [1208] Binding.vhost.exe Lifecycle Events Thread: Stack Frame: Code Map

No Application Insights Events

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs

Binding

```

24
25
26
27
28
29
30
31
32
33
34
35
36
37

```

MainWindow

Name	Golf
Color	RedChanged
Cost	5000
Speed	2400

CmdGet Click(object sender, RoutedEventArgs e)

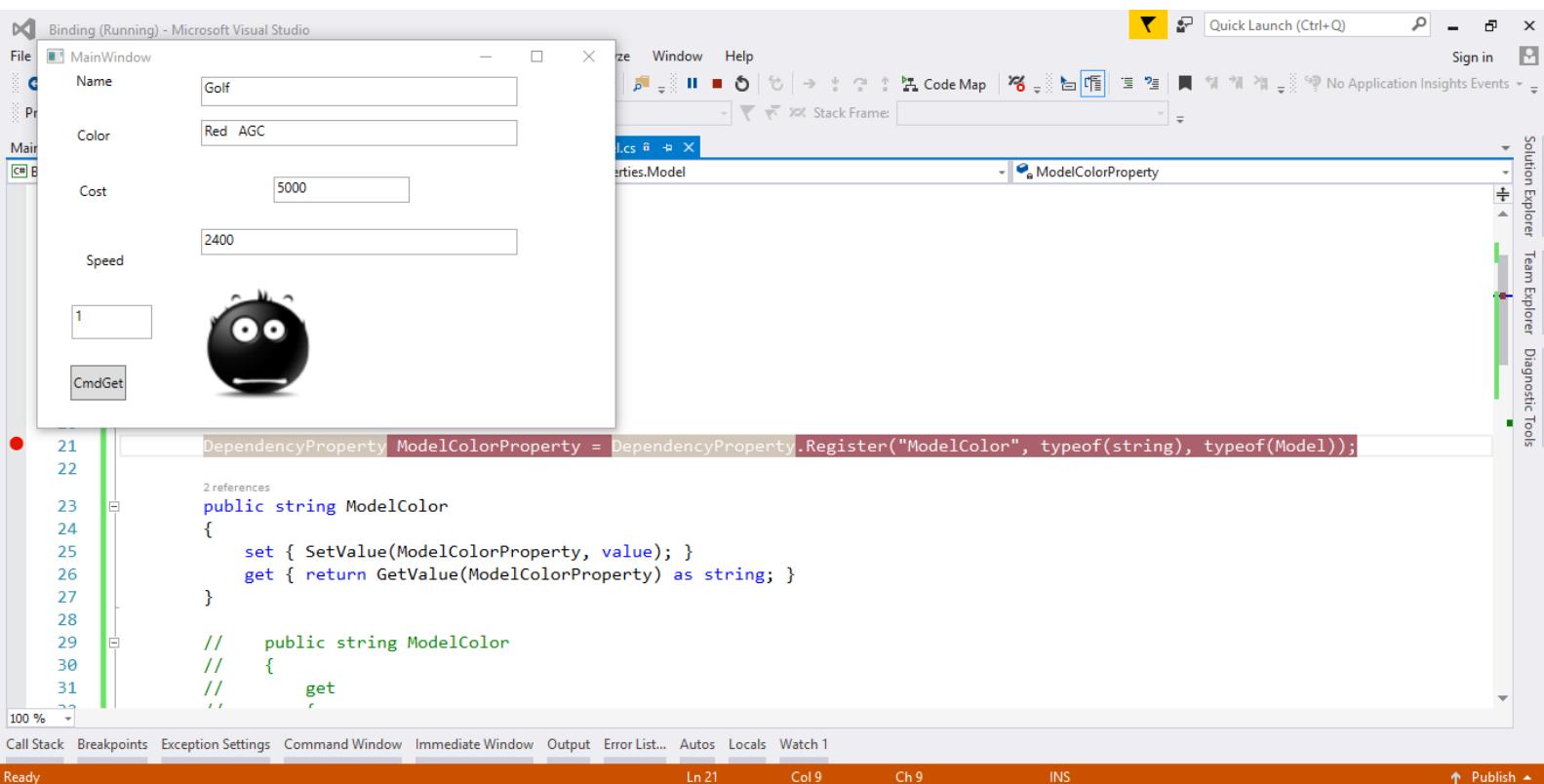
100 % Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ready Ln 34 Col 9 Ch 9 INS

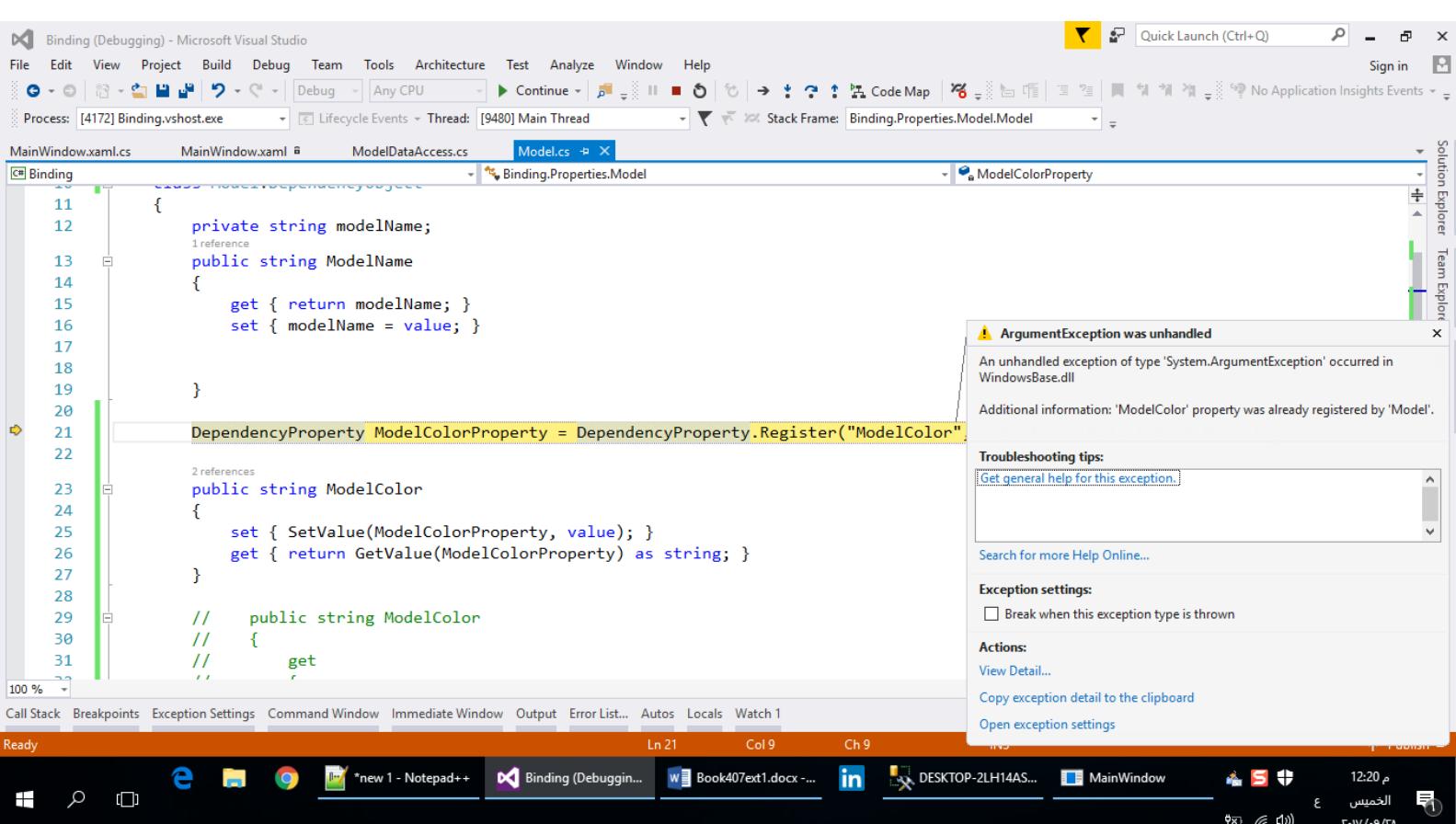
Published

اضاف الكلمة بنجاح

بس لسه متحفظش فى الداتا بيز



جابلى اول سجل بنجاح جيت اجيب تانى سجل طلع ايرور ليه تعالى نشووفه



بس كل شوية البروبرتى يتعملها ريجستر

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

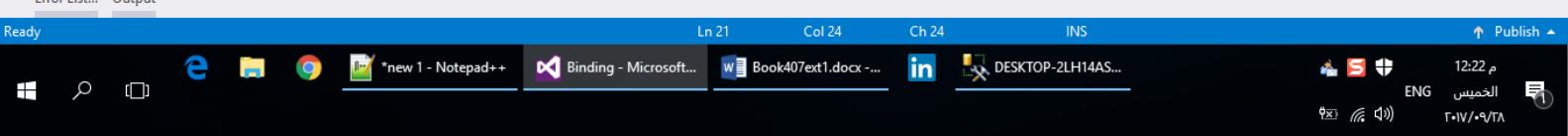
Quick Launch (Ctrl+Q) Minimize

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs* Binding

```
11 {
12     private string modelName;
13     public string ModelName
14     {
15         get { return modelName; }
16         set { modelName = value; }
17     }
18 }
19 static readonly DependencyProperty ModelColorProperty = DependencyProperty.Register("ModelColor", typeof(string), typeof(Model));
20
21 public string ModelColor
22 {
23     set { SetValue(ModelColorProperty, value); }
24     get { return GetValue(ModelColorProperty) as string; }
25 }
26
27 //    public string ModelColor
28 //    {
29 //        get
30 //    }
31
32 }
```

100 % Error List... Output

Ln 21 Col 24 Ch 24 INS



بعملها كده عشان مش كل مرة يتعملها تهيئة من جديد

نجب

Binding (Running) - Microsoft Visual Studio

File MainWindow

Name: Jelly

Color: Blue AGC

Cost: 2500

Speed: 1600

2

CmdGet

```
21 static readonly DependencyProperty ModelColorProperty = DependencyProperty.Register("ModelColor", typeof(string), typeof(Model));
22
23 public string ModelColor
24 {
25     set { SetValue(ModelColorProperty, value); }
26     get { return GetValue(ModelColorProperty) as string; }
27 }
28
29 //    public string ModelColor
30 //    {
31 //        get
32 //    }
```

100 % Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ln 21 Col 24 Ch 24 INS

Ready

12:23 م الخميس ٢٠١٧/٩/٦

جاب 1 ثم 2 بنجاح

تعالي نجي بطريقة تانية ازاي يحس بالتغييرات

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

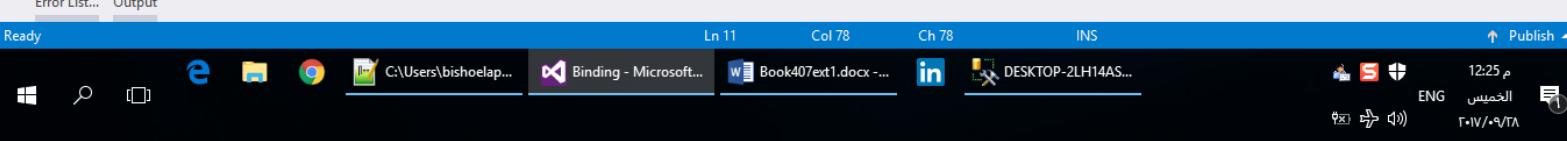
Quick Launch (Ctrl+Q) Sign in

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs * Binding

```
7 using System.Windows;
8 namespace Binding.Properties
9 {
10     class Model : DependencyObject, System.ComponentModel.INotifyPropertyChanged
11     {
12         private string modelName;
13         public string ModelName
14         {
15             get { return modelName; }
16             set { modelName = value; }
17         }
18     }
19
20     static readonly DependencyProperty ModelColorProperty = DependencyProperty.Register("ModelColor", typeof(string), typeof(Model));
21
22     public string ModelColor
23     {
24         set { SetValue(ModelColorProperty, value); }
25         get { return GetValue(ModelColorProperty) as string; }
26     }
27 }
```

100 % Error List... Output

Ln 11 Col 78 Ch 78 INS



جipp الاترفيis

INotifyPropertyChanged

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

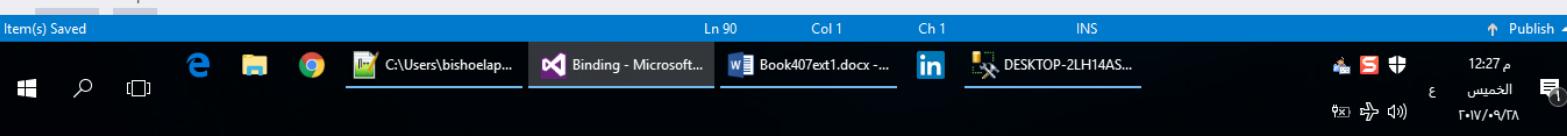
Quick Launch (Ctrl+Q) Sign in

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs * Binding

```
43     public int ModelSpeed{...}
44
45     public float ModelPrise{...}
46
47     public string ModelImage{...}
48
49     //private string modelColor;
50     private int modelSpeed;
51     private float modelprise;
52     private string modelImage;
53
54     public event PropertyChangedEventHandler PropertyChanged;
55 }
```

100 % Error List... Output

Ln 90 Col 1 Ch 1 INS



ونكم اشتغلنا بيه قبـل كده ودى اليفنت بتاعتها

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

MainWindow.xaml.cs* MainWindow.xaml ModelDataAccess.cs* Model.cs Model Speed

Binding

```
68  
69     public string ModelImage{...}  
70  
71     //private string modelColor;  
72     private int modelSpeed;  
73     private float    modelprise;  
74     private string  modelImage;  
75  
76  
77     public event PropertyChangedEventHandler PropertyChanged;  
78     [reference]  
79     public void OnPropertyChanged(PropertyChangedEventArgs e)  
80     {  
81         if (PropertyChanged != null) ←  
82             PropertyChanged(this, e);  
83     }  
84 }  
85  
86 }  
87 }  
88 }  
89 }  
90 }  
91 }  
92 }  
93 }  
94 }  
95 }  
96 }  
97 }
```

100 % Error List Output

Item(s) Saved Ln 43 Col 30 Ch 30 INS

12:41 م الخميس ٢٠١٧/٩/٦ ENG DESKTOP-2LH14AS...

بعمل فويد بياخذ

PropertyChangedEventArgs

وبسنله بقوله لو

PropertyChanged

مش فاضية يبقى شغاله طبعا اعمل الاتى

حط فيها

PropertyChanged(this, e);

الكلس ده e +

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer

MainWindow.xaml.cs MainWindow.xaml ModelDataAccess.cs Model.cs Binding Properties.Model

OnPropertyChanged(PropertyChangedEventArgs e)

```
41 } // }
42
43 public int ModelSpeed
44 {
45     get
46     {
47         return modelSpeed;
48     }
49
50     set
51     {
52         modelSpeed = value; OnPropertyChanged(new PropertyChangedEventArgs("ModelSpeed"));
53     }
54 }
55
56 public float ModelPrise...
57
58 public string ModelImage...
59
60 //private string modelColor;
61 //private int modelSpeed;
62 //private float modelprise;
```

100 %

Error List Output

Ln 93 Col 42 Ch 42 INS

Ready

12:43 م الخميس ٢٠١٧/٩/١٨

بقوله هنا

OnPropertyChanged

بداخلها اعمل نسخه جديدة من

PropertyChangedEventArgs

وحطلي فيها

الاتى

بمرر له اسم البروبerti بتاعته

Modelspeed

نجرب

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Process: [6] MainWindow

MainWindow.xaml

Name: Jelly

Color: Blue AGC

Cost: 2500

Speed: 800

2

CmdGet



```
new PropertyChangedEventArgs("ModelSpeed"));
```

100 %

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ready

Ln 46 Col 13 Ch 13 INS

1 reference public float ModelPrise...
1 reference public string ModelImage...
//private string modelColor;
private int modelSpeed;

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ready

Ln 46 Col 13 Ch 13 INS

12:36 م الخميس ٢٠١٧/٩/٦

فعلا حس بالتغييرات فى التيكست بوكس وجابها على طول
ودول طريقتين عشان التيكستات تحس بالتغييرات اللي بتحصل

Binding to a collection

هنعمل بىندينج لأكتر من عنصر داخل كنترول زى الليست بوكس

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in Diagnostic Tools

Server Explorer Toolbox Solution Explorer

listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
1 reference
2 public static List<Model> GetModels()
3 {
4     SqlConnection conn = new SqlConnection("Server=.;Database=DataBinding;Trusted_Connection=True");
5
6     SqlCommand comm = new SqlCommand();
7     comm.CommandText = "Select * From [Model]";
8     comm.Connection = conn;
9
10
11     List<Model> models = new List<Model>(); ←
12     try
13     {
14         conn.Open();
15         SqlDataReader rd = comm.ExecuteReader();
16
17         while (rd.Read())
18         {
19             models.Add(new Model
20             {
21
22                 ModelName = rd["ModelName"].ToString(),
23                 ModelColor = rd["ModelColor"].ToString(),
24                 ModelImage = rd["ModelImage"].ToString(),
25                 ModelPrise = float.Parse(rd["ModelPrise"].ToString()),
26                 ModelSpeed = int.Parse(rd["ModelSpeed"].ToString())
27
28             });
29         } ←
30         return models; ←
31     }
32     catch
33     {
34         return null; } finally { conn.Close(); }
35     }
36     }
37     }
38     }
39     }
40     }
41     }
42     }
43     }
44     }
45     }
46     }
47     }
48     }
49     }
50     }
51     }
52     }
53     }
54     }
55     }
56     }
57     }
58     }
59     }
60     }
61     }
62     }
63     }
64     }
65     }
66     }
67     }
68     }
69     }
70     }
71     }
72     }
73     }
74     }
75     }
76     }
77     }
78     }
79     }
80     }
81     }
82     }
83     }
84     }
85     }
```

100 % Error List... Output

Ln 82 Col 27 Ch 27 INS

Ready Publish

بضيف الميثود لجلب العناصر من الداتا بيز

listBinding

GetModels	
Name	<input type="text"/>
Color	<input type="text"/>
Cost	<input type="text"/>
Speed	<input type="text"/>

عملت صفحة جديدة حطيت فيها ليست بوكس وزر وتيكست بوكس

نروح تحت الزر

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer

listBinding.xaml.cs ModelDataAccess.cs Binding.listBinding listBinding()

```
21 public partial class listBinding : Window
22 {
23     public listBinding()
24     {
25         InitializeComponent();
26     }
27
28     private void button_Click(object sender, RoutedEventArgs e)
29     {
30         List<Model> mds = ModelDataAccess.GetModels(); ←
31         lstModel.ItemsSource = mds; ←
32     }
33 }
34
35
```

100 % Error List... Output

Ready Ln 8 Col 31 Ch 31 INS

↑ Publish

بجیب المیثود وامررها ک سورس لليست بوكس مصدر بیاناتک يا لیست بوكس هو mds

نجرب

Binding (Running) - Microsoft Visual Studio

File listBinding

Properties Model Properties Model

GetModels

Name

Color

Cost

Speed

VerticalAlignment="Top" Margin="13,0,0,0" Grid.Row="2"
Alignment="Left" Height="26" Margin="59,2,0,0
Row="2"/>
t" Margin="13,5,0,0" VerticalAlignment="Top" Grid.Row="3"
alAlignment="Left" Height="23" TextWrapping="Wrap"
w="3"/>
" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top"
alAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4"
t" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top"
alAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5"
TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<ListBox x:Name="lstModel" HorizontalAlignment="Left" Height="47" VerticalAlignment="Top" Width="292" Grid.RowSpan="2" />
<Button x:Name="button" Content="GetModels" Click="button_Click" FontSize="15" Margin="100,10,104,3" Grid.Row="1" />
<!--DisplayMemberPath="ModelName"-->

VerticalAlignment="Top" Margin="13,0,0,0" Grid.Row="2"
Alignment="Left" Height="26" Margin="59,2,0,0
Row="2"/>
t" Margin="13,5,0,0" VerticalAlignment="Top" Grid.Row="3"
alAlignment="Left" Height="23" TextWrapping="Wrap"
w="3"/>
" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top"
alAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4"
t" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top"
alAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5"
TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<ListBox x:Name="lstModel" HorizontalAlignment="Left" Height="47" VerticalAlignment="Top" Width="292" Grid.RowSpan="2" />
<Button x:Name="button" Content="GetModels" Click="button_Click" FontSize="15" Margin="100,10,104,3" Grid.Row="1" />
<!--DisplayMemberPath="ModelName"-->

100 % Design XAML

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

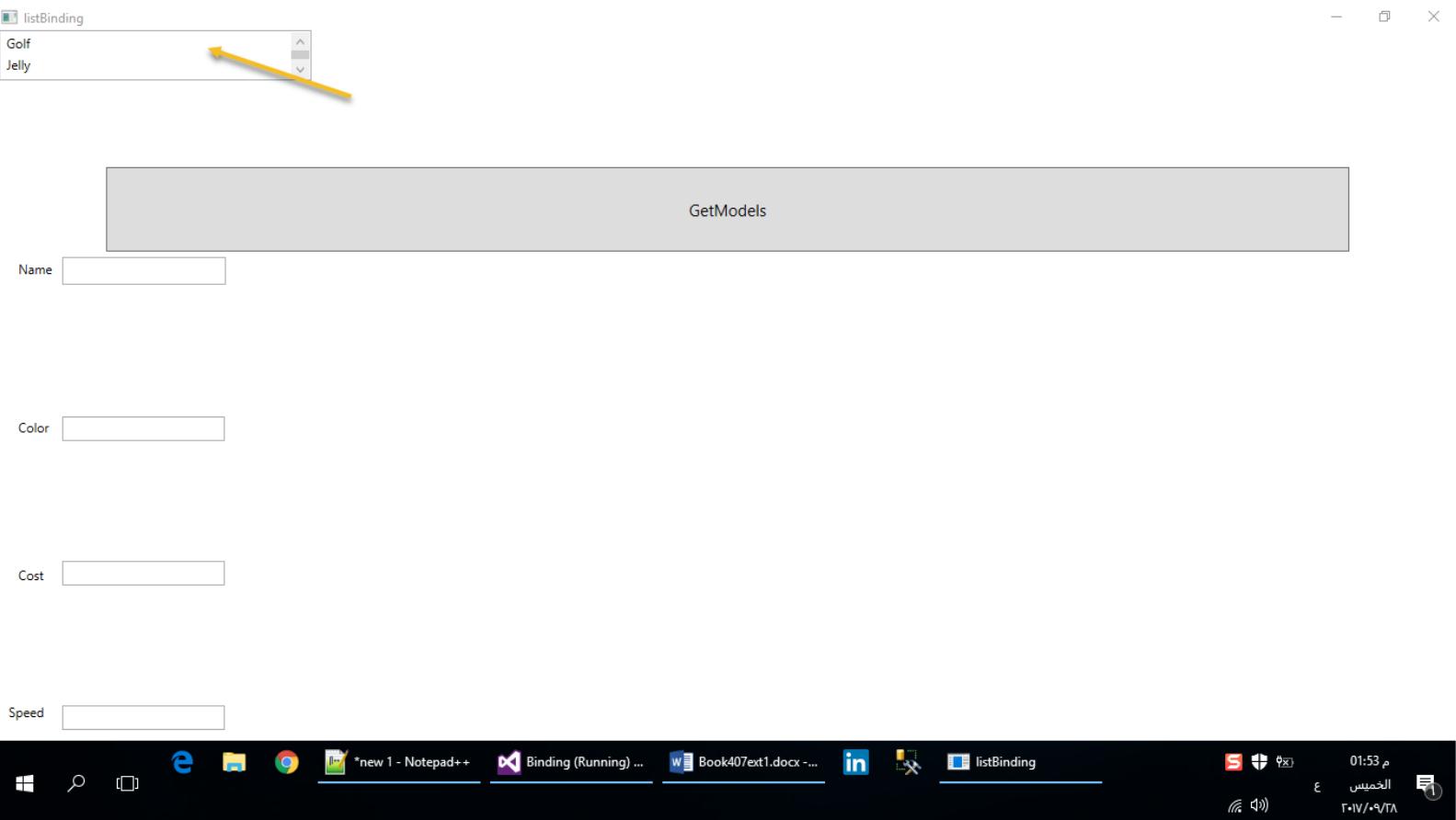
Ready Ln 31 Col 45 Ch 45 INS

↑ Publish

مجاش الاسماء ليه عشان انا محدتش عايز اعرض ايه

```
20 </Grid.RowDefinitions>
21 <Label x:Name="label" Content="Name" HorizontalAlignment="Left" VerticalAlignment="Top" Margin="13,0,0,0" Grid.Row="2"
22     Height="26" Width="42"/>
23 <TextBox x:Name="textBox" Text="{Binding ModelName}" HorizontalAlignment="Left" Height="26" Margin="59,2,0,0"
24     TextWrapping="Wrap" VerticalAlignment="Top" Width="153" Grid.Row="2"/>
25 <Label x:Name="label1" Content="Color" HorizontalAlignment="Left" Margin="13,5,0,0" VerticalAlignment="Top" Grid.Row="3"
26     Height="26" Width="39"/>
27 <TextBox x:Name="textBox1" Text="{Binding ModelColor}" HorizontalAlignment="Left" Height="23" TextWrapping="Wrap"
28     VerticalAlignment="Top" Width="152" Margin="59,8,0,0" Grid.Row="3"/>
29 <Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top"
30     RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>
31 <TextBox x:Name="textBox2" Text="{Binding ModelPrise}" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4"
32     TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
33 <Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top"
34     Height="26" Width="43"/>
35 <TextBox x:Name="textBox3" Text="{Binding ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0"
36     Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
37 <ListBox x:Name="lstModel" HorizontalAlignment="Left" Height="47" VerticalAlignment="Top" Width="292" ~
38     DisplayMemberPath="ModelName" Grid.RowSpan="2" />
39 <Button x:Name="button" Content="GetModels" Click="button_Click" FontSize="15" Margin="100,10,104,3" Grid.Row="1" />
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
59
```

نجر بـ الموديات اسماء اعرضلى قوله



نحو وجب اسماء الموديات

عايزين نعمل حاجة تانى نجيب اسم الموديل وادوس عليه يعرضلى بيانته على التيكستات

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Design Format Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer

listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Color
Cost

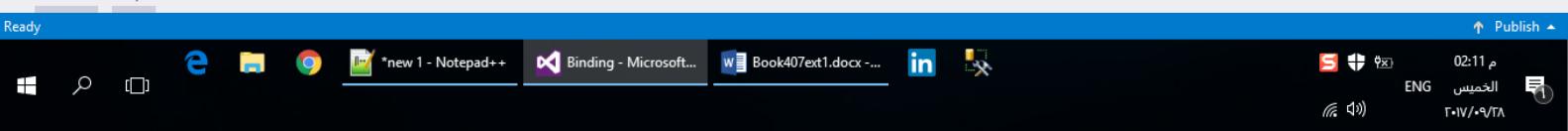
100% Design XAML

```

27
28
29
30 <Grid RowDefinitions="3" DataContext="{Binding ElementName=lstModel, Path=SelectedItem}">
31   <Grid.ColumnDefinitions>
32     <ColumnDefinition/>
33   </Grid.ColumnDefinitions>
34   <Grid.RowDefinitions>
35     <RowDefinition Height="14*"/>
36     <RowDefinition Height="11*"/>
37     <RowDefinition Height="17*"/>
38     <RowDefinition Height="17*"/>
39     <RowDefinition Height="14*"/>

```

Error List... Output

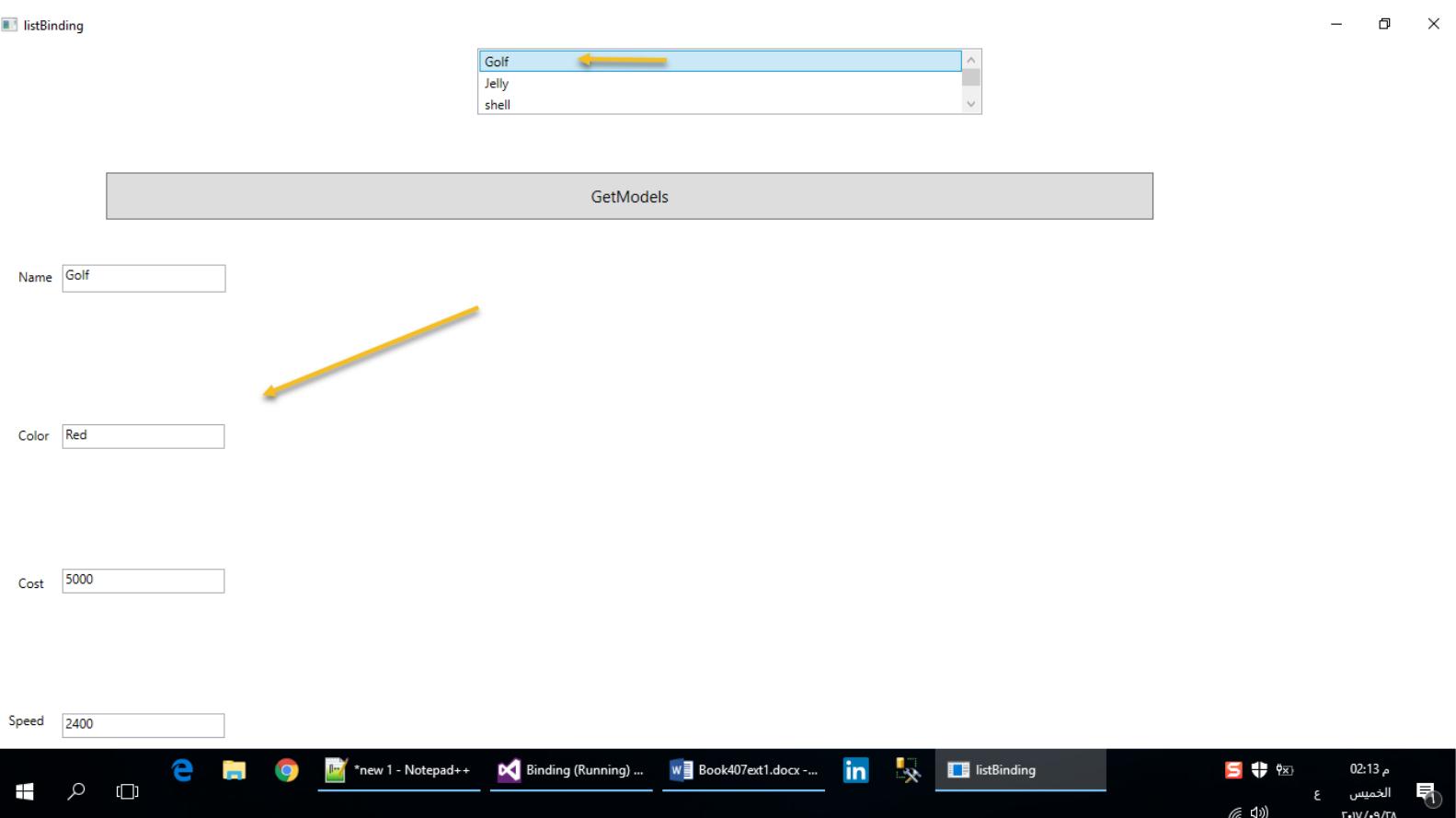


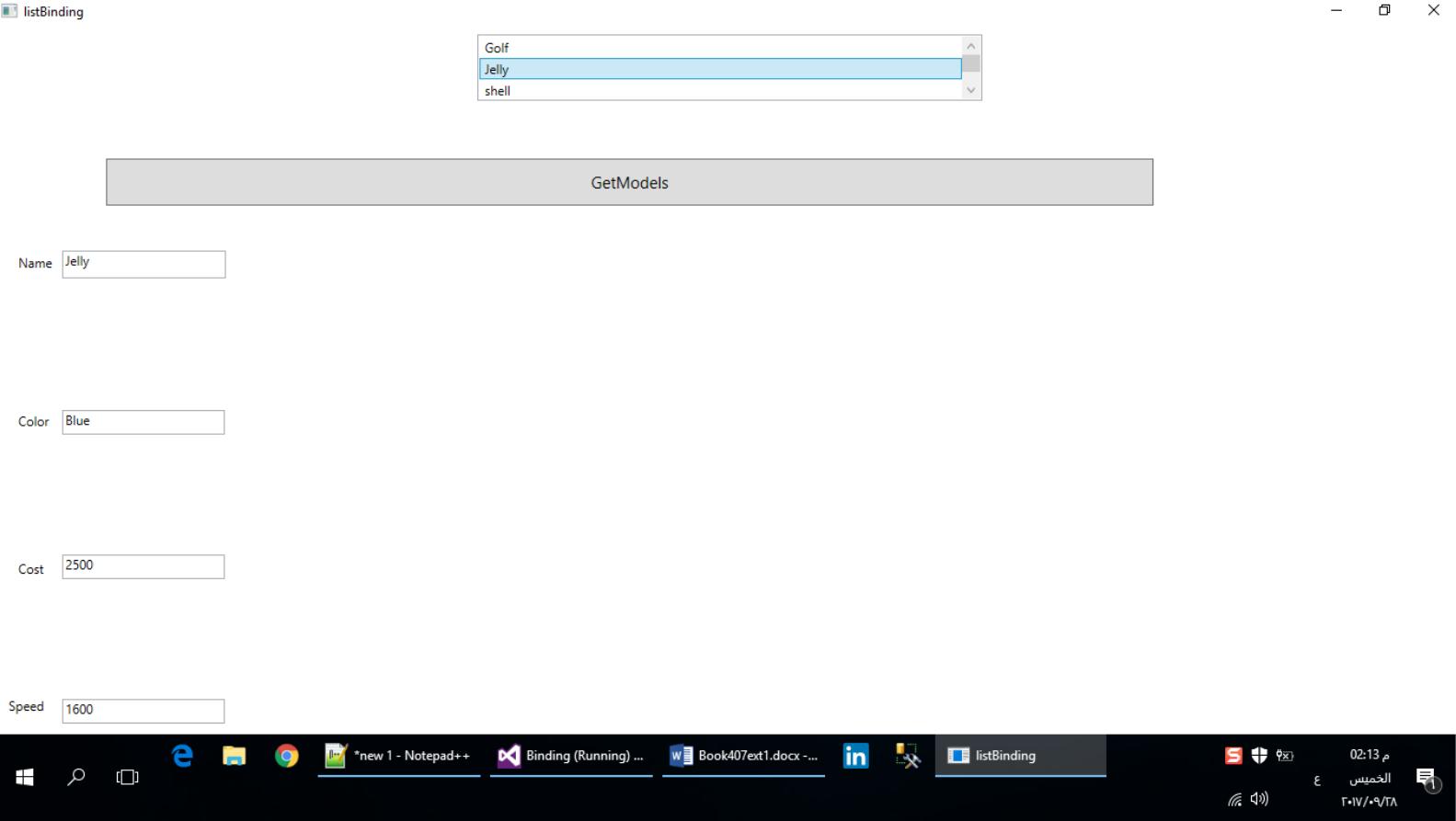
هنا انا عامل 2 جريد الجريد اللي فيها الكنترول بقى اللى اكون تيكتست كذا موضح بمرر اسم الكنترول والباقي بمرر فيه الايفنت المطلوب لما اليوزر يختار عنصر يعرضله ببياناته

وبنزل تحت اقوله

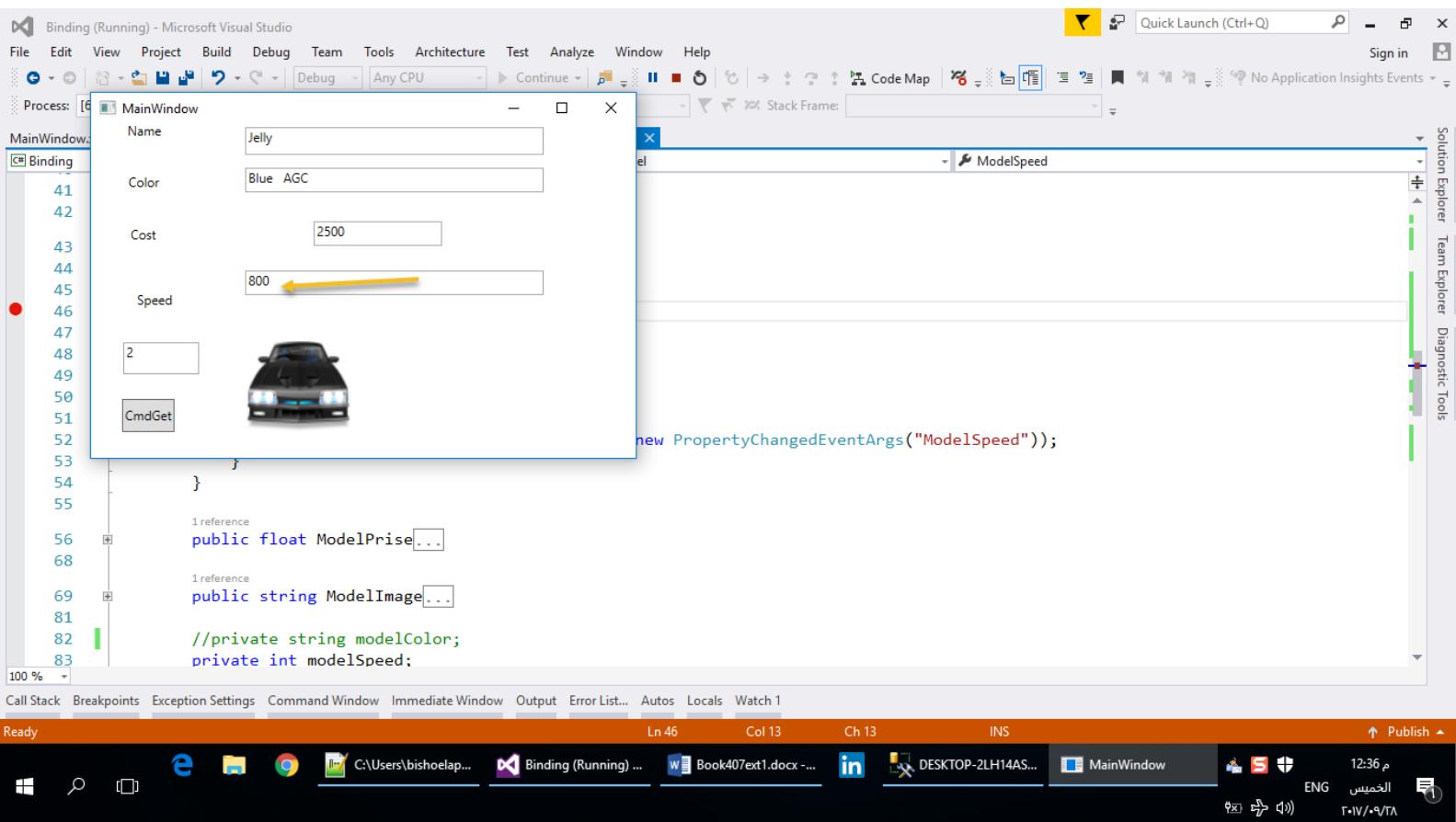
Text="{Binding ModelName}"

وامرر الباقى لباقي التيكتستات نجرب





شغاله بنجاح



تمام

بروح اضيف زر

AddModel

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Solution Explorer Diagnostic Tools

listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

```

19  /// Interaction logic for listBinding.xaml
20  /// </summary>
21  public partial class listBinding : Window
22  {
23      List<Model> mds; ←
24
25      public listBinding()
26      {
27          InitializeComponent();
28      }
29
30      private void button_Click(object sender, RoutedEventArgs e)
31      {
32          mds = ModelDataAccess.GetModels();
33          lstModel.ItemsSource = mds;
34      }
35
36      private void AddModel_Click(object sender, RoutedEventArgs e)
37      {
38          if(mds != null){
39              mds.Add(new Model
40              {
41
42
43
44
45
46
47
48
49
40 % ←

```

Error List... Output

Item(s) Saved

Ln 46 Col 20 Ch 20 INS

02:29 م الخميس ٢٠١٧/٩/٢٨

هنا باخد الاوبيكت ده احطه فوق عشان بيقى عام واقدر اغيير فيه بعد كده

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Solution Explorer Diagnostic Tools

listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

```

27      InitializeComponent();
28  }
29
30      private void button_Click(object sender, RoutedEventArgs e)
31      {
32          mds = ModelDataAccess.GetModels();
33          lstModel.ItemsSource = mds;
34      }
35
36      private void AddModel_Click(object sender, RoutedEventArgs e)
37      {
38          if(mds != null){
39              mds.Add(new Model
40              {
41                  ModelName = txtName.Text,
42                  ModelColor = txtColor.Text,
43                  ModelPrise = float.Parse(txtcost.Text),
44                  ModelSpeed = int.Parse(txtspeed.Text),
45                  ModelImage = "Null"
46              });
47          }
48      }
49
100 % ←

```

Error List... Output

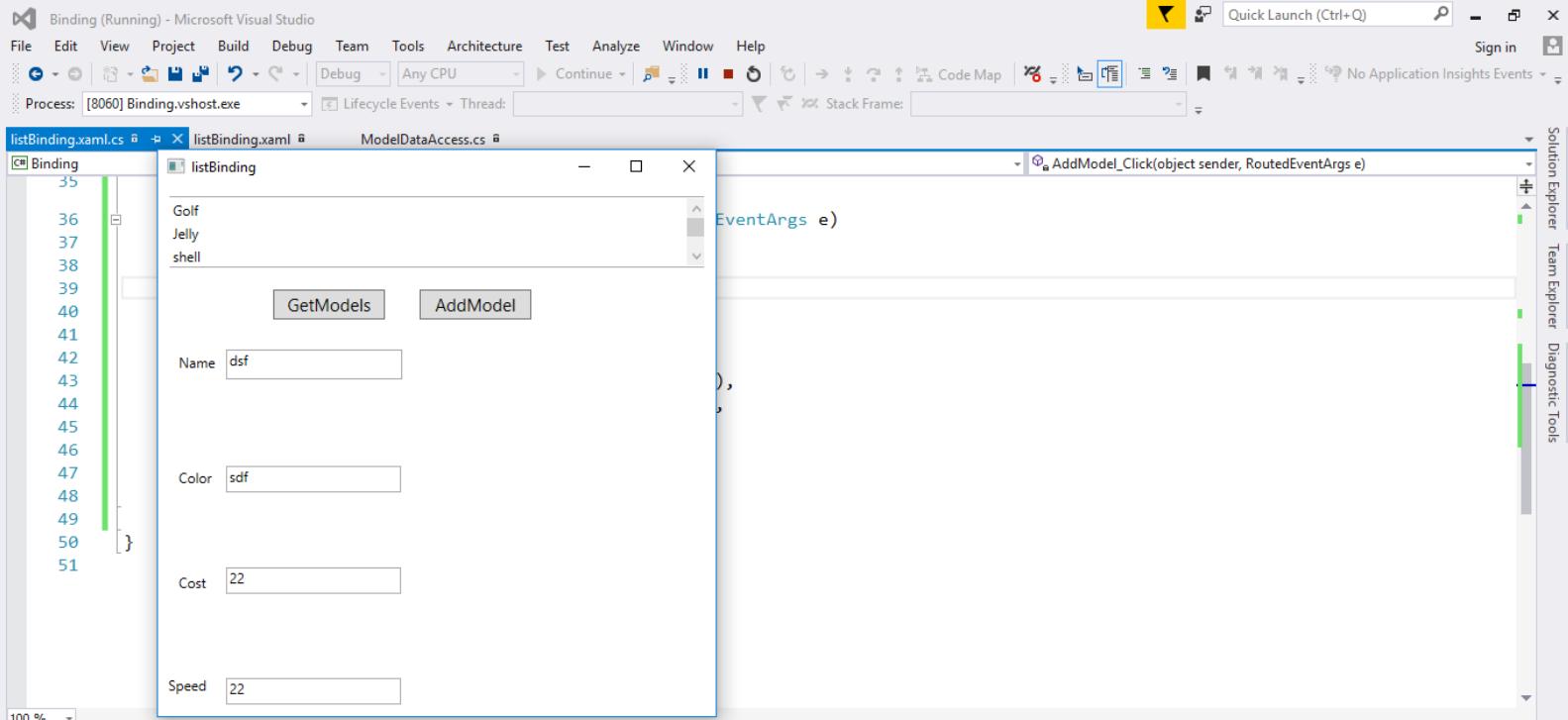
Item(s) Saved

Ln 46 Col 20 Ch 20 INS

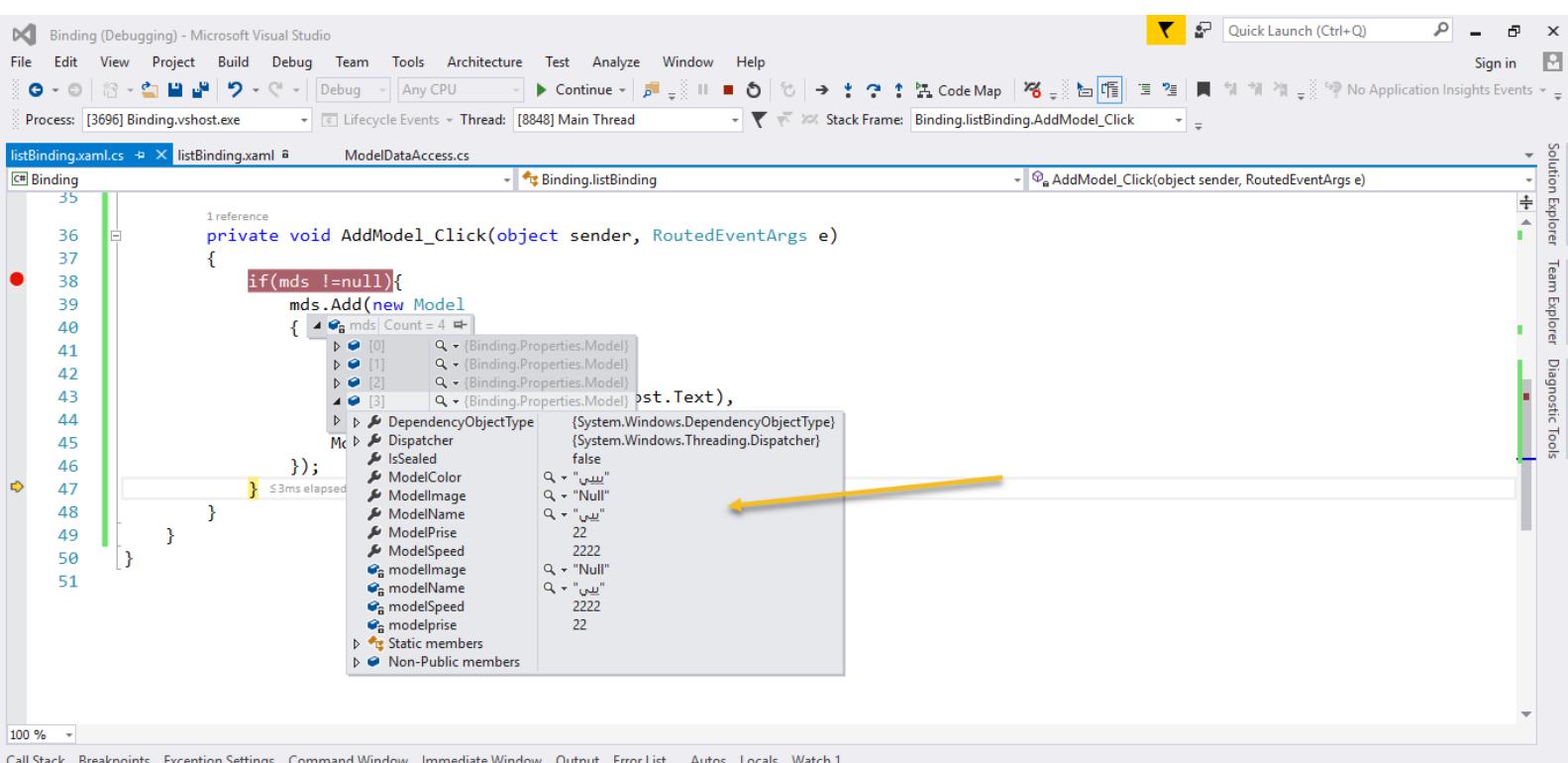
02:29 م الخميس ٢٠١٧/٩/٢٨

هنا فى الزر بقوله كما موضح تعالى نشوف

هل الليست بوكس هتحس بالعنصر الجديد ده ولا



جبت الموديات وضيف موديل جديد مظهرش فى الليست بوكس الليست بوكس محستش بيه



شووف ضيف بيانات فعلا وانضافت بنجاح بس ليه محستش الليست بوكس بالسجل الجديد ده

نه الليست بوكس مش بتدعيم

INotifycollection interface

الحل هنستخدم كلاس

ObservableCollection

ـ ده الوحدة اللي بيذع انه الليست بوكس وامثالها انهم يحسوا بالتغييرات على طول

هعمل الاتى
هتروح للكلاس
الداتا اكسبيس
ونضيف النيم اسبيس عشان نجيب الكلاس بتعانى

using System.Collections.ObjectModel;

ونكمل

هناخد نسخه من فانكشنين

GetModels

وهنغير فيها حاجات

```
84
85
86     public static List<Model> GetModelsNotify()
87     {
88         SqlConnection conn = new SqlConnection("Server=.;Database=DataBinding;Trusted_Connection=True");
89
90         SqlCommand comm = new SqlCommand();
91         comm.CommandText = "Select * From [Model]";
92         comm.Connection = conn;
93
94
95         //List<Model> models = new List<Model>();
96         System.Collections.ObjectModel.ObservableCollection<Model> models = new ObservableCollection<Model>();
97         try
98         {
99             conn.Open();
100            SqlDataReader rd = comm.ExecuteReader();
101
102            while (rd.Read())
103            {
104                models.Add(new Model
105                {
106                    ModelName = rd["ModelName"].ToString(),
107                    ModelColor = rd["ModelColor"].ToString(),
108                });
109            }
110        }
111    }
112 }
```

بغير اسم الفانكشنين وبأخذ نسخه من الكلاس وبمرر له الموديل بتعانى

ونكمل

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
98     conn.Open();
99     SqlDataReader rd = comm.ExecuteReader();
100
101    while (rd.Read())
102    {
103        models.Add(new Model
104        {
105            ModelName = rd["ModelName"].ToString(),
106            ModelColor = rd["ModelColor"].ToString(),
107            ModelImage = rd["ModelImage"].ToString(),
108            ModelPrise = float.Parse(rd["ModelPrise"].ToString()),
109            ModelSpeed = int.Parse(rd["ModelSpeed"].ToString())
110        });
111    }
112    return models;
113 }
114 catch { return null; }
115 finally { conn.Close(); }
116 }
117 }
118 }
119 }
120 }
121 }
122 }
```

100 % Error List... Output

Ready Ln 8 Col 1 Ch 1 INS

02:49 م الخميس ٢٠١٧/٩/٣١

معترض على نوع التابع الذى هيرجع

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
53
54     public static List<Model> GetModels()...
55
56     public static List<Model> GetModelsNotify()
57     {
58         SqlConnection conn = new SqlConnection("Server=.;Database=DataBinding;Trusted_Connection=True");
59
60         SqlCommand comm = new SqlCommand();
61         comm.CommandText = "Select * From [Model]";
62         comm.Connection = conn;
63
64
65         //List<Model> models = new List<Model>();
66         System.Collections.ObjectModel.ObservableCollection<Model> models = new ObservableCollection<Model>();
67         try
68         {
69             conn.Open();
70             SqlDataReader rd = comm.ExecuteReader();
71
72             while (rd.Read())
73             {
74                 models.Add(new Model
75
76
77
78
79
80
81
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102
103
104 }
```

100 % Error List... Output

Ready Ln 8 Col 1 Ch 1 INS

02:49 م الخميس ٢٠١٧/٩/٣١

ده هنغير التابع

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

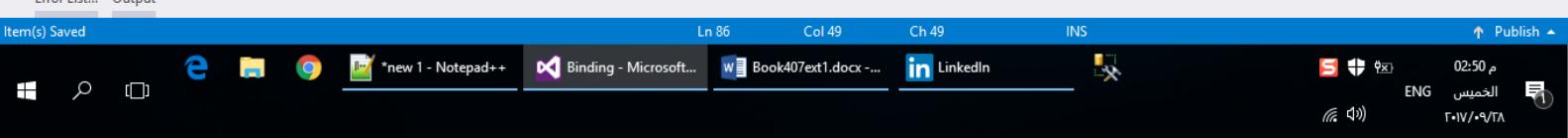
Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
53     1 reference
54     public static List<Model> GetModels()...
55
56     References
57     public static ObservableCollection<Model> GetModelsNotify()
58     {
59         SqlConnection conn = new SqlConnection("Server=.;Database=DataBinding;Trusted_Connection=True");
60
61         SqlCommand comm = new SqlCommand();
62         comm.CommandText = "Select * From [Model]";
63         comm.Connection = conn;
64
65
66         //List<Model> models = new List<Model>();
67         System.Collections.ObjectModel.ObservableCollection<Model> models = new ObservableCollection<Model>();
68         try
69         {
70             conn.Open();
71             SqlDataReader rd = comm.ExecuteReader();
72
73             while (rd.Read())
74             {
75                 models.Add(new Model
76             }
77         }
78     }
79
80
81
82
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104
```

100 % Error List... Output

Ln 86 Col 49 Ch 49 INS



Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

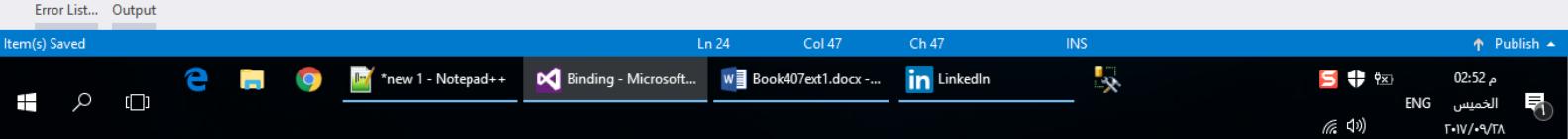
Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
10     using System.Windows.Documents;
11     using System.Windows.Input;
12     using System.Windows.Media;
13     using System.Windows.Media.Imaging;
14     using System.Windows.Shapes;
15     using System.Collections.ObjectModel;
16     namespace Binding
17     {
18         /// <summary>
19         /// Interaction logic for listBinding.xaml
20         /// </summary>
21         public partial class listBinding : Window
22         {
23             List<Model> mds;
24             ObservableCollection<Model> mdsNotify;
25
26             References
27             public listBinding()
28             {
29                 InitializeComponent();
30             }
31
32             1 reference
33             private void button_Click(object sender, RoutedEventArgs e)
34             {
35             }
36         }
37     }
```

100 % Error List... Output

Ln 24 Col 47 Ch 47 INS



Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

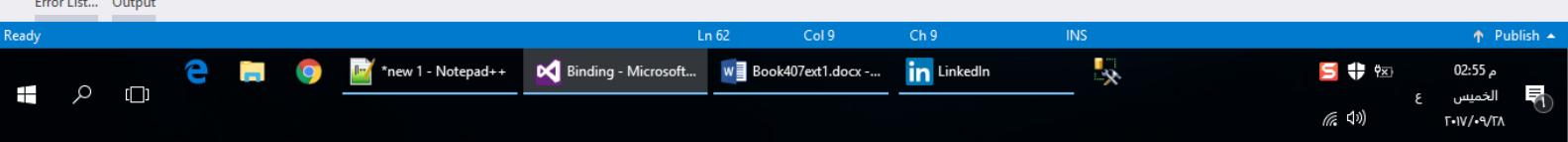
Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

```
private void AddModel_Click(object sender, RoutedEventArgs e)
{
    //if(mds !=null){
    //    mds.Add(new Model
    //    {
    //        ModelName = txtName.Text,
    //        ModelColor = txtColor.Text,
    //        ModelPrise = float.Parse(txtcost.Text),
    //        ModelSpeed = int.Parse(txtspeed.Text),
    //        ModelImage = "Null"
    //    });
    //}
    if (mdsNotfiy != null)
    {
        mdsNotfiy.Add(new Model
        {
            ModelName = txtName.Text,
            ModelColor = txtColor.Text,
            ModelPrise = float.Parse(txtcost.Text),
            ModelSpeed = int.Parse(txtspeed.Text),
            ModelImage = "Null"
        });
    }
}
```

100 % Error List... Output



نجب

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

No Application Insights Events

Process: [3480] Binding.vhost.exe Lifecycle Events Thread: Stack Frame:

Model.cs MainWindow.xaml.cs MainWindow.xaml listBinding.xaml.cs listBinding.xaml ModelDataAccess.cs

Binding

listBinding

```
shell
mdsNotfiy
```

GetModels AddModel

Name mdsNotfiy

Color mdsNotfiy

Cost 33

Speed 332

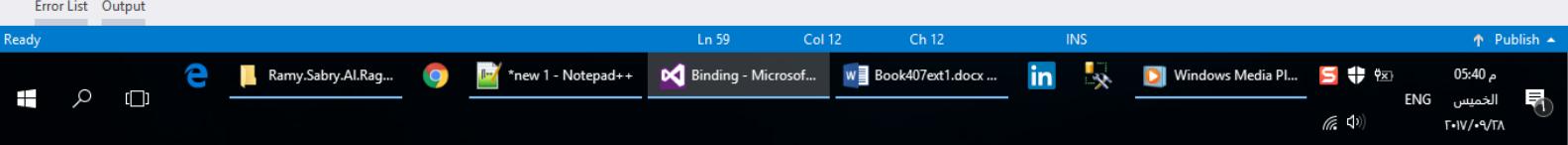
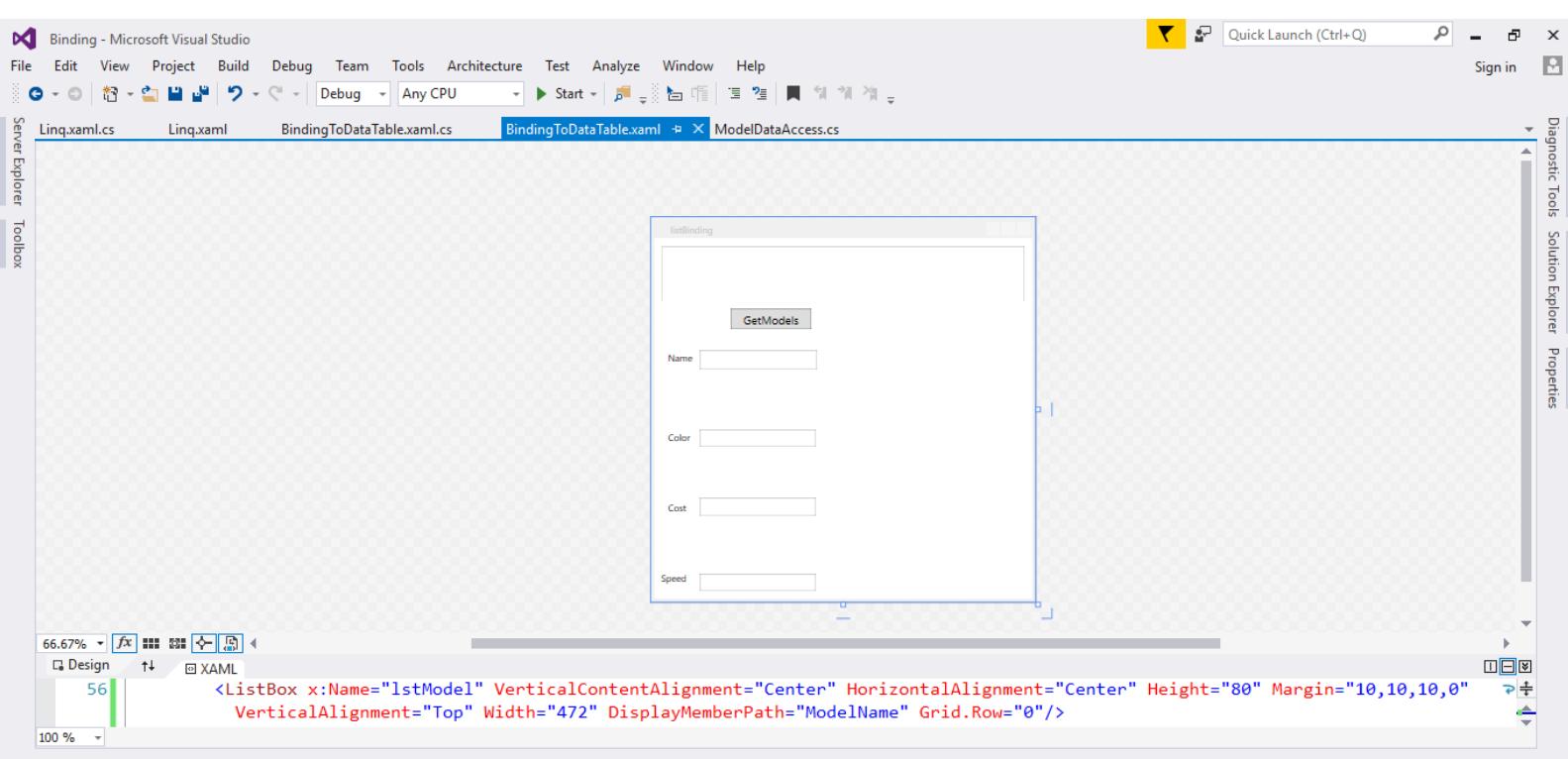
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ln 62 Col 9 Ch 9 INS

Windows Search Task View Start File Explorer Microsoft Edge Notepad++ Binding (Running) Book407ext1.docx LinkedIn listBinding ENG 02:55 م الخميس ٢٠١٧/٩/٦

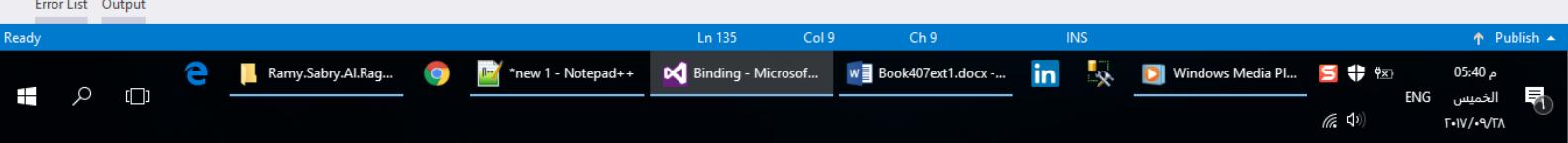
نجحت

Using ADO



```
115     }
116     catch
117     { return null; }
118     finally { conn.Close(); }
119   }

120   -references
121   public static DataTable GetModelsByDataTable()
122   {
123     SqlConnection conn = new SqlConnection("Server=.;Database=DataBinding;Trusted_Connection=True");
124
125     SqlCommand comm = new SqlCommand();
126     comm.CommandText = "select * from Model";
127     comm.Connection = conn;
128     SqlDataAdapter adap = new SqlDataAdapter(comm);
129     DataTable table = new DataTable("Models");
130
131     adap.Fill(table);
132     return table;
133
134   }
135 }
```



Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Linq.xaml.cs Linq.xaml BindingToDataTable.xaml.cs BindingToDataTable.xaml ModelDataAccess.cs

Binding

```
21 // /</summary>
22 public partial class BindingToDataTable : Window
23 {
24     public BindingToDataTable()
25     {
26         InitializeComponent();
27     }
28
29     private void button_Click(object sender, RoutedEventArgs e)
30     {
31         DataTable dt = ModelDataAccess.GetModelsByDataTable();
32         lstModel.ItemsSource = dt.DefaultView;
33     }
34 }
35
36 }
```

100 % Error List Output

Ready Ln 31 Col 13 Ch 13 INS

Windows Media Player 05:40 م ENG ٢٠١٧/٩/٣

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

listBinding

Golf

Jelly

shell

GetModels

Name: Jelly

Color: Blue

Cost: 2500

Speed: 1600

BindingToDataTable.xaml ModelDataAccess.cs

```
button_Click(object sender, RoutedEventArgs e)
{
    DataTable dt = ModelDataAccess.GetModelsByDataTable();
}
```

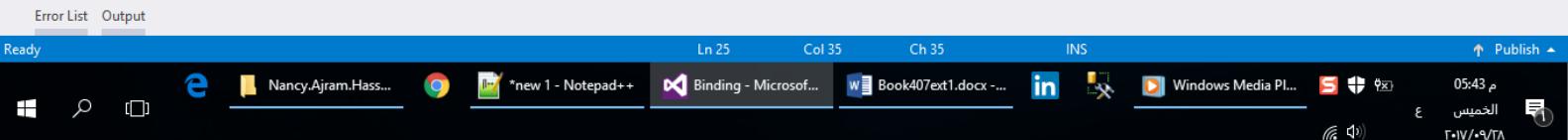
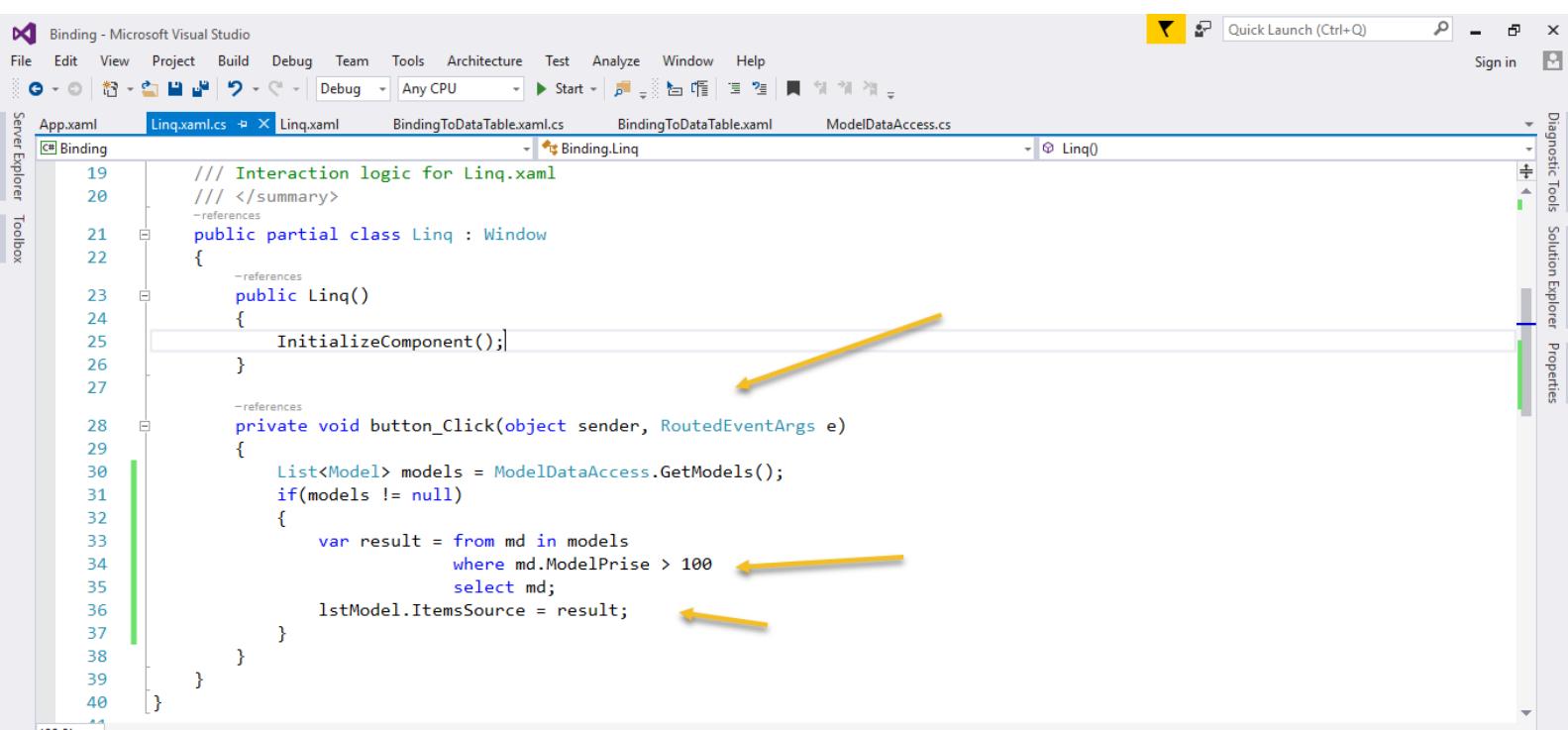
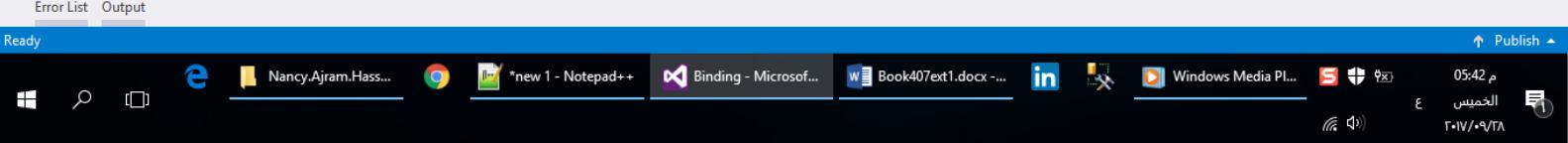
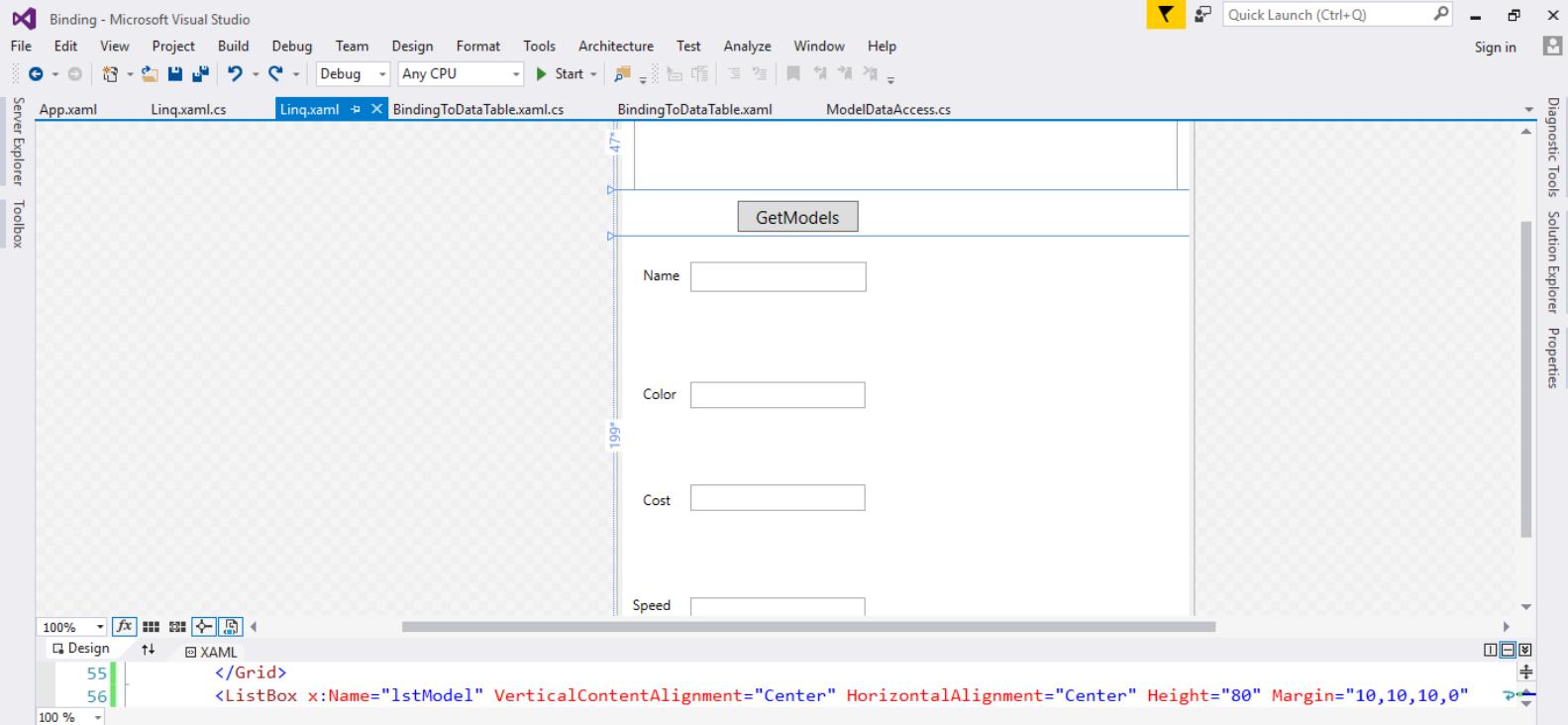
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

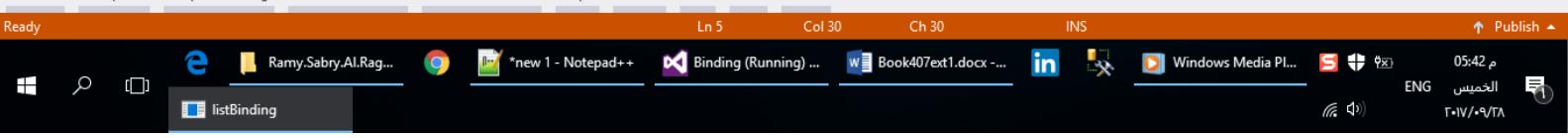
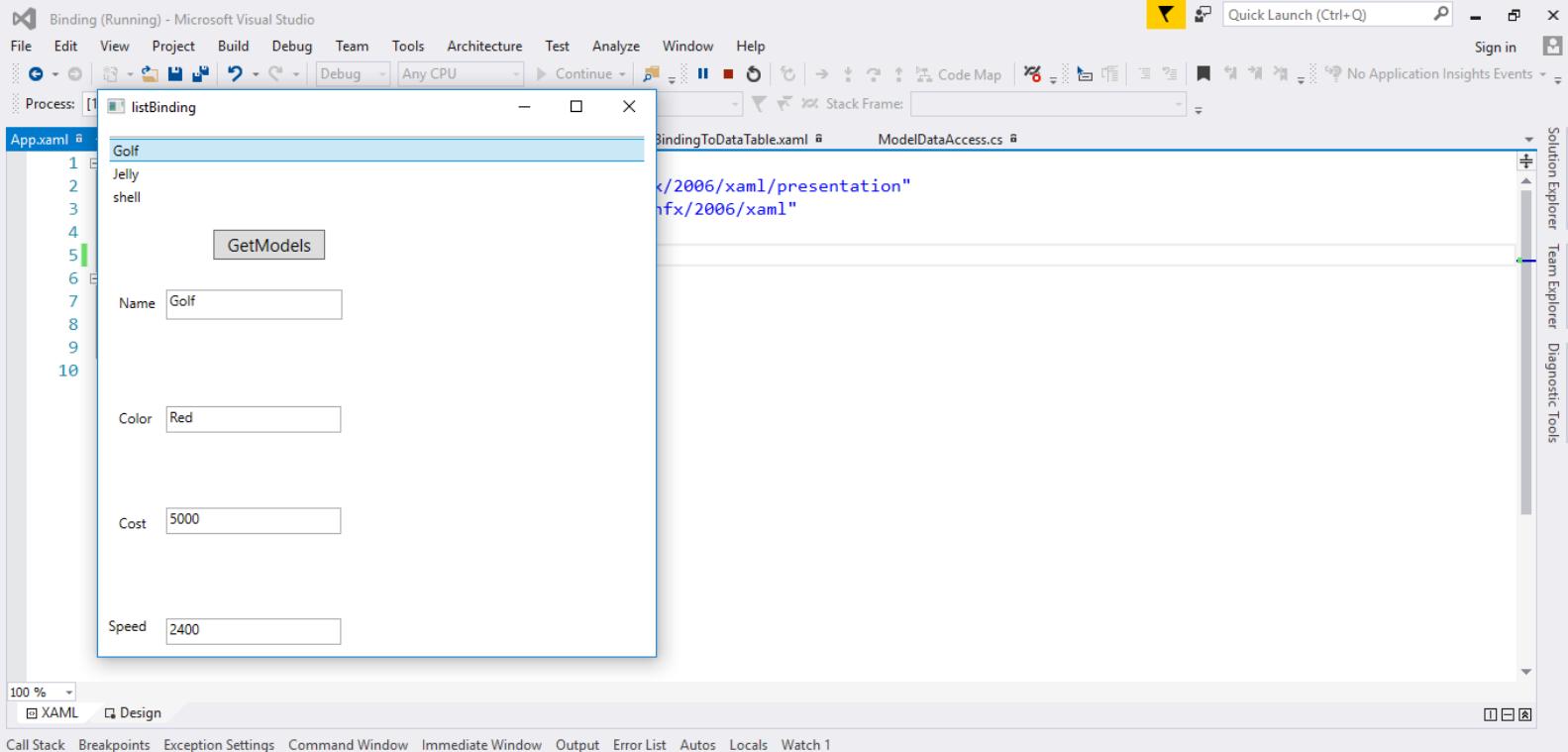
Ready Ln 31 Col 13 Ch 13 INS

Windows Media Player 05:41 م الخميس ٢٠١٧/٩/٣

شغاله بنجاح

Using LINQ



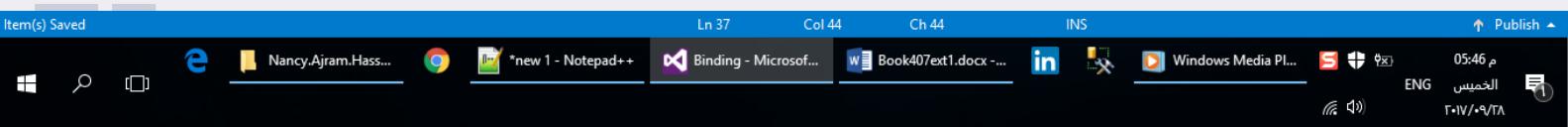
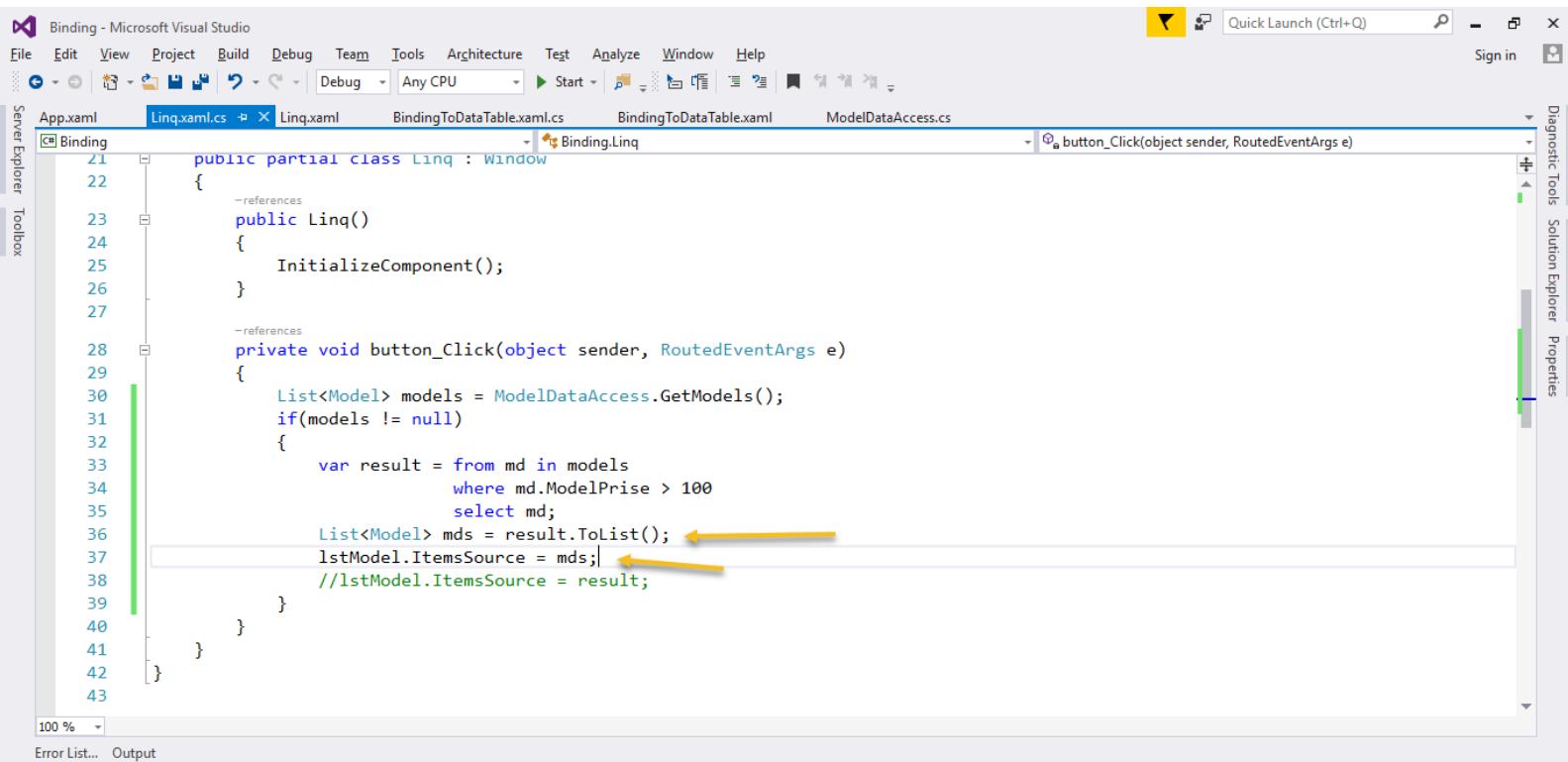


شغاله بنجاح

تعالى نحو الاوبيكت

Var

ل تولیست



Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Process: [7260] Binding.vshost.exe Lifecycle Events Thread: Stack Frame: No Application Insights Events

App.xaml.cs Linq.xaml.cs Linq.xaml BindingToDataTable.xaml.cs BindingToDataTable.xaml ModelDataAccess.cs

```

21 Binding
22
23
24
25
26
27
28 listBinding
29 Golf
30 Jelly
31 shell
32
33 GetModels
34
35
36
37 Name: 
38
39 Color: 
40
41 Cost: 
42 Speed: 

```

button_Click(object sender, RoutedEventArgs e)

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ready

Ln 37 Col 44 Ch 44 INS

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ready

listBinding

05:46 م الخميس ٢٠١٩/٧/٣

تمام شغاله بنجاح

تعالى نعملها با

Observablecollection

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

App.xaml.cs Linq.xaml.cs Linq.xaml BindingToDataTable.xaml.cs BindingToDataTable.xaml ModelDataAccess.cs

```

24 public Linq()
25 {
26     InitializeComponent();
27 }
28
29 private void button_Click(object sender, RoutedEventArgs e)
30 {
31     List<Model> models = ModelDataAccess.GetModels();
32     if(models != null)
33     {
34         var result = from md in models
35                     where md.ModelIPrise > 100
36                     select md;
37         List<Model> mds = result.ToList();
38         ObservableCollection<Model> mdsNotify = new ObservableCollection<Model>(result.ToList());
39
40         lstModel.ItemsSource = mdsNotify;
41         //lstModel.ItemsSource = result;
42     }
43 }
44 }
45 }
46

```

button_Click(object sender, RoutedEventArgs e)

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ready

Network Book407ext1.doc... Windows Media Player Network and Shared Folders 05:53 م الخميس ٢٠١٩/٧/٣

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Process: [9640] Binding.vshost.exe Lifecycle Events Thread: Stack Frame:

Quick Launch (Ctrl+Q) Sign in

Solution Explorer Team Explorer Diagnostic Tools

App.xaml Linq.xaml.cs Linq.xaml BindingToDataTable.xaml.cs BindingToDataTable.xaml ModelDataAccess.cs

Binding

listBinding

Golf

Jelly

shell

GetModels

Name: Golf

Color: Red

Cost: 5000

Speed: 2400

Args e);

ObservableCollection<Model>(result.ToList());

Call Stack Breakpoints Execution Settings Command Window Immediate Window Output Environment Watch Locals Watch 1

Ready

Ln 40 Col 49 Ch 49 INS

Network Google Chrome Binding (Running...) Book407ext1.doc... LinkedIn YouTube Windows Media Player Network and Shared ENG 05:54 م الخميس ٢٠١٧/٩/٣١

شغال بنجاح

نعمل اضافة

بعمل زر جديد وبضيف تحته

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Server Explorer Toolbox

App.xaml Linq.xaml.cs Linq.xaml BindingToDataTable.xaml.cs BindingToDataTable.xaml ModelDataAccess.cs

Binding

```
38     select md;
39     List<Model> mds = result.ToList();
40     mdsNotify = new ObservableCollection<Model>(result.ToList());
41
42     lstModel.ItemsSource = mdsNotify;
43     //lstModel.ItemsSource = result;
44   }
45 }
46
47 -references
48 private void button2_Click(object sender, RoutedEventArgs e)
49 {
50   mdsNotify.Add(new Model
51   {
52     ModelName = txtName.Text,
53     ModelColor = txtColor.Text,
54     ModelPrise = float.Parse(txtcost.Text),
55     ModelSpeed = int.Parse(txtspeed.Text),
56     ModelImage = "Null"
57   });
58 }
59 }
```

button2_Click(object sender, RoutedEventArgs e)

args e);

ObservableCollection<Model>(result.ToList());

Call Stack Breakpoints Execution Settings Command Window Immediate Window Output Environment Watch Locals Watch 1

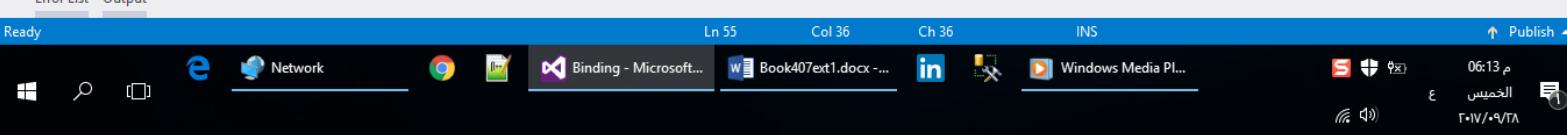
Ready

Ln 55 Col 36 Ch 36 INS

Network Google Chrome Binding - Microsoft... Book407ext1.doc... LinkedIn YouTube Windows Media Player Network and Shared ENG 06:12 م الخميس ٢٠١٧/٩/٣١

تم

```
Binding.cs
27 }
28
29 ObservableCollection<Model> mdsNotfiy; ← yellow arrow
30
31 -references
32 private void button_Click(object sender, RoutedEventArgs e)
33 {
34     List<Model> models = ModelDataAccess.GetModels();
35     if(models != null)
36     {
37         var result = from md in models
38                     where md.ModelPrise > 100
39                     select md;
40         List<Model> mds = result.ToList();
41         mdsNotfiy = new ObservableCollection<Model>(result.ToList());
42
43         lstModel.ItemsSource = mdsNotfiy;
44         //lstModel.ItemsSource = result;
45     }
46
47 -references
48 private void button2_Click(object sender, RoutedEventArgs e)
49 {
50     mdsNotfiy.Add(new Model
51 }
```

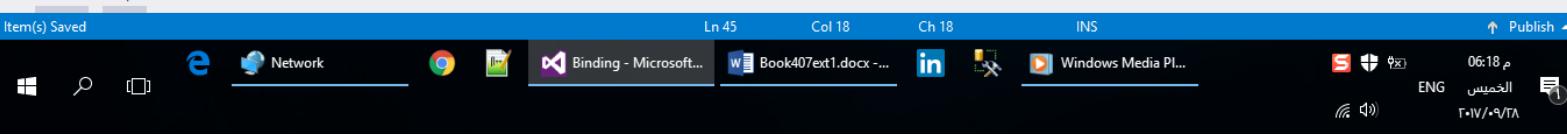


بطل الكتير فوق عشان يتشفى على العام
الاضافة شغاله لكن لما بعمل

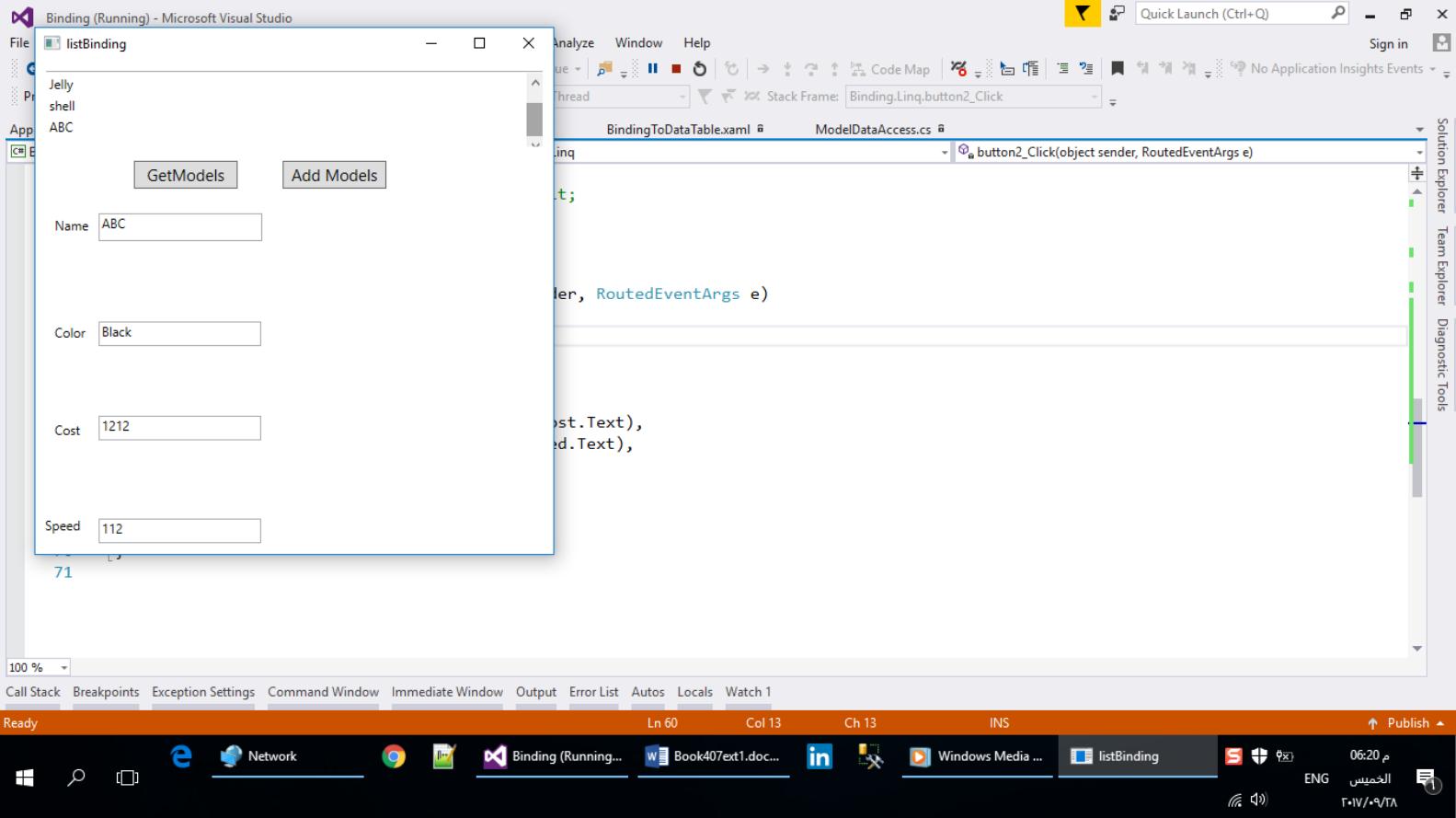
GetModels

تاني بيمسح الموديل الجديد اللي انضاف

```
Binding.cs
32 {
33     List<Model> models = ModelDataAccess.GetModels();
34     if(models != null)
35     {
36         var result = from md in models
37                     where md.ModelPrise > 100
38                     select md;
39         List<Model> mds = result.ToList();
40
41         if(mdsNotfiy == null) { ← yellow arrow
42             mdsNotfiy
43                 = new ObservableCollection<Model>(result.ToList());
44             lstModel.ItemsSource = mdsNotfiy; ← yellow arrow
45         }
46         else ← yellow arrow
47         {
48             var results = from md in mdsNotfiy
49                         where md.ModelPrise > 100
50                         select md;
51             lstModel.ItemsSource = results; ← yellow arrow
52
53         }
54     }
55 }
```



بنعمل شرط عشان يشنقل مضمون



كل لما اعمل جيت موديلز بيجيبلى الموديلز الجديدة والقديمة بنجاح

Improving Performance of Lists

- UI virtualization, is a technique where the list creates container objects for the currently displayed items only.
- A number of factors can break UI virtualization, sometimes when you don't expect it:
 - Putting your list control in a ScrollViewer.
 - Using grouping.
 - Not using data binding.
- Using it:
 1. <ComboBox><ComboBox.ItemsPanel>
 2. <ItemsPanelTemplate>
 3. <VirtualizingStackPanel></VirtualizingStackPanel>
 4. </ItemsPanelTemplate>
 5. </ComboBox.ItemsPanel></ComboBox>



AGC Academy

جميع حقوق النشر والتوزيع محفوظة ومسجلة باسم
الشركة وبعذر هن استخدام حسابك في ذلك الغرض.

Lists Performance

Ui virtualization

هو تكنيك معمول ومسؤل عن اداء الكنترول اللي من نوع ليست بوكس زى الكمبيوتر بوكس

بيقولك لما تيجي تعرض مجموعه من العناصر فى كمبو بوكس هو بيرسم او بيحمل الجزء ده على سبيل المثال 10 عناصر هو لما بيحمل بيحمل 10 فقط من اصل 1000 او مليون سجل على سحب ما بتحتار هو بيحمل العدد المطلوب عرضه ولما يخلصه تيجي عايز اللي بعده يحملك 10 عناصر تانى وهكذا لحد ما يخلص

بيقولك ساعات التكنيك بتاع

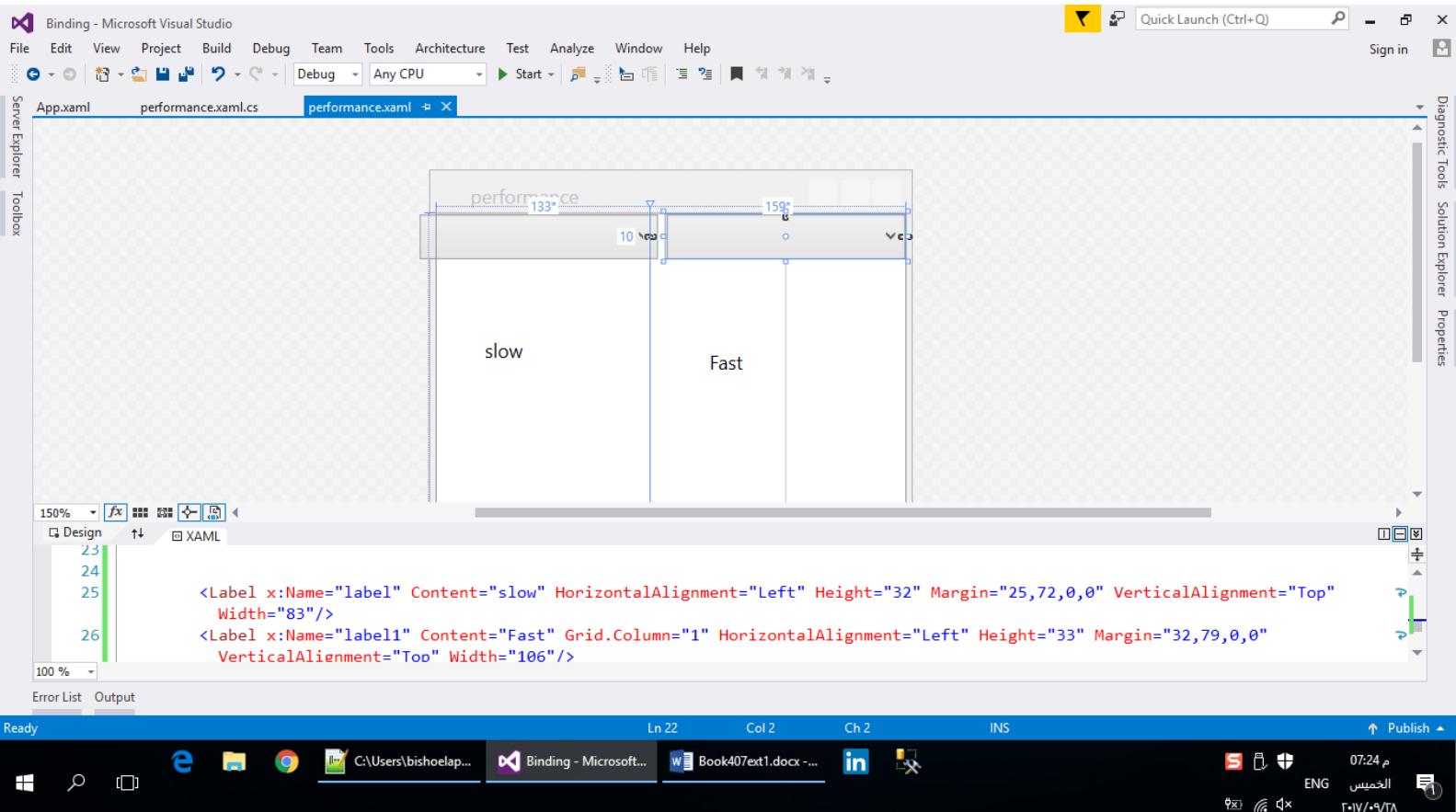
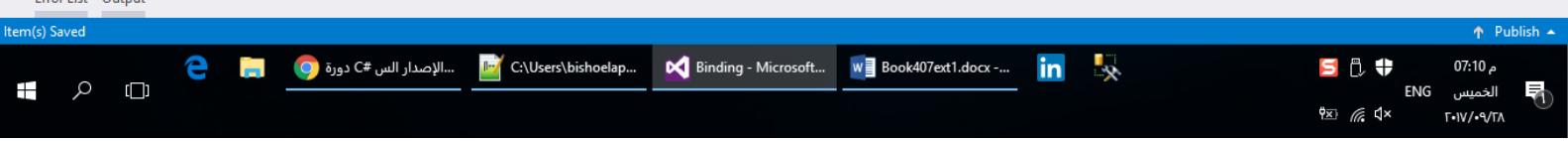
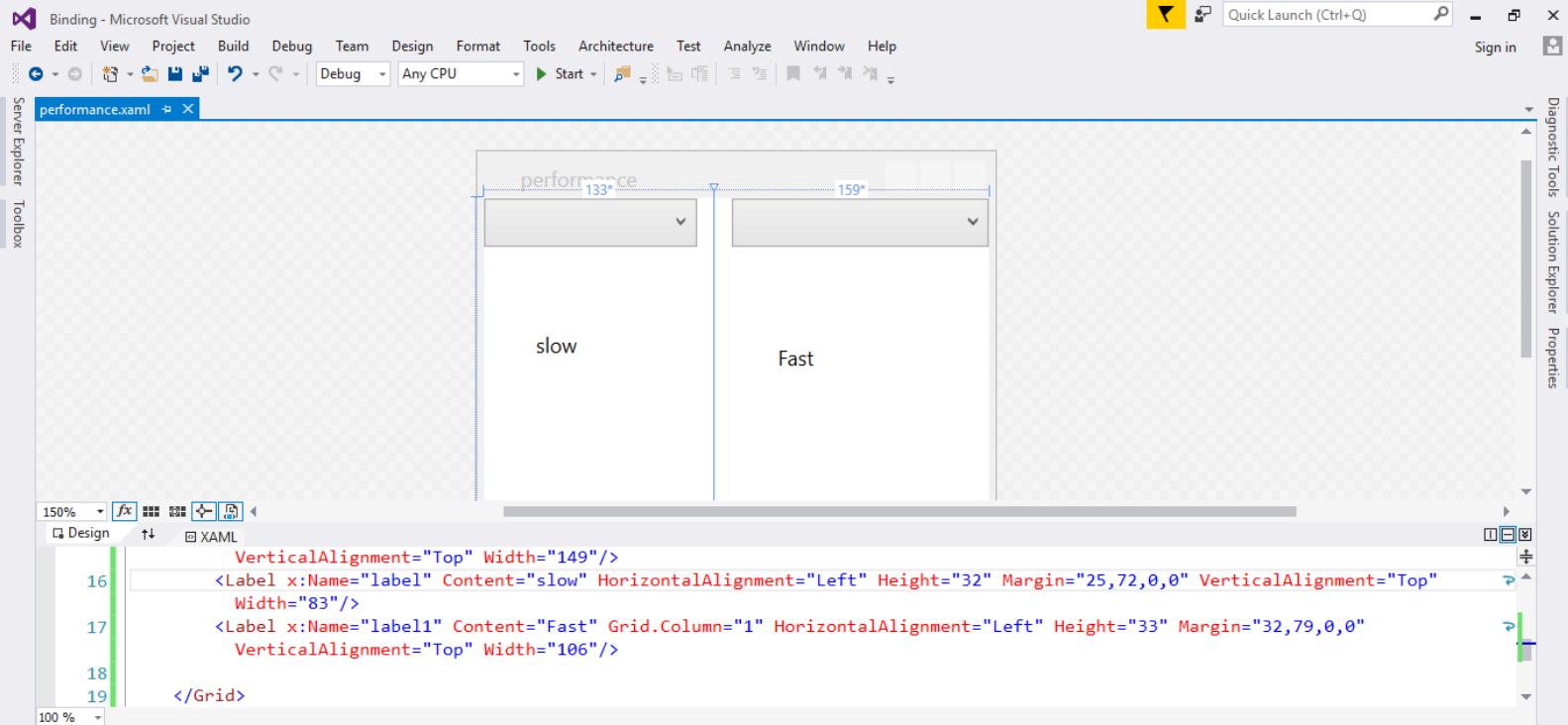
Virtualization

مش بيتشتغل امتا مش بيشتغل

لو حطبت الليست بتاعك داخل اسکرول فيور التكنيك مش هيشتغل

لو استخدمت الجروبينج

لما مستخدمش data binding



عملن 2 كمب ووحدة سريعة ووحدة بطئه

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

App.xaml performance.xaml.cs performance.xaml

Binding

```
16 {  
17     /// <summary>  
18     /// Interaction logic for performance.xaml  
19     /// </summary>  
20     -references  
21     public partial class performance : Window  
22     {  
23         -references  
24         public performance()  
25         {  
26             InitializeComponent();  
27             for (int i = 1; i <= 10000; i++)  
28             {  
29                 comslow.Items.Add(i);  
29                 comfast.Items.Add(i);  
30             }  
31         }  
32     }  
33 }
```

100 % Error List Output

Ln 28 Col 38 Ch 38 INS

Ready 07:25 م الخميس ٢٠١٧/٩/١٨

هذا قوته يملئ الكمبيوتر بوكس من لحد 10 الالاف

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

App.xaml performance.xaml.cs performance.xaml

Design XAML

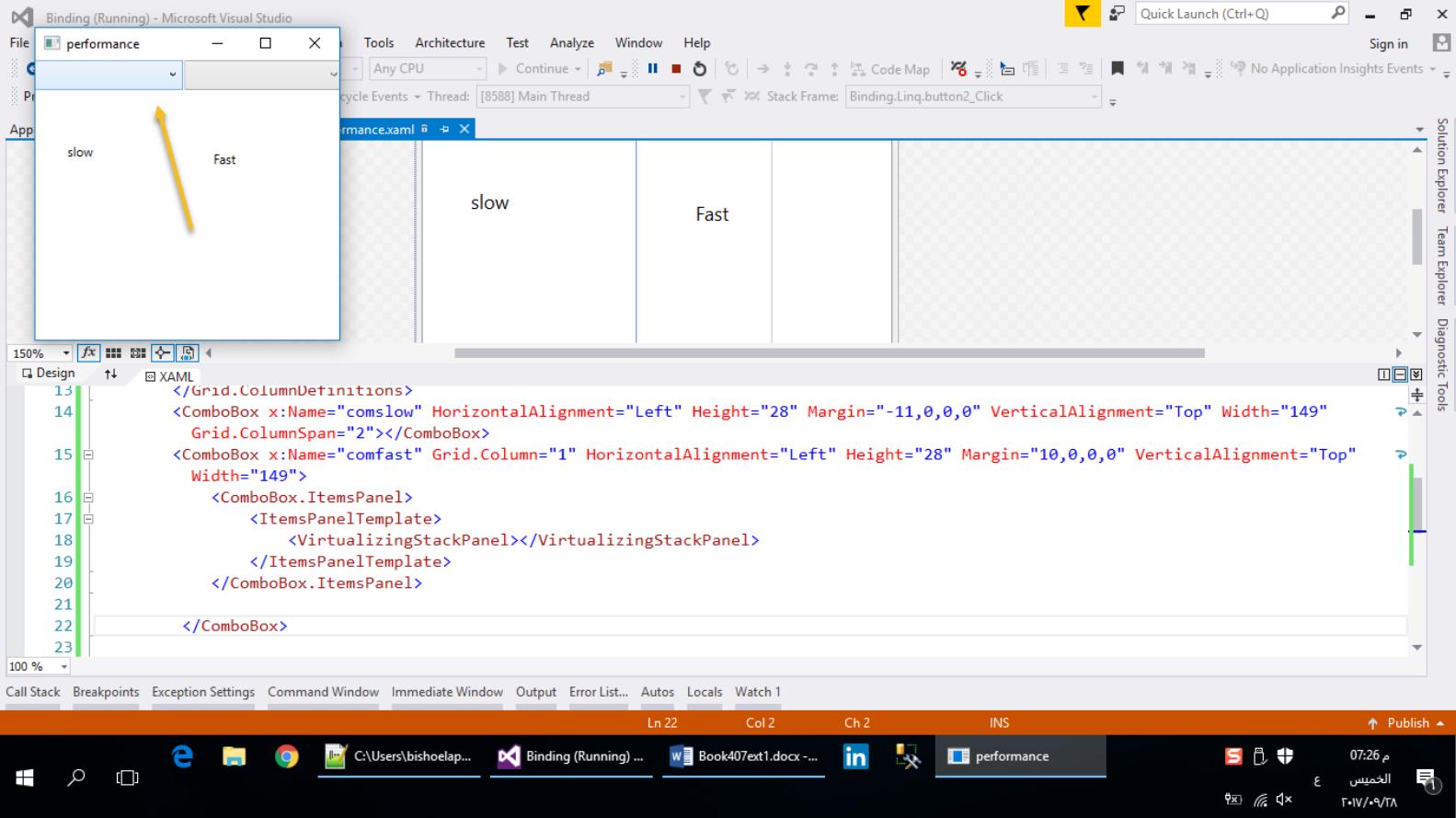
```
13 </Grid.ColumnDefinitions>  
14 <ComboBox x:Name="comslow" HorizontalAlignment="Left" Height="28" Margin="-11,0,0,0" VerticalAlignment="Top" Width="149"  
15     Grid.ColumnSpan="2"></ComboBox>  
16 <ComboBox x:Name="comfast" Grid.Column="1" HorizontalAlignment="Left" Height="28" Margin="10,0,0,0" VerticalAlignment="Top" >  
17     Width="149"  
18     <ComboBox.ItemsPanel>  
19         <ItemsPanelTemplate>  
20             <VirtualizingStackPanel></VirtualizingStackPanel>  
21         </ItemsPanelTemplate>  
22     </ComboBox.ItemsPanel>  
23  
24 </ComboBox>
```

100 % Error List Output

Ln 22 Col 2 Ch 2 INS

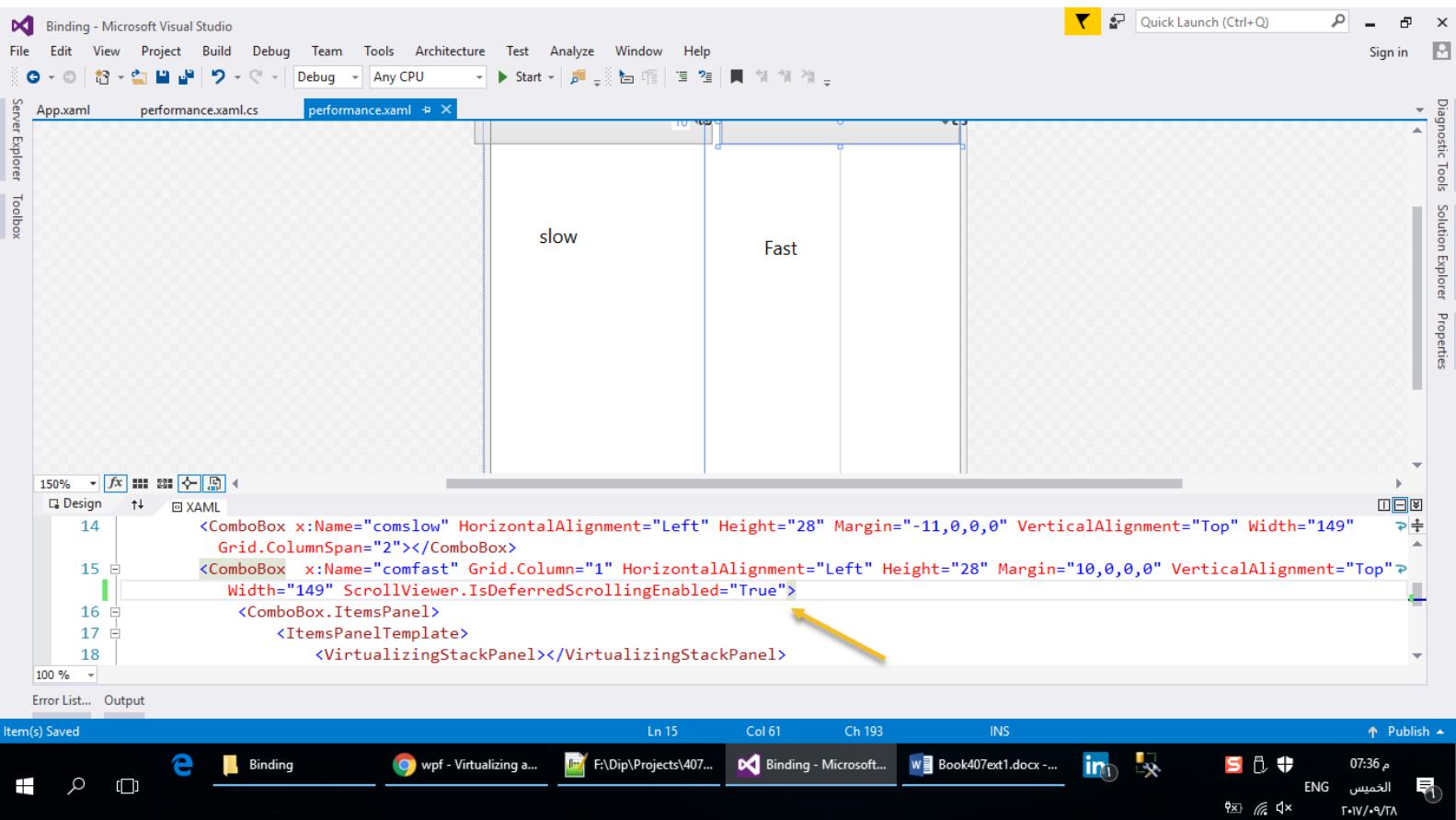
Ready 07:25 م الخميس ٢٠١٧/٩/١٨

بضيف الكود السحري ونشغل



دوست واحد وقت في التحميل لكن الكمبو بوكس السريعه فتحت على طول بدون تحميل

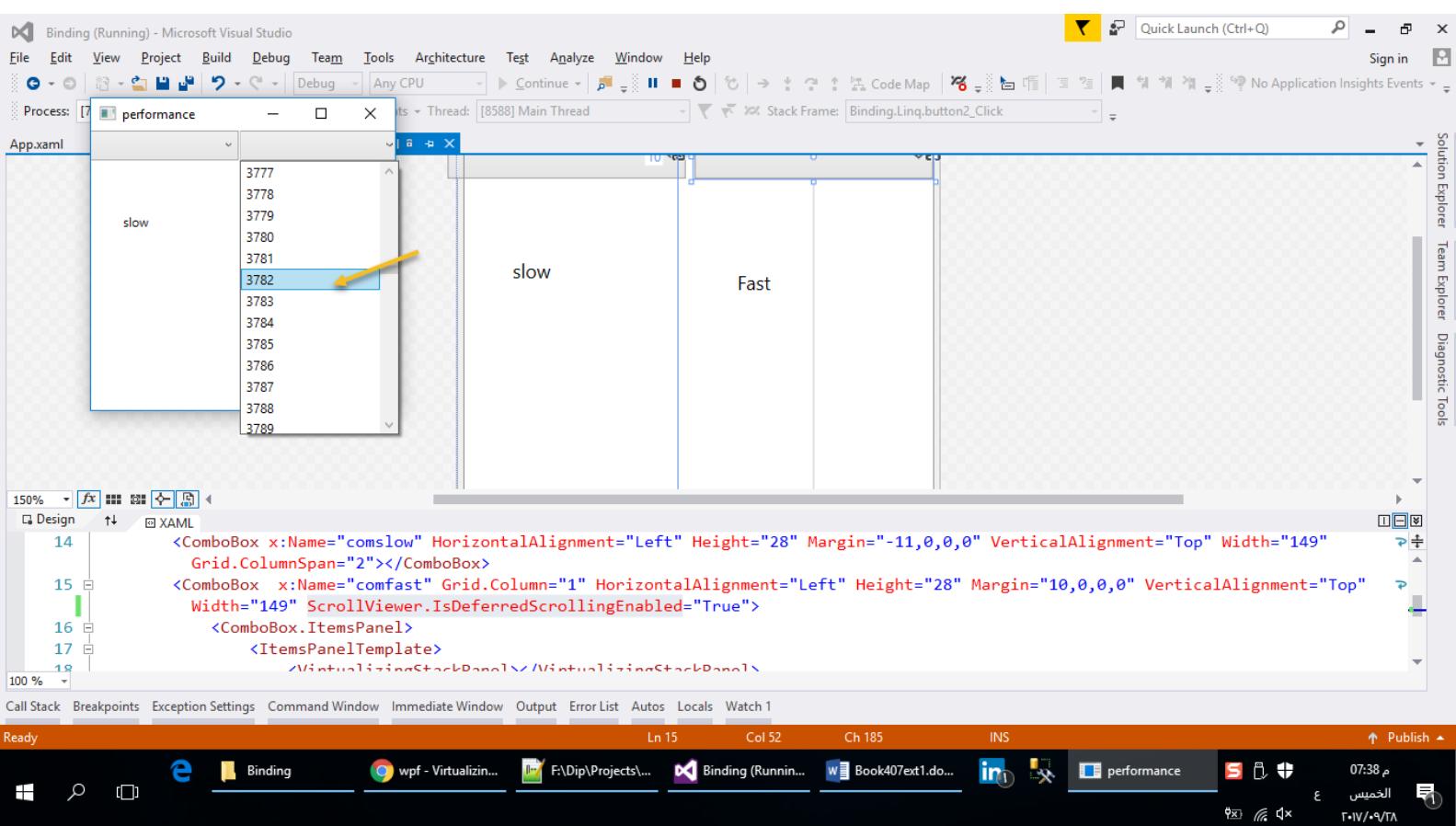
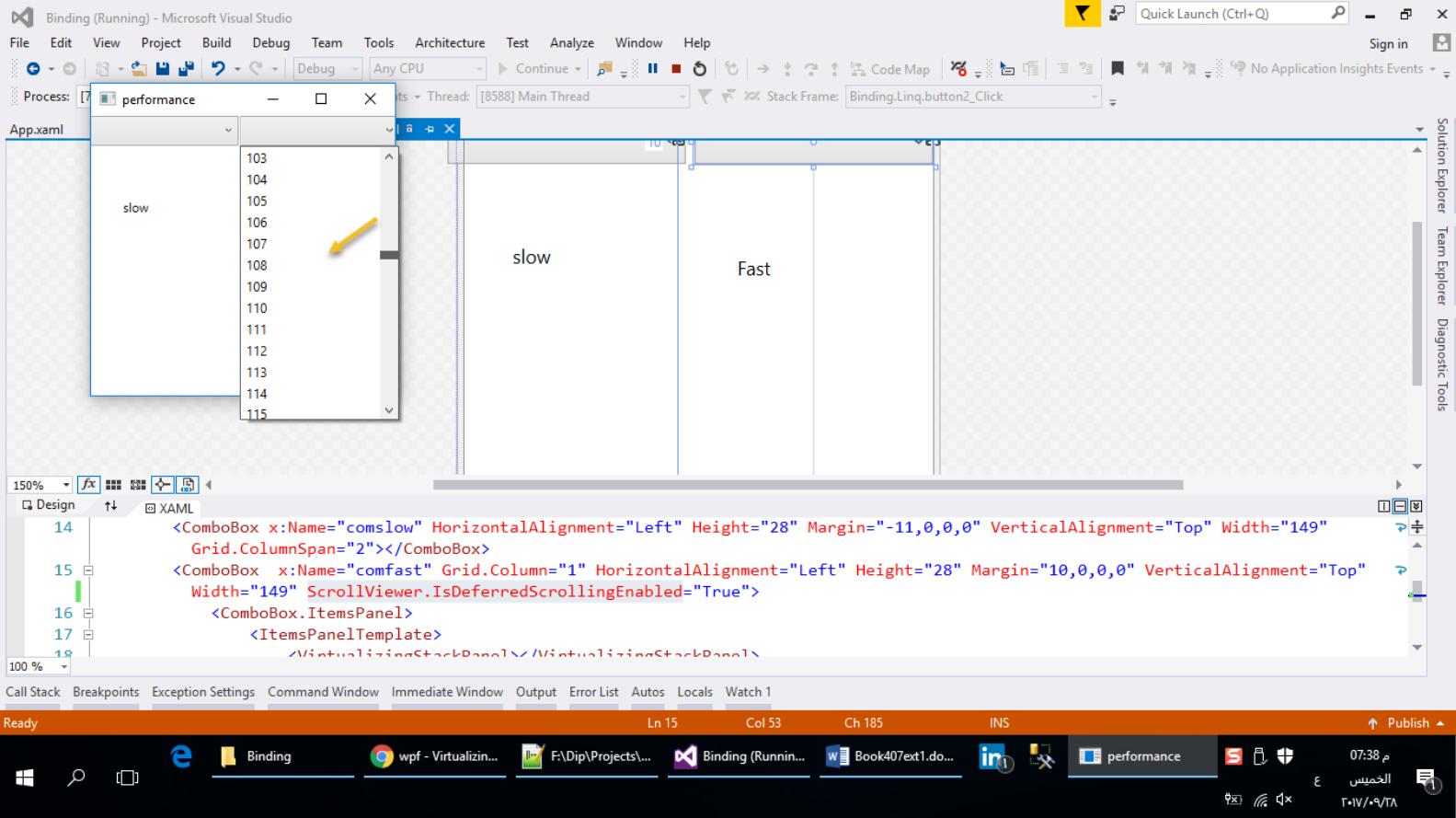
وبسرعه رهيبه جدا



خاصية

ScrollViewer.IsDeferredScrollingEnabled

بتخلصك ت Shawf القييم الجديد كل ماتنزل بالماوس او تحديداً توقف الاسكرول بار مكان ما هتتوقفه هتشوف القييم الجديد لكن لو نازل بالاسكرول طول مانتا نازل مفيش قيمة بتتحدد غير لما توقف نزول بص



تمام تمت بنجاح

Validation

بعمل صفة جديدة

The screenshot shows the Microsoft Visual Studio IDE with the code editor open. The file is Model.cs, containing C# code for a Model class. The code includes properties for ModelSpeed and ModelPrise, and a validation logic for ModelSpeed. The validation logic checks if the value is less than or equal to zero, throwing an ArgumentException if true. Arrows from the text "هنا بضيف شرط بقوله لو صفر او اقل اضرب اكسبيشن" point to the condition in the if statement and the throw statement.

```
public int ModelSpeed
{
    get
    {
        return modelSpeed;
    }
    set
    {
        if(value <= 0)
        {
            throw new ArgumentException("Bad data input");
        }
        else
        {
            modelSpeed = value; OnPropertyChanged(new PropertyChangedEventArgs("ModelSpeed"));
        }
    }
}

public float ModelPrise
{
    get
    {
        return modelprise;
    }
}
```

هنا بضيف شرط بقوله لو صفر او اقل اضرب اكسبيشن

The screenshot shows the Microsoft Visual Studio IDE with the code editor open. The file is objectValidate.cs, containing C# code for a partial class objectValidate. It includes logic for a button_Click event handler. The handler retrieves data from ModelDataAccess using the text from textid.Text. An arrow from the text "تحت الزر" points to the grd.DataContext assignment in the event handler.

```
public partial class objectValidate : Window
{
    public objectValidate()
    {
        InitializeComponent();
    }

    private void button_Click(object sender, RoutedEventArgs e)
    {
        grd.DataContext = ModelDataAccess.GetData(int.Parse(textid.Text));
    }
}
```

تحت الزر

نجرب

Binding (Running) - Microsoft Visual Studio

File Edit View Project

Process: [8796] Binding.vshost

objectValidate.xaml.cs

Binding

```
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
```

listBinding

1

GetModels

Name: Golf

Color: Red

Cost: 5000

Speed: 2400

public float ModelPrise

{

get

{

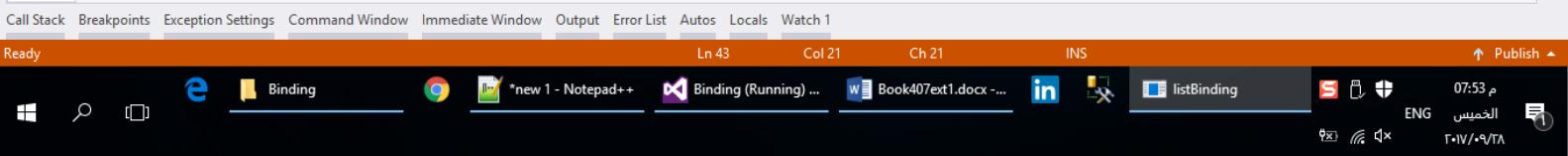
});

ertyChangedEventArgs("ModelSpeed"));

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ready

Ln 43 Col 21 Ch 21 INS



Binding (Running) - Microsoft Visual Studio

File Edit View Project

Process: [8796] Binding.vshost

objectValidate.xaml.cs

Binding

```
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
```

listBinding

1

GetModels

Name: Golf

Color: Red

Cost: 5000

Speed: 2400

public float ModelPrise

{

get

{

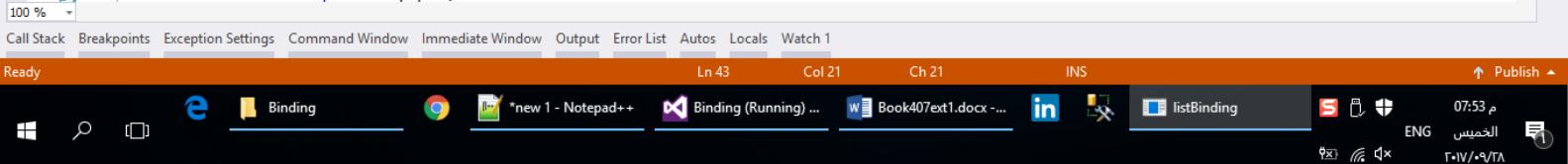
});

ertyChangedEventArgs("ModelSpeed"));

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ready

Ln 43 Col 21 Ch 21 INS



بنغير القيمة لصفر

The screenshot shows the Microsoft Visual Studio IDE interface. The main window displays the code for a `Model.cs` file:

```
public int ModelSpeed
{
    get
    {
        return modelSpeed;
    }

    set
    {
        if(value <= 0)
        {
            throw new ArgumentException("Bad data input");
        }
        else
            modelSpeed = value; OnPropertyChanged(new PropertyChangedEventArgs("ModelSpeed"));
    }
}

public float ModelPrise
{
    get
    {
        ...
    }
}
```

A tooltip window is open at the cursor position (line 43, column 16), showing the following information:

ArgumentException was unhandled by user code
An exception of type 'System.ArgumentException' occurred in Binding.exe but was not handled in user code
Additional information: Bad data input

Troubleshooting tips:
Get general help for this exception.

Exception settings:
 Break when this exception type is user-unhandled

Actions:
View Detail...
Enable editing
Copy exception detail to the clipboard
Open exception settings

طلع الايرور بنجاح

انا مقولتش ليه روح اعمل سيتتج للداتا معمليتش

Bind to waw

امال ايه حصل في التيكست بوكس هي افتراضيا لما يحصل لوست فوكس

بِتَقْوِيمِ عَمَلِ الْكَلَامِ دَهْ تَلَقَّاَيَا بِيَعْمَلِ السِّيَّتِجِ دَى لَوْحَدَهَا اللَّى هَهْ

Toway

دی طریقة و ممکن طریقة اخري

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

objectValidate.xaml.cs objectValidate.xaml Model.cs App.xaml performance.xaml.cs performance.xaml

Binding

```
30
31
32     -references
33     public int ModelSpeed
34     {
35         get
36         {
37             return modelSpeed;
38         }
39
40         set
41         {
42             if(value > 0)
43                 modelSpeed = value; OnPropertyChanged(new PropertyChangedEventArgs("ModelSpeed"));
44         }
45     }
46
47     -references
48     public float ModelPrise
49     {
50         get
51         {
52             return modelprise;
53         }
54     }

```

100 % Error List... Output

Ln 42 Col 16 Ch 16 INS

Item(s) Saved 08:02 م ENG الخميس ٢٠١٧/٩/٦

هذا جربت بنجاح كل ما أغير القيمة لاي حاجة اقل من صفر او = صفر يمسحها ويحط القيمة الأصلية

كلاس او الانترفيس

IDataErrorInfo

معالجة الایرور

* استخدام **IDataErrorInfo** وهو Interface يتحقق من الأخطاء التي تحصل في View العيب الوحيد فيه هو يرجع error واحد فقط

Binding - Microsoft Visual Studio

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Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

DataError.xaml objectValidate.xaml.cs objectValidate.xaml Model.cs* App.xaml performance.xaml.cs performance.xaml Binding

```
2 using System.Collections.Generic;
3 using System.ComponentModel;
4 using System.Linq;
5 using System.Text;
6 using System.Threading.Tasks;
7 using System.Windows;
8 namespace Binding.Properties
9 {
10     -references
11     class Model : DependencyObject, System.ComponentModel.INotifyPropertyChanged, IDataErrorInfo
12     {
13         private string modelName;
14         public string ModelName
15         {
16             get { return modelName; }
17             set { modelName = value; }
18         }
19     }
20     static readonly DependencyProperty ModelColorProperty = DependencyProperty.Register("ModelCo
21     (Model));
22     -references
23 }
```

CS0535 'Model' does not implement interface member 'IDataErrorInfo.this[string]'

Implement interface Implement interface explicitly

```
public string Error
{
    get
    {
        throw new NotImplementedException();
    }
}

public string this[string columnName]
{
    get
    {
        throw new NotImplementedException();
    }
}

private int modelSpeed;
...
```

Preview changes Fix all occurrences in: Document | Project | Solution

100 %

Error List Output

Ready

Ln 11 Col 93 Ch 93 INS

08:11 م ENG الخميس ٢٠١٧/٩/٦

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

DataError.xaml objectValidate.xaml.cs objectValidate.xaml Model.cs* App.xaml performance.xaml.cs performance.xaml Binding

```
70     }
71 }
72 -references
73 public string Error ←
74 {
75     get
76     {
77         throw new NotImplementedException();
78     }
79 }
80 -references
81 public string this[string columnName] ←
82 {
83     get
84     {
85         throw new NotImplementedException();
86     }
87 }
88 private int modelSpeed;
89 private float modelprise;
90 private string modelImage;
91
92 }
```

100 %

Error List Output

Ready

Ln 11 Col 90 Ch 90 INS

08:11 م ENG الخميس ٢٠١٧/٩/٦

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

objectValidate.xaml.cs objectValidate.xaml DataError.xaml.cs DataError.xaml Model.cs App.xaml

Binding

```
78 }  
79 }  
80 }  
81 }  
82 }  
83 }  
84 }  
85 public string this[string propertyName]  
86 {  
87     get  
88     {  
89         if (propertyName == "ModelPrise")  
90         {  
91             if (ModelPrise <= 0)  
92                 return "Bad data value " + modelprise + "is not valid ";  
93             else if(propertyName == "ModelSpeed")  
94                 if (modelSpeed == 100)  
95                     return "Bad speed";  
96             return null;  
97         }  
98     }  
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```

غير اسم المتغير وبعدين في

Get

بطح كام شرط كده لتحقق

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

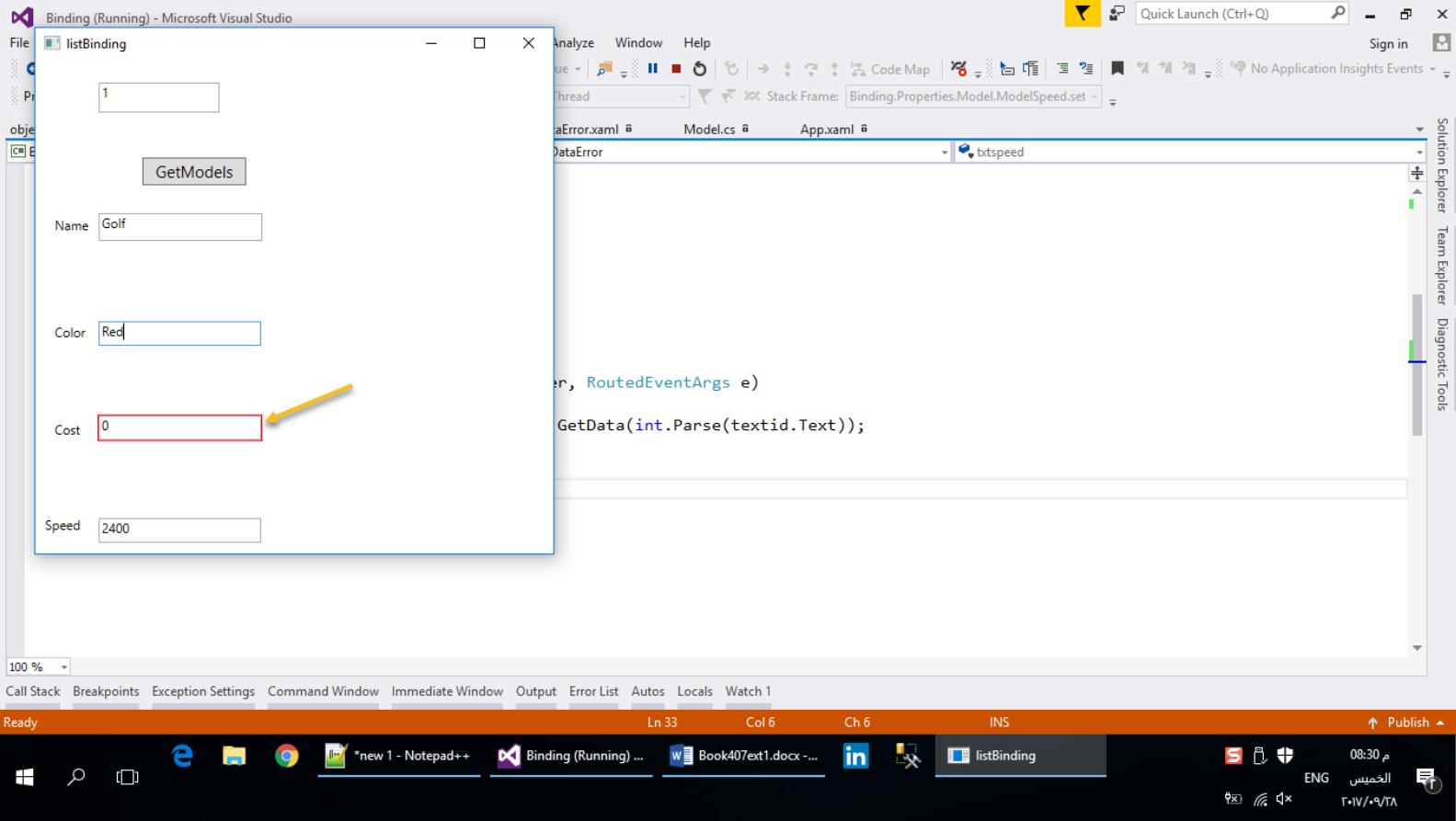
objectValidate.xaml.cs objectValidate.xaml DataError.xaml.cs DataError.xaml Model.cs App.xaml

Binding

```
VerticalAlignment="Top" Width="152" Margin="59,8,0,0" Grid.Row="3"/>  
<Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>  
  
<TextBox x:Name="txtcost" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>  
    <TextBox.Text>  
        <Binding Path="ModelPrise">  
            <Binding.ValidationRules>  
                <DataErrorValidationRule></DataErrorValidationRule>  
            </Binding.ValidationRules>  
        </Binding>  
    </TextBox.Text>  
  
</TextBox>  
<Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top" Height="26" Width="43"/>  
<TextBox x:Name="txtspeed" Text="{Binding ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" VerticalAlignment="Top" Width="152"/>
```

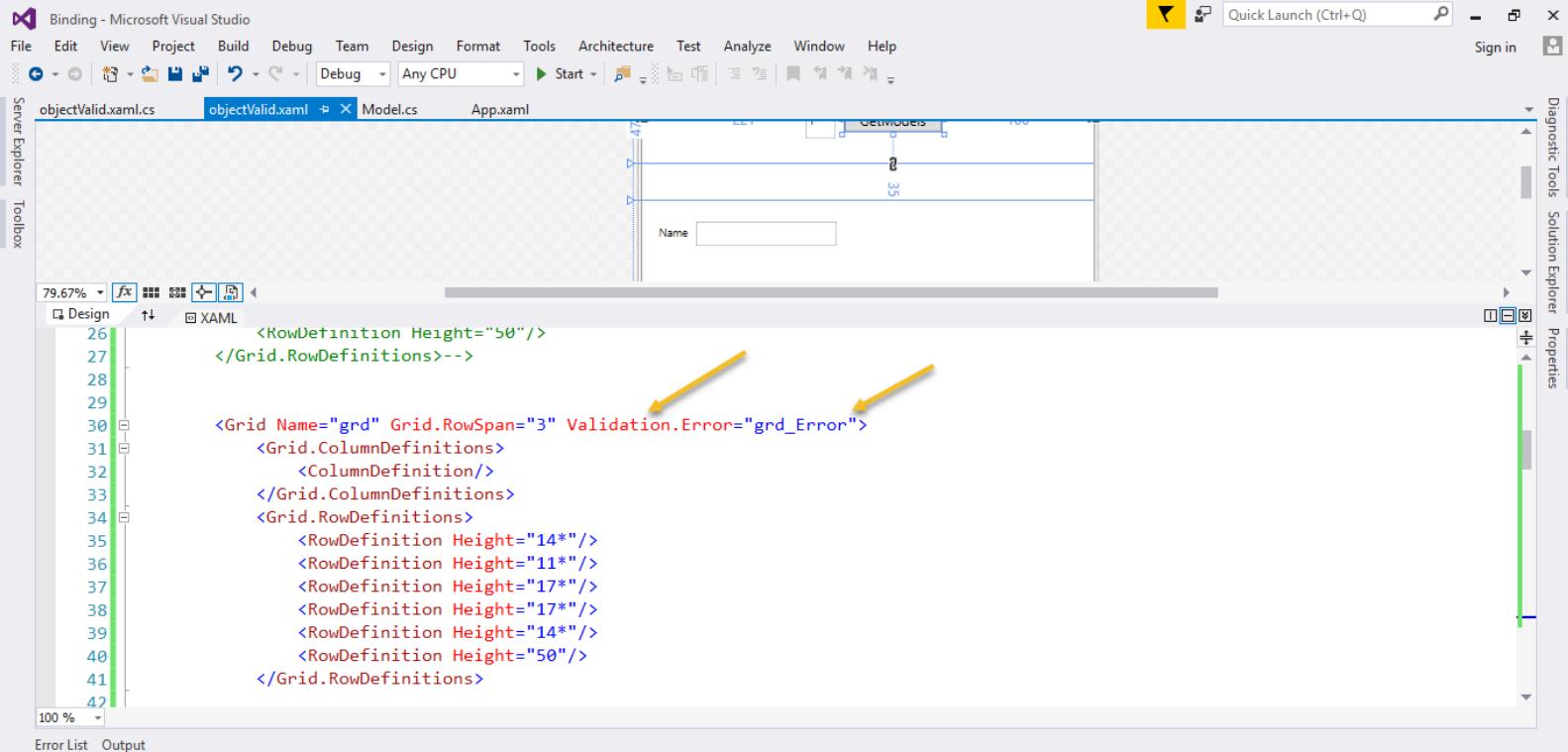
بروح على التيكست المستهدف التحقق منها

واحط الكود المطلوب وامرر اسم الحقل وتعالى نجرب

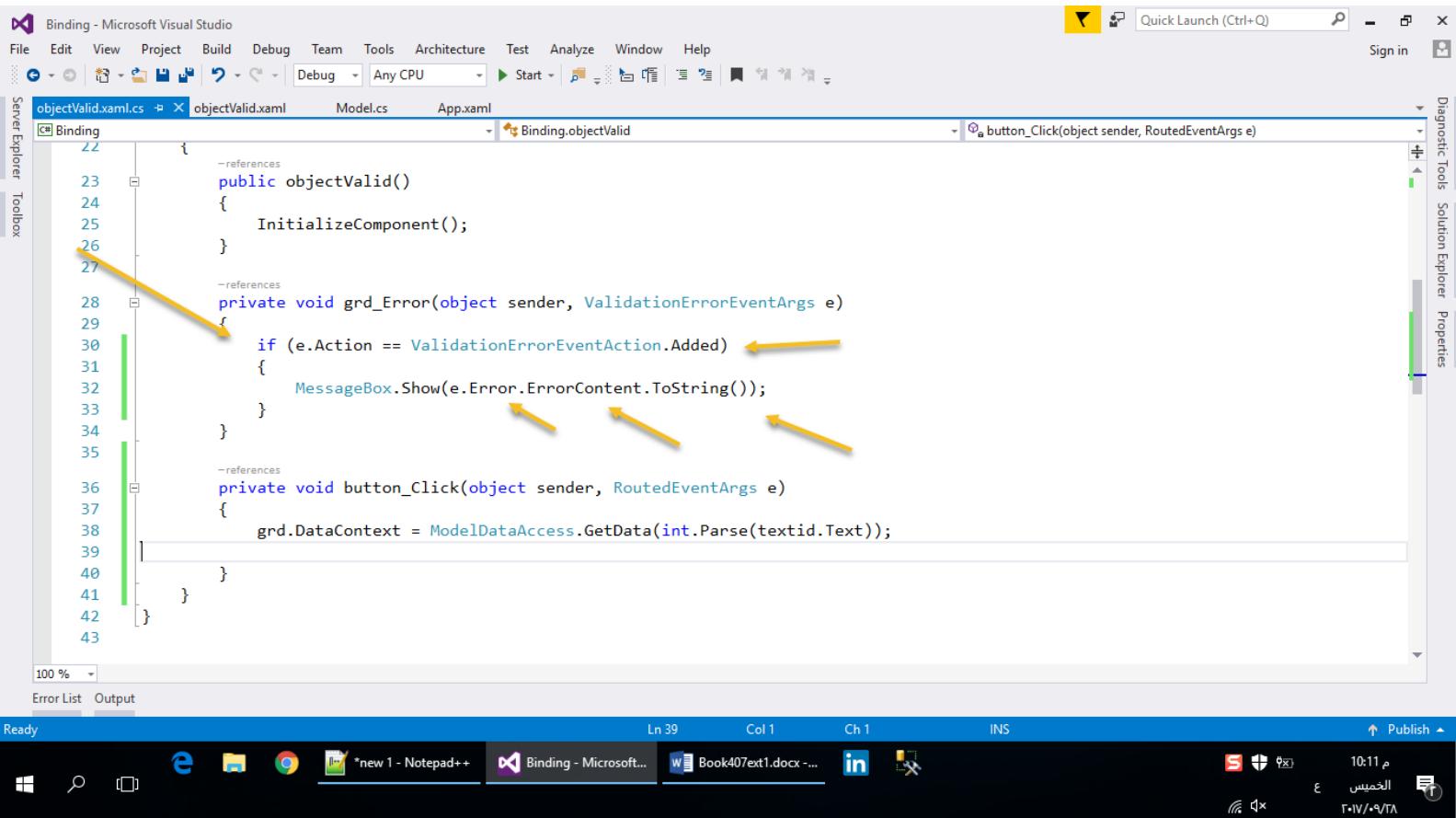


كتبت 0 واول ما شيلت الماوس التحقق اشتغل بنجاح

Get the Error Message by code



بنعمل ايقنت



كود عرض الایرور

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Design Format Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

objectValid.xaml.cs objectValid.xaml Model.cs App.xaml

Design XAML

97.67% 49 <Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>

50 <TextBox x:Name="txtcost" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="152">

51 <TextBox.Text>

52 <Binding Path="ModelPrice" NotifyOnValidationError="True">

53 <Binding.ValidationRules>

54 <DataErrorValidationRule></DataErrorValidationRule>

55 </Binding.ValidationRules>

56 </Binding>

57 </TextBox.Text>

58 </TextBox>

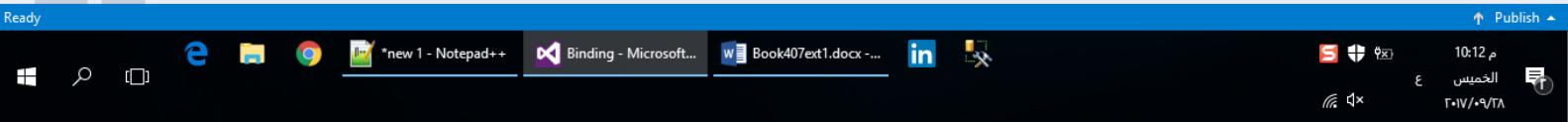
59 <Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top" Height="26" Width="43"/>

60 <TextBox x:Name="txtspeed" Text="{Binding ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>

61

100 % Error List Output

```
<Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>
<TextBox x:Name="txtcost" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="152">
<TextBox.Text>
<Binding Path="ModelPrice" NotifyOnValidationError="True">
<Binding.ValidationRules>
<DataErrorValidationRule></DataErrorValidationRule>
</Binding.ValidationRules>
</Binding>
</TextBox.Text>
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<Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top" Height="26" Width="43"/>
<TextBox x:Name="txtspeed" Text="{Binding ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
```



بفعل الخاصية الموضحة

وتعالى نشغل

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Process: [1] listBinding

objectValid.xaml Model.cs App.xaml

Binding

18
19
20
21
22 Name Golf

23
24
25
26 Color Red

27
28
29
30 Cost 0

31 <Binding Path="ModelPrice" NotifyOnValidationError="True">

32 <Binding.ValidationRules>

33 <DataErrorValidationRule></DataErrorValidationRule>

34 </Binding.ValidationRules>

35 Speed 2400

36
37 }
38

100 % Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1 Ln 23 Col 21 Ch 21 INS

Ready

Quick Launch (Ctrl+Q) Sign in

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1 Ln 23 Col 21 Ch 21 INS

Ready

10:10 م الخميس ٢٠١٩/١١/٢٠٢٠

```
Name Golf
Color Red
Cost 0
Speed 2400
```

نجح

وجاب الايرور

نشوف نوع آخر من ال

Validation

Custom validation

ال

Base class

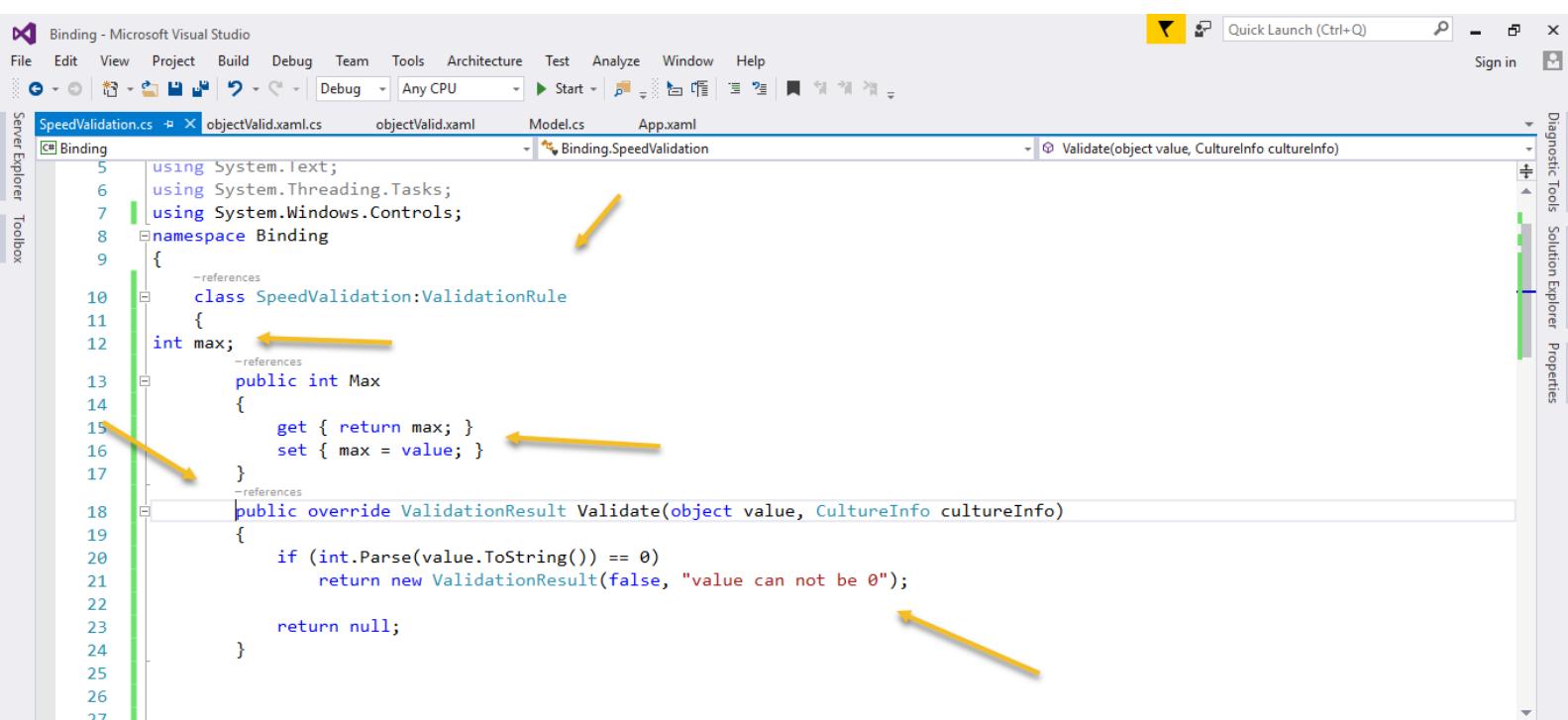
بناء اى حاجة لها علاقة بال

validation

اسمه

ValidationRule

نعمل احنا كلاس



```
using System.Text;
using System.Threading.Tasks;
using System.Windows.Controls;
namespace Binding
{
    class SpeedValidation:ValidationRule
    {
        int max;
        public int Max
        {
            get { return max; }
            set { max = value; }
        }
        public override ValidationResult Validate(object value, CultureInfo cultureInfo)
        {
            if (int.Parse(value.ToString()) == 0)
                return new ValidationResult(false, "value can not be 0");
            return null;
        }
    }
}
```

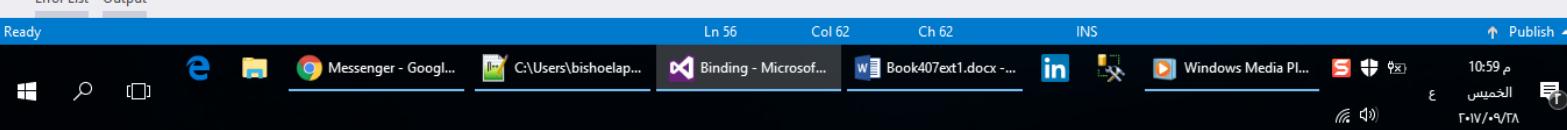
بنورث الكلاس الاب داخل الكلاس ببناء

بنعمل اوفريد تحت

ويحط فيها الفاليشين ببناء

The screenshot shows the Microsoft Visual Studio interface with the XAML editor open. The XAML code defines a custom validation rule named 'SpeedValidation'. The code includes a binding path 'ModelSpeed' and a validation rule 'Max' set to '66695'. The XAML code is as follows:

```
50 <TextBox x:Name="txtspeed" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
51 <TextBox.Text>
52 <Binding Path="ModelSpeed" NotifyOnValidationError="True">
53 <Binding.ValidationRules>
54 <local:SpeedValidation Max="66695" /></local:SpeedValidation>
55 </Binding.ValidationRules>
56 </Binding>
57 </TextBox.Text>
58 </TextBox>
59 <TextBox x:Name="textid" HorizontalAlignment="Left" Height="28" Margin="178,26,0,0" TextWrapping="Wrap" Text="1" VerticalAlignment="Top" Width="33" RenderTransformOrigin="3.835,0.707"/>
60 <!--<ListBox x:Name="lstModel" HorizontalAlignment="Left" Height="47" VerticalAlignment="Top" Width="292" /-->
```



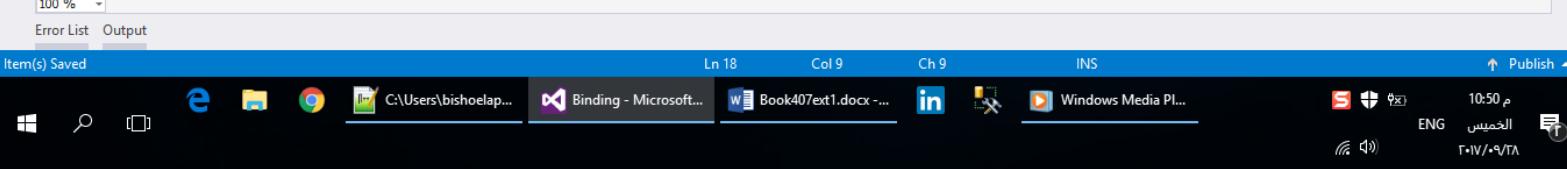
هنا بمرر الكلاس وبمرر قيمة الماكس اى حاجة كبيرة وليكن الرقم ده

تعالى نشوف ميثود

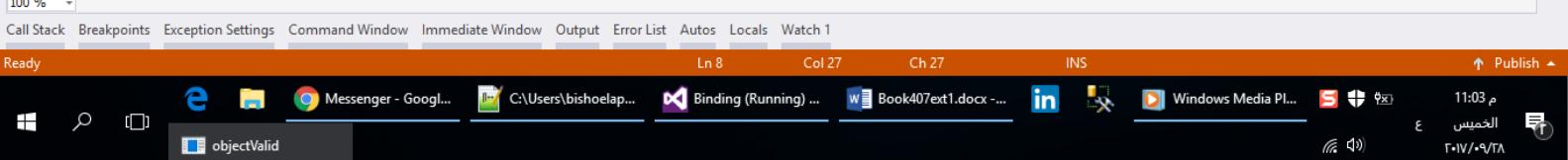
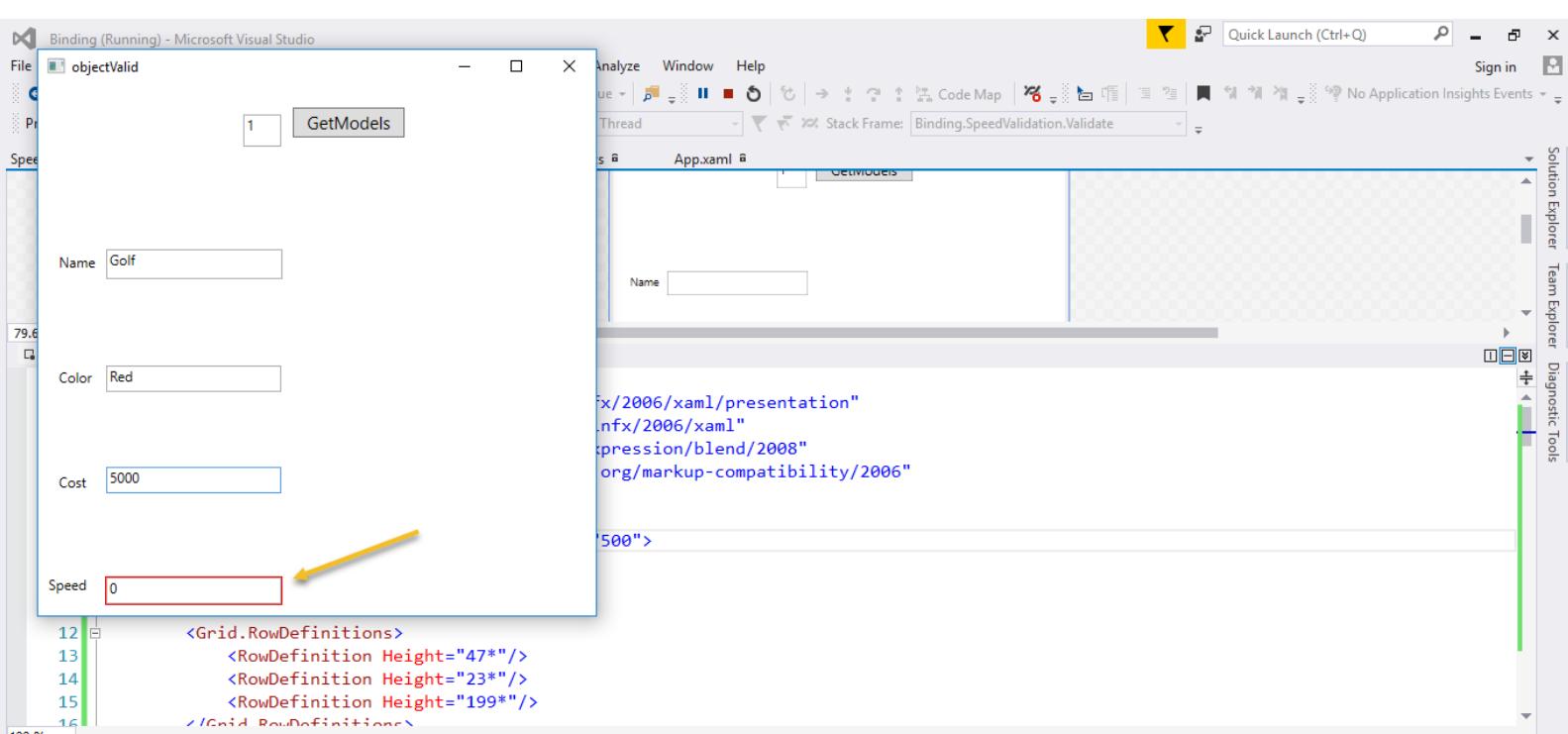
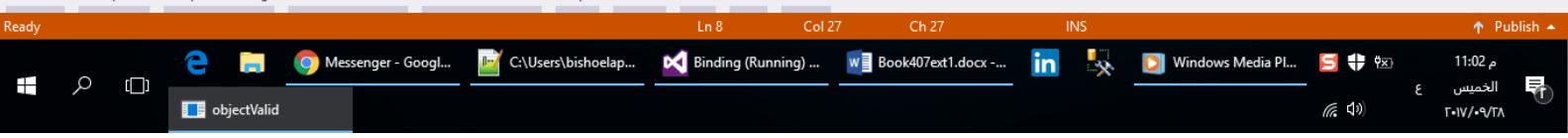
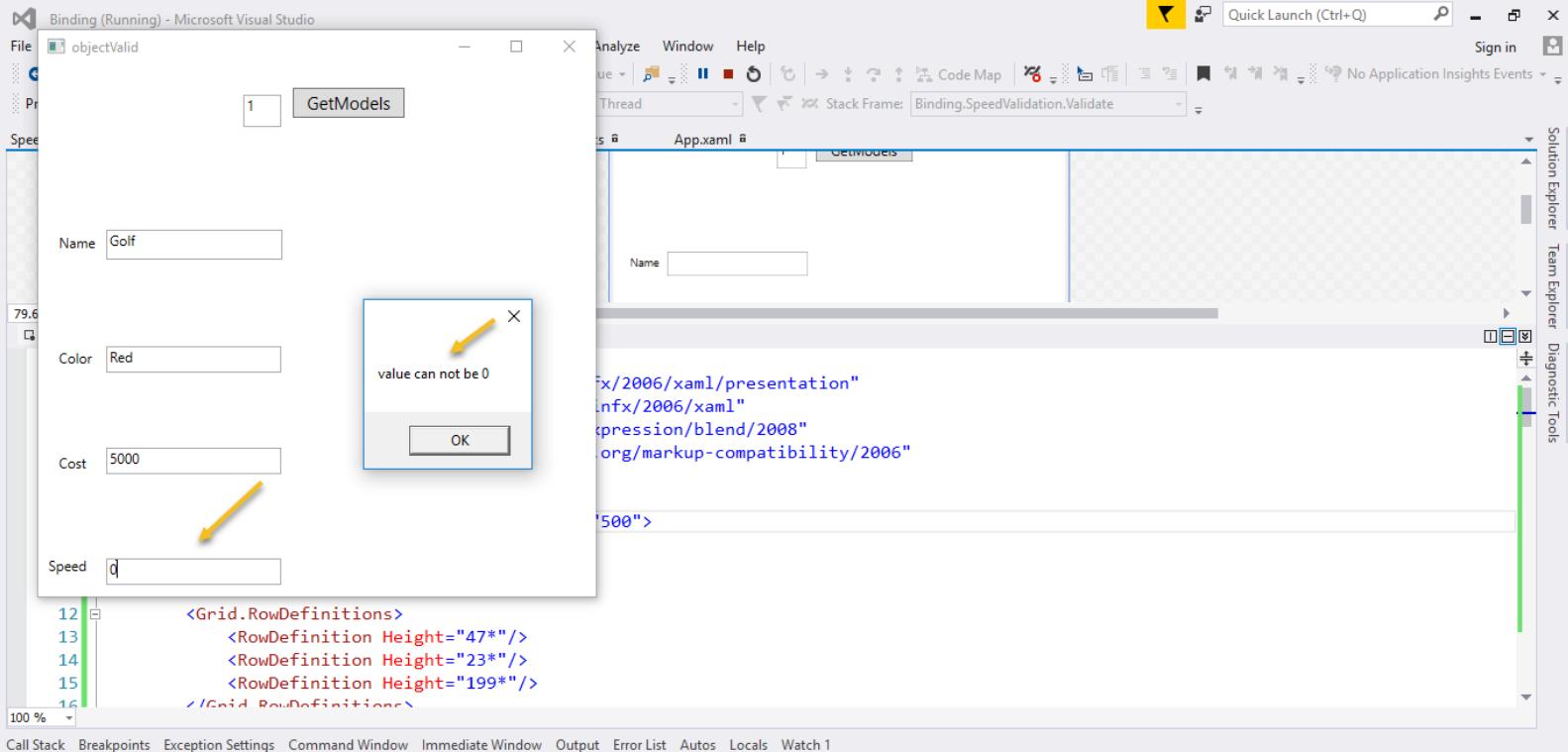
Max

The screenshot shows the Microsoft Visual Studio interface with the code editor open. The code implements a validation rule named 'SpeedValidation'. It includes a private field 'max' and a public property 'Max' with get and set methods. The validation logic checks if the value is zero and returns a validation result if so. The code is as follows:

```
5 using System;
6 using System.Threading.Tasks;
7 using System.Windows.Controls;
8 namespace Binding
9 {
10     class SpeedValidation : ValidationRule
11     {
12         int max;
13         public int Max
14         {
15             get { return max; }
16             set { max = value; }
17         }
18         public override ValidationResult Validate(object value, CultureInfo cultureInfo)
19         {
20             if (int.Parse(value.ToString()) == 0)
21                 return new ValidationResult(false, "value can not be 0");
22
23             return null;
24         }
25     }
26 }
27
```



تعالى نجرب



حاجة اسمها

ايرور تمبلیت ودى بتظهر اول ما يكون فى ايرور وبتبقى جنب الكنترول

cabishoe36811

AGC Academy

Showing a Different Error Indicator

```
• <Style TargetType="{x:Type TextBox}">
  •   <Setter Property="Validation.ErrorTemplate">
  •     <Setter.Value>
  •       <ControlTemplate>
  •         <DockPanel LastChildFill="True">
  •           <TextBlock DockPanel.Dock="Right" Foreground="Red"
    FontSize="14" FontWeight="Bold">*</TextBlock>
  •           <Border BorderBrush="Green" BorderThickness="1">
    <AdornedElementPlaceholder></AdornedElementPlaceholder>
  •         </Border>
  •       </ControlTemplate>
  •     </Setter.Value>
  •   </Setter>
  • </Style>
```



بنديله اسم البروبرى ونعمل اوبيجكت اسمه

AdornedElement

بيسمحلى انى احط الاندكتور ده بجانب الكنترول اللي عايزين نعمله تحقق وعن طريقه اقدر اجيب رساله الايرور وكل حاجة نشوف المثال

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

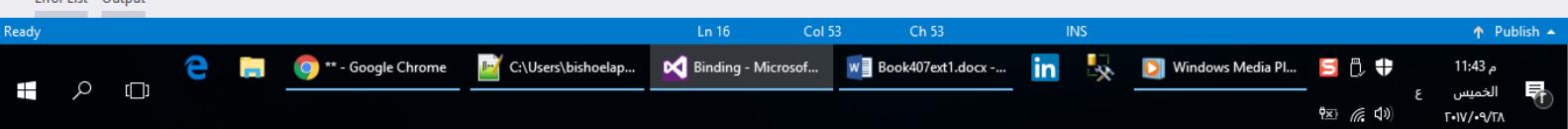
Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

SpeedValidation.cs objectValid.xaml.cs objectValid.xaml Model.cs App.xaml

```
8     Title="objectValid" Height="500" Width="500">
9
10    <Window.Resources>
11        <Style TargetType="TextBox">
12            <Setter Property="Validation.ErrorTemplate">
13                <Setter.Value>
14                    <ControlTemplate>
15                        <DockPanel LastChildFill="True">
16                            <Popup StaysOpen="False" IsOpen="True" PopupAnimation="Slide" Placement="Bottom" ClipToBounds="True"
17                                AllowsTransparency="True" >
18                                <Border Background="White" CornerRadius="4" BorderBrush="Gold" BorderThickness="3">
19                                    <TextBlock Text="{Binding ElementName=error ,Path=AdornedElement.(Validation.Errors)
20                                        [0].ErrorContent}">
21                                        </TextBlock>
22                                </Border></Popup>
23
24
25            </ControlTemplate>
26        </Setter.Value>
27    </Style>
28
29
```

100 % XAML Design

Error List Output



بطع الايرور في

Popup

Binding (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Quick Launch (Ctrl+Q) Sign in

Process: [4224] Binding.vshost.exe Lifecycle Events Thread: [11980] Main Thread Stack Frame: Binding.SpeedValidation.Validate

No Application Insights Events

Solution Explorer Team Explorer Diagnostic Tools

SpeedValidation.cs objectValid.xaml.cs objectValid.xaml Model.cs App.xaml

```
8     Title="objectValid" Height="500" Width="500">
9
10    <Window x:Name="objectValid" ...>
11        <Grid>
12            <Grid.RowDefinitions>
13                <RowDefinition Height="Auto" />
14                <RowDefinition Height="Auto" />
15                <RowDefinition Height="Auto" />
16                <RowDefinition Height="Auto" />
17            </Grid.RowDefinitions>
18            <Button Content="GetModels" Margin="10" Click="GetModels_Click" />
19
20            <FormFlow x:Name="flow" Margin="10" ValidationMode="Manual" ValidationTarget="SelfAndChildren" />
21
22            <TextBlock Text="Name" Margin="10" />
23            <TextBlock Text="Color" Margin="10" />
24            <TextBlock Text="Cost" Margin="10" />
25            <TextBlock Text="Speed" Margin="10" />
26
27            <TextBlock Text="Golf" Margin="10" />
28            <TextBlock Text="Red" Margin="10" />
29            <TextBlock Text="0" Margin="10" />
30            <TextBlock Text="2400" Margin="10" />
31
32            <TextBlock Text="Bad data value. 0 is not valid." Margin="10" />
33
34        </Grid>
35    </Window>
36
37
38
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73
74
75
76
77
78
```

100 % XAML Design

Call Stack Breakpoints Exceptions Command Window Immediate Window Output Errors Watch Locals Watch 1

Ln 16 Col 53 Ch 53 INS

Ready

e C:\Users\bishoelap... Binding (Running... Book407ext1.doc... Windows Media ... objectValid 11:45 م الخميس ٢٠١٧/٩/٦ ENG

شغاله بنجاح

Data provider

بروفيدر بيسمحل انك تعمل ببنج على اوجبيكت موجود في الريسورسز بتاعتك

عامل اوجبيكت وبداخله حاجات موجود في الريسورس الداتا بروفيدر تقدر من خلال الداتا بروفيدر انك تدخل للعنصر وتعمله binding وفيه نوعين منه

اول نوع

Objectdataprovider

бинادي على ميثود داخل كلاس

ثاني نوع

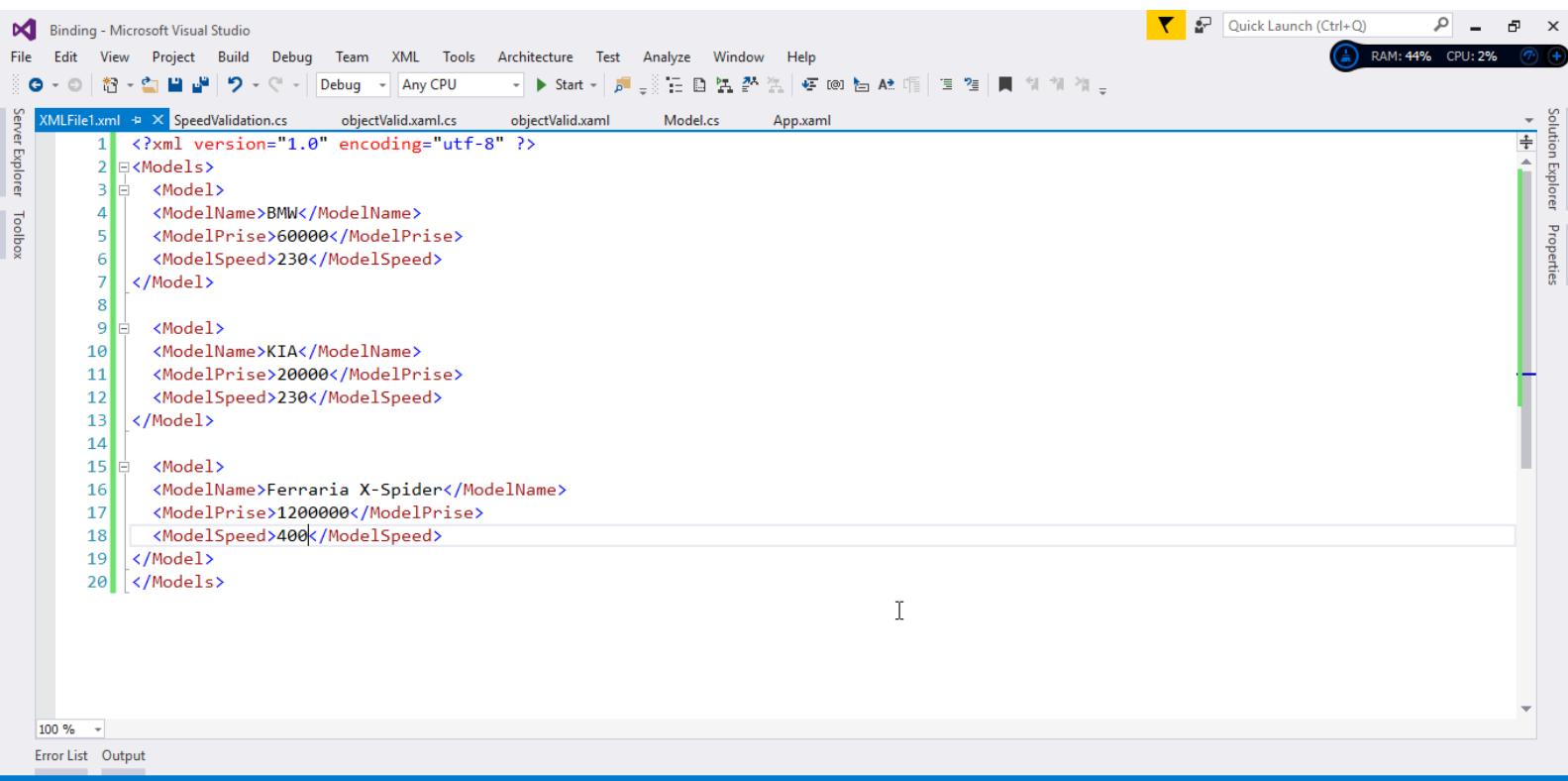
Xmldataprovider

بيجيب معلومات من ال

Xml

مباشرة

نشتعل



```
<?xml version="1.0" encoding="utf-8" ?>
<Models>
  <Model>
    <ModelName>BMW</ModelName>
    <ModelPrise>60000</ModelPrise>
    <ModelSpeed>230</ModelSpeed>
  </Model>
  <Model>
    <ModelName>KIA</ModelName>
    <ModelPrise>20000</ModelPrise>
    <ModelSpeed>230</ModelSpeed>
  </Model>
  <Model>
    <ModelName>Ferraria X-Spider</ModelName>
    <ModelPrise>1200000</ModelPrise>
    <ModelSpeed>400</ModelSpeed>
  </Model>
</Models>
```

ملف

Xml

```
1 <Window x:Class="Binding.ProviderXML"
2     xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3     xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4     xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
5     xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6     xmlns:local="clr-namespace:Binding"
7     mc:Ignorable="d"
8     Title="ProviderXML" Height="500" Width="500">
9     <Window.Resources>
10    <XmlDataProvider Source="ModelsXML.xml" XPath="Models" x:Key="models"></XmlDataProvider>
11  </Window.Resources>
12
13  <Grid>
14    <Grid.RowDefinitions>
15      <RowDefinition Height="47*"/>
16      <RowDefinition Height="23*"/>
17      <RowDefinition Height="199*"/>
18    </Grid.RowDefinitions>
19    <Grid Name="grd" Grid.RowSpan="3" DataContext="{Binding ElementName=lstModels,Path=SelectedItem}" >
20      <Grid.ColumnDefinitions>
21        <ColumnDefinition/>
22      </Grid.ColumnDefinitions>
23      <Grid.RowDefinitions>
24        <RowDefinition Height="14*"/>

```

بعمل الريسورس وبقوله السورس اسم ملف

Xml

وبعدين

Xpath

بمرر له

ال

Root

Element

واخيرا المفتاح

Binding - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 65% CPU: 3%

ProviderXML.xaml.cs

ProviderXML.xaml.cs

```

<Label x:Name="label" Content="Name" HorizontalAlignment="Left" VerticalAlignment="Top" Margin="13,0,0,0" Grid.Row="2" Height="26" Width="42"/>
<TextBox x:Name="txtName" Text="{Binding XPath=ModelSpeed}" HorizontalAlignment="Left" Height="26" Margin="59,2,0,0" TextWrapping="Wrap" VerticalAlignment="Top" Width="153" Grid.Row="2"/>
<Label x:Name="label1" Content="Color" HorizontalAlignment="Left" Margin="13,5,0,0" VerticalAlignment="Top" Grid.Row="3" Height="26" Width="39"/>
<TextBox x:Name="txtColor" Text="{Binding XPath=ModelColor}" HorizontalAlignment="Left" Height="23" TextWrapping="Wrap" VerticalAlignment="Top" Width="152" Margin="59,8,0,0" Grid.Row="3"/>
<Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>
<TextBox x:Name="txtcost" Text="{Binding XPath=ModelPrise}" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top" Height="26" Width="43"/>
<TextBox x:Name="txtspeed" Text="{Binding XPath=ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<ListBox x:Name="lstModels" HorizontalAlignment="Left" Height="70" Margin="10,0,0,0" VerticalAlignment="Top" ItemsSource="{Binding Source={StaticResource models},XPath=Model}" DisplayMemberPath="ModelName">
</ListBox>
</Grid>

```

100 % XAML Design

Error List Output

بمرر المفتاح الخاص بالرسورس ثم ال

Xpath

Model

وبطاع فوق بقوله ال

Xpath

كذا لكل تيكست بوكس

ونجرب

Binding (Running) - Microsoft Visual Studio

Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 68% CPU: 21%

ProviderXML.xaml.cs

ProviderXML.xaml.cs

```

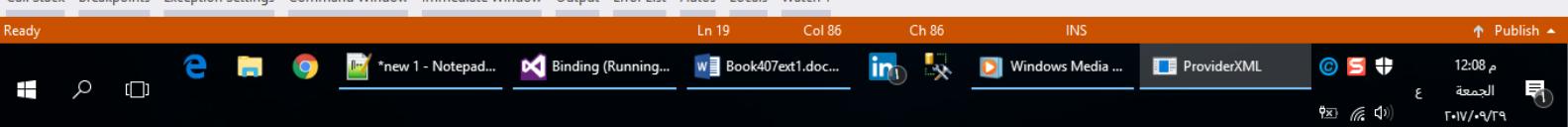
<Label x:Name="label" Content="Name" HorizontalAlignment="Left" VerticalAlignment="Top" Margin="13,0,0,0" Grid.Row="2" Height="26" Width="42"/>
<TextBox x:Name="txtName" Text="{Binding XPath=ModelSpeed}" HorizontalAlignment="Left" Height="26" Margin="59,2,0,0" TextWrapping="Wrap" VerticalAlignment="Top" Width="153" Grid.Row="2"/>
<Label x:Name="label1" Content="Color" HorizontalAlignment="Left" Margin="13,5,0,0" VerticalAlignment="Top" Grid.Row="3" Height="26" Width="39"/>
<TextBox x:Name="txtColor" Text="{Binding XPath=ModelColor}" HorizontalAlignment="Left" Height="23" TextWrapping="Wrap" VerticalAlignment="Top" Width="152" Margin="59,8,0,0" Grid.Row="3"/>
<Label x:Name="label2" Content="Cost" HorizontalAlignment="Left" Margin="13,0,0,0" Grid.Row="4" VerticalAlignment="Top" RenderTransformOrigin="0.368,-1.5" Height="26" Width="34"/>
<TextBox x:Name="txtcost" Text="{Binding XPath=ModelPrise}" HorizontalAlignment="Left" Height="23" Margin="59,0,0,0" Grid.Row="4" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<Label x:Name="label3" Content="Speed" HorizontalAlignment="Left" Margin="4,10,0,0" Grid.Row="5" VerticalAlignment="Top" Height="26" Width="43"/>
<TextBox x:Name="txtspeed" Text="{Binding XPath=ModelSpeed}" HorizontalAlignment="Left" Height="23" Margin="59,17,0,0" Grid.Row="5" TextWrapping="Wrap" VerticalAlignment="Top" Width="152"/>
<ListBox x:Name="lstModels" HorizontalAlignment="Left" Height="70" Margin="10,0,0,0" VerticalAlignment="Top" ItemsSource="{Binding Source={StaticResource models},XPath=Model}" DisplayMemberPath="ModelName">
</ListBox>
</Grid>

```

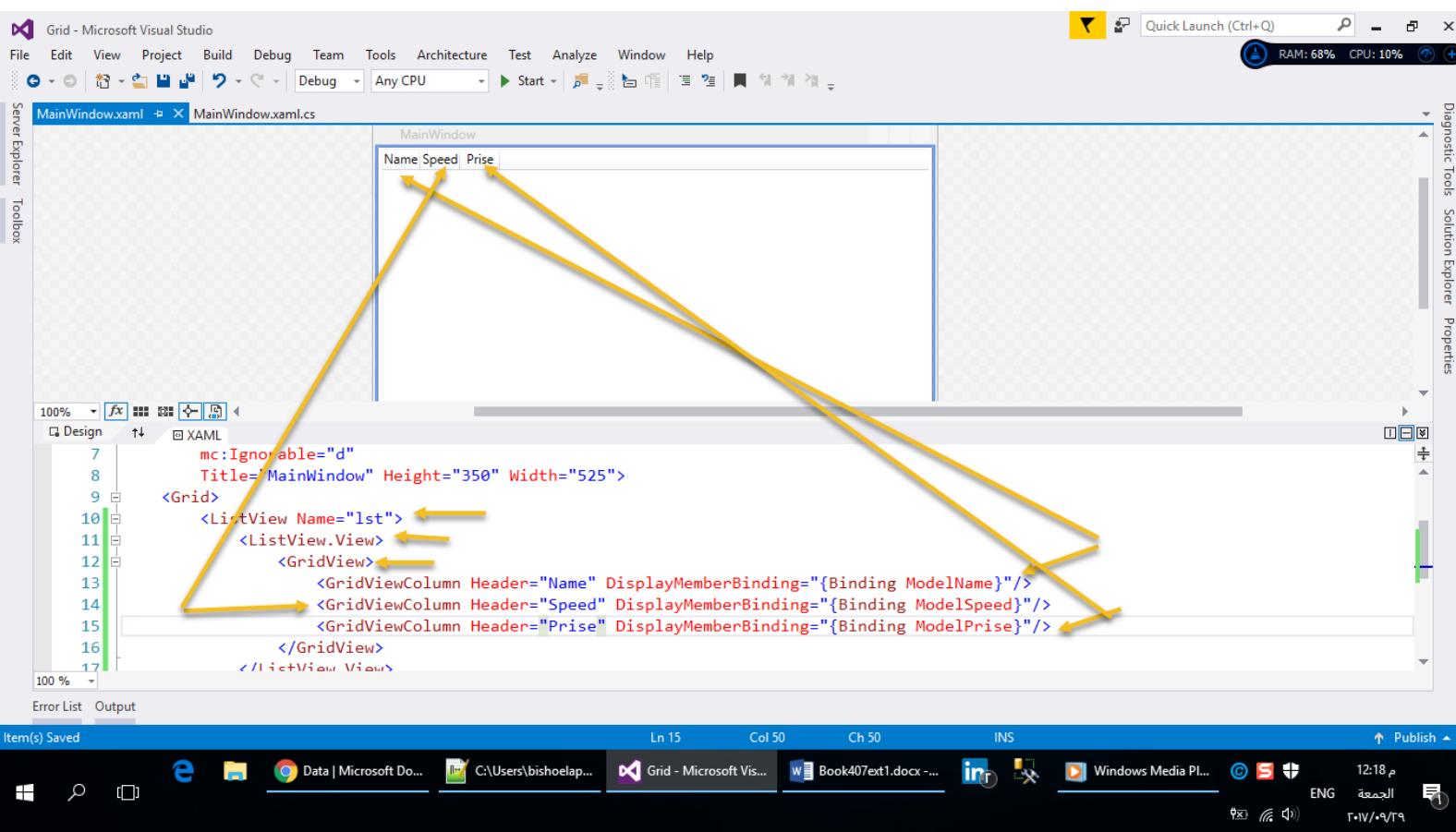
100 % XAML Design

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1

Ln 19 Col 86 Ch 86 INS



Grid



بنضيف ليست فيو

وبنحط فيها 3 اعمدة ونعملها

Binding

Grid - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 72% CPU: 6%

MainWindow.xaml MainWindow.xaml.cs

Grid

```
8  using System.Windows.Controls;
9  using System.Windows.Data;
10 using System.Windows.Documents;
11 using System.Windows.Input;
12 using System.Windows.Media;
13 using System.Windows.Media.Imaging;
14 using System.Windows.Navigation;
15 using System.Windows.Shapes;
16
17 namespace Grid
18 {
19     /// <summary>
20     /// Interaction logic for MainWindow.xaml
21     /// </summary>
22     public partial class MainWindow : Window
23     {
24         public MainWindow()
25         {
26             InitializeComponent();
27             lst.ItemsSource = ModelDataAccess.GetModels();
28         }
29     }
30 }
```

100 % Error List Output

Ln 27 Col 56 Ch 56 INS



Grid (Running) - Microsoft Visual Studio

File MainWindow

Name Speed Prise

Golf	2400	5000
Jelly	1600	2500
shell	3600	50500

Ln 27 Col 56 Ch 56 INS

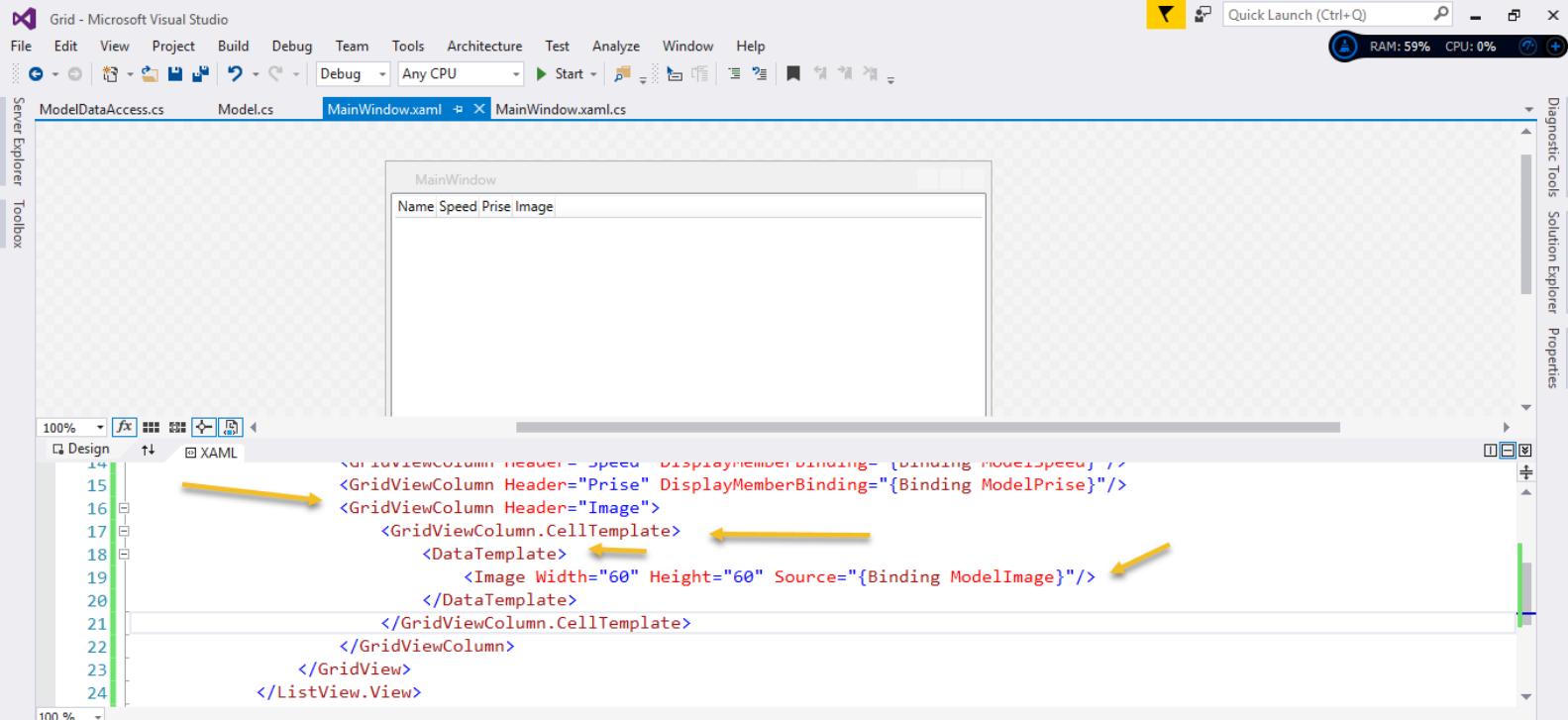
```
19     /// <summary>
20     /// Interaction logic for MainWindow.xaml
21     /// </summary>
22     public partial class MainWindow : Window
23     {
24         public MainWindow()
25         {
26             InitializeComponent();
27             lst.ItemsSource = ModelDataAccess.GetModels();
28         }
29     }
```

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1 Ready

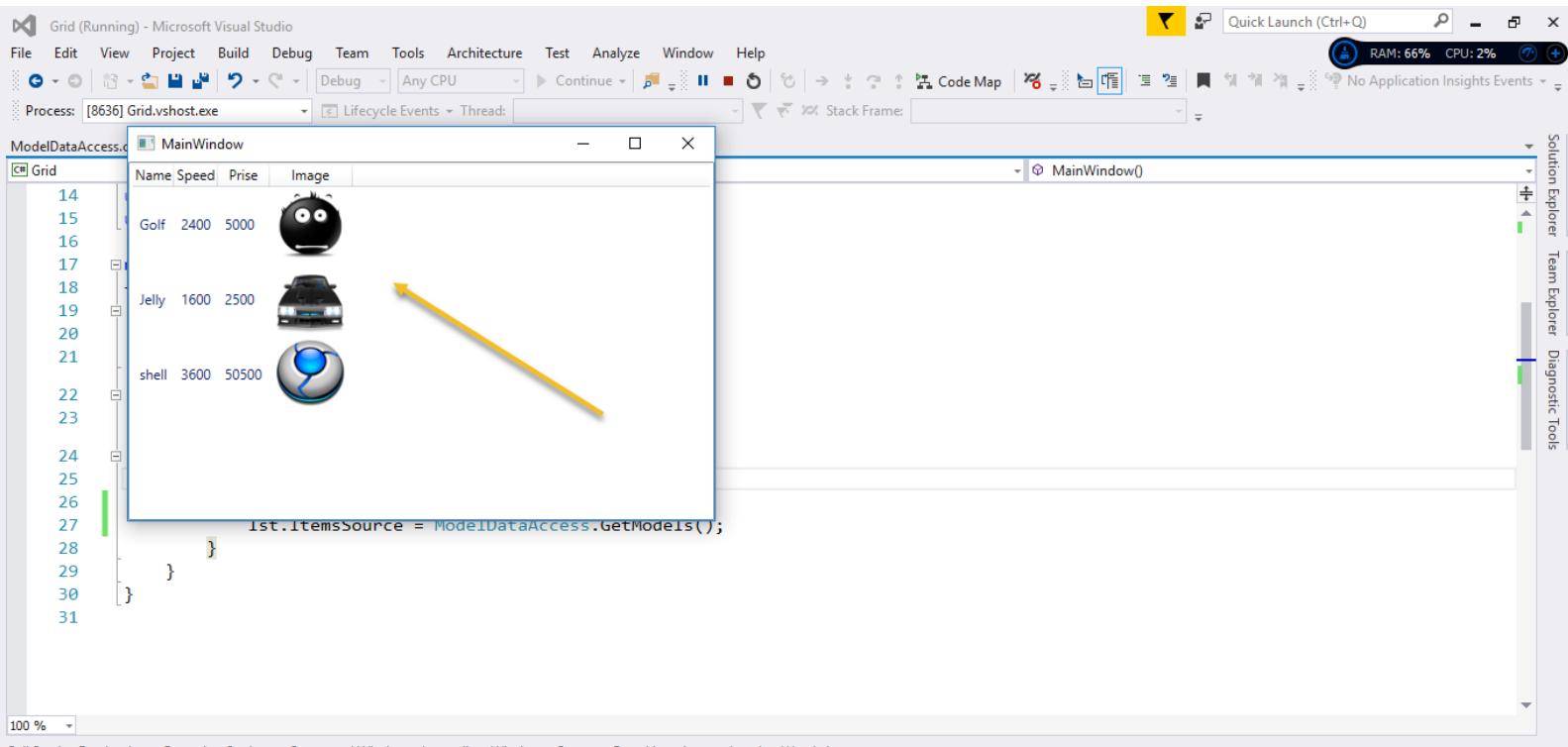
Windows Taskbar showing Microsoft Word, Google Chrome, Microsoft Visual Studio, and other icons.

جاب البيانات بنجاح

نحط صورة



لكرود اهو وطبعاً نحط الصور داخل المشروع



لہر بنجاح

Data Grid

The screenshot shows the Microsoft Visual Studio interface with the title "Data Grid". The main area displays XAML code for a window containing a DataGrid:

```
6 <Window x:Name="Grid1" Title="Grid" Height="300" Width="300">
7     <Grid>
8         <DataGrid Name="grd">
9             <DataGrid.Columns>
10                <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
11                <DataGridHyperlinkColumn Header="prise" Binding="{Binding ModelPrise}"/>
12            </DataGrid.Columns>
13        </DataGrid>
14    </Grid>
15 </Window>
```

Two yellow arrows point from the text "ModelName" and "ModelPrise" in the XAML code to the corresponding binding properties in the "Grid1" class code below.

Visual Studio status bar: Ready, Ln 16, Col 12, Ch 12, INS.

عملت حقلين

The screenshot shows the Microsoft Visual Studio interface with the title "Grid - Microsoft Visual Studio". The main area displays C# code for a "BindGrid" class:

```
14 using System.Windows.Shapes;
15
16 namespace Grid
17 {
18     /// <summary>
19     /// Interaction logic for BindGrid.xaml
20     /// </summary>
21     public partial class BindGrid : Window
22     {
23         public BindGrid()
24         {
25             InitializeComponent();
26             grd.ItemsSource = ModelDataAccess.GetModels();
27         }
28     }
29 }
30
```

Visual Studio status bar: Ready, Ln 26, Col 59, Ch 59, INS.

Grid

Name	prise	ModelName	ModelColor	ModelSpeed	ModelPrise	ModelImage	Error	DependencyObjectType	IsSealed	Dispatcher	RAM: 60% CPU: 5%
5000	Golf	Red	2400	5000	amazing.ico			System.Windows.DependencyObjectType	<input type="checkbox"/>	System.Windows.Threading.Dispatcher	
2500	Jelly	Blue	1600	2500	091_069.ico			System.Windows.DependencyObjectType	<input type="checkbox"/>	System.Windows.Threading.Dispatcher	
50500	shell	green	3600	50500	091_088.ico			System.Windows.DependencyObjectType	<input type="checkbox"/>	System.Windows.Threading.Dispatcher	

نجح وجب المطلوب لكن جاب حقول ملهاش لازمة لاته عمل

Auto generate

Grid - Microsoft Visual Studio

BindGrid.xaml.cs BindGrid.xaml App.xaml

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 59% CPU: 9%

BindGrid.xaml.cs BindGrid.xaml App.xaml

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

Design XAML

```

6      xmlns:local="clr-namespace:Grid"
7      mc:Ignorable="d"
8      Title="Grid" Height="300" Width="300">
9      <Grid>
10     <DataGrid Name="grd" AutoGenerateColumns="False">
11       <DataGrid.Columns>
12         <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
13         <DataGridHyperlinkColumn Header="prise" Binding="{Binding ModelPrise}"/>
14       </DataGrid.Columns>
15     </DataGrid>
16   </Grid>
17 </Window>
18

```

100 %

Ln 10 Col 57 Ch 57 INS

Item(s) Saved

new 1 - Notepad++ Grid - Microsoft Vis... Book407ext1.docx Windows Media Pl... RAM: 59% CPU: 9% 12:52 م الجمعة ٢٠١٧/٩/٣٩ ENG

بنلغى توليد الاعمدة وبخليه يجيب بياناتى المحددة فقط ونجرب

Grid (Running) - Microsoft Visual Studio

File Tools Architecture Test Analyze Window Help

RAM: 62% CPU: 12%

No Application Insights Events

Grid Name prise

Golf	5000
Jelly	2500
shell	50500

Design XAML

```
6 <Grid>
7     xmlns:local="clr-namespace:Grid"
8     mc:Ignorable="d"
9     Title="Grid" Height="300" Width="300">
10    <Grid>
11        <DataGrid Name="grd" AutoGenerateColumns="False">
12            <DataGrid.Columns>
13                <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
14                <DataGridHyperlinkColumn Header="prise" Binding="{Binding ModelPrise}"/>
15            </DataGrid.Columns>
16        </DataGrid>
17    </Grid>
18 </Window>
```

Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ready

12:53 م الجمعة ٢٠١٧/٩/٣٩

نجح

عرض صورة

Grid (Running) - Microsoft Visual Studio

File Tools Architecture Test Analyze Window Help

RAM: 63% CPU: 3%

No Application Insights Events

BindGrid.xaml.cs BindGrid.xaml App.xaml

Golf	5000	
Jelly	2500	
shell	50500	

Design XAML

```
12 <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
13 <DataGridHyperlinkColumn Header="prise" Binding="{Binding ModelPrise}"/>
14 <DataGridTemplateColumn>
15     <DataGridTemplateColumn.CellTemplate>
16         <DataTemplate>
17             <Image Width="60" Height="60" Source="{Binding ModelImage}"/>
18         </DataTemplate>
19     </DataGridTemplateColumn.CellTemplate>
20 </DataGridTemplateColumn>
21 </DataGrid.Columns>
22 </DataGrid>
23 </Grid>
24 </Window>
```

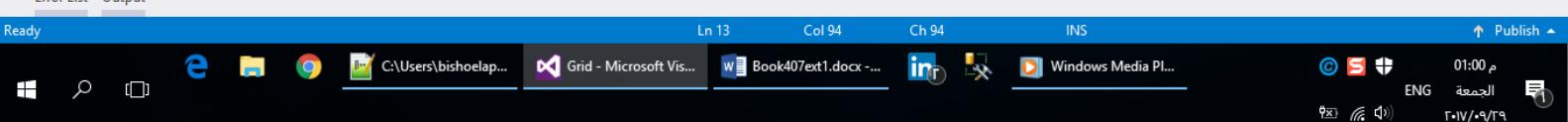
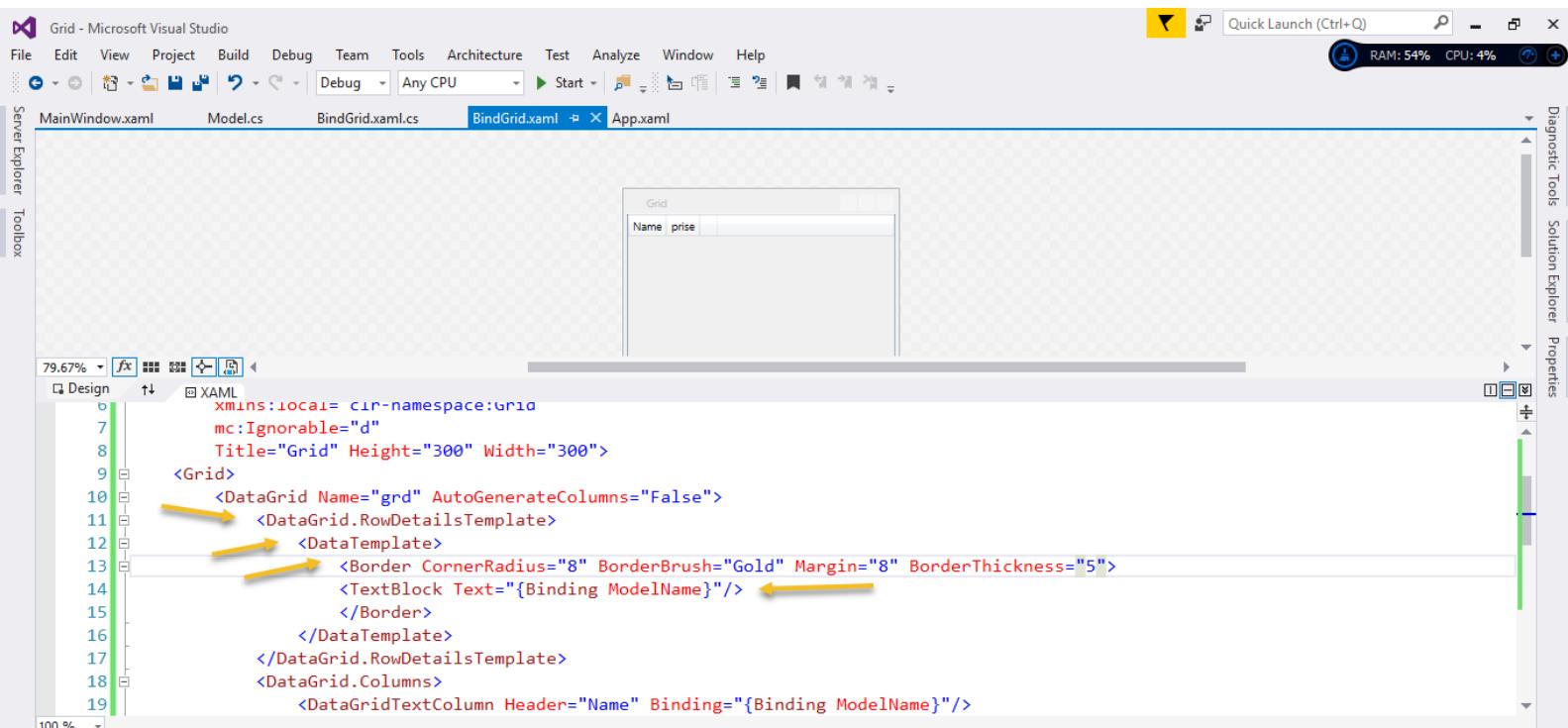
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List... Autos Locals Watch 1

Ready

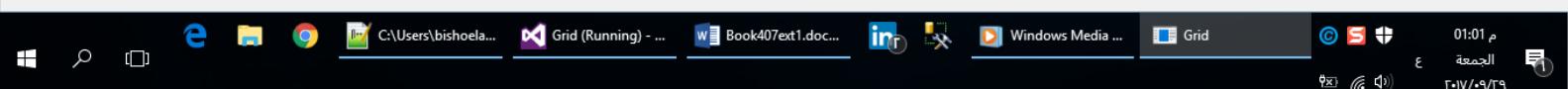
12:55 م الجمعة ٢٠١٧/٩/٣٩

نجح

عرض تفاصيل السجل



Name	prise	
Golf	5000	
Jelly	2000	
shell	50500	



اهو عرضلى اسم الموديل زى ماعملت ولما اضغط على السجل يعرضلى تفاصيله

Data Grid Editing

Grid - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 60% CPU: 2%

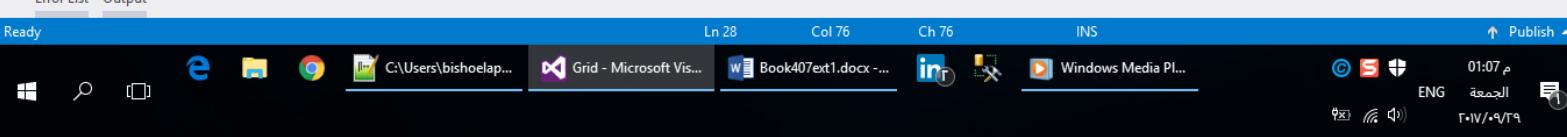
MainWindow.xaml Model.cs BindGrid.xaml BindGrid.xaml App.xaml

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

Design XAML

```
</DataTemplate>
</DataGridRowDetailsTemplate>
<DataGrid.Columns>
    <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
    <DataGridTemplateColumn Header="prise">
        <DataGridTemplateColumn.CellTemplate>
            <DataTemplate>
                <TextBlock Text="{Binding ModelPrise}"></TextBlock>
            </DataTemplate>
        </DataGridTemplateColumn.CellTemplate>
        <DataGridTemplateColumn.CellEditingTemplate>
            <DataTemplate>
                <TextBox BorderBrush="Green" BorderThickness="3">
                    </TextBox>
                </DataTemplate>
            </DataGridTemplateColumn.CellEditingTemplate>
        </DataGridTemplateColumn>
    <DataGridTemplateColumn>
```

100 % Error List Output



Grid (Running) - Microsoft Visual Studio

Name prise

	Name	prise
Golf	5000	
Jelly	2500	
shell	50500	

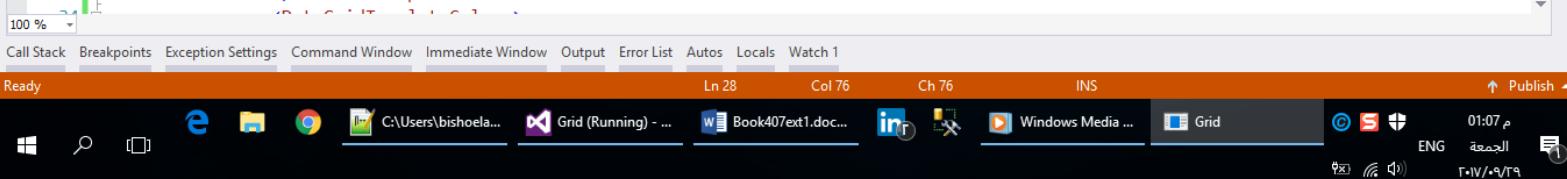
File Tools Architecture Test Analyze Window Help

Any CPU Continue Cycle Events Thread: Stack Frame: Code Map

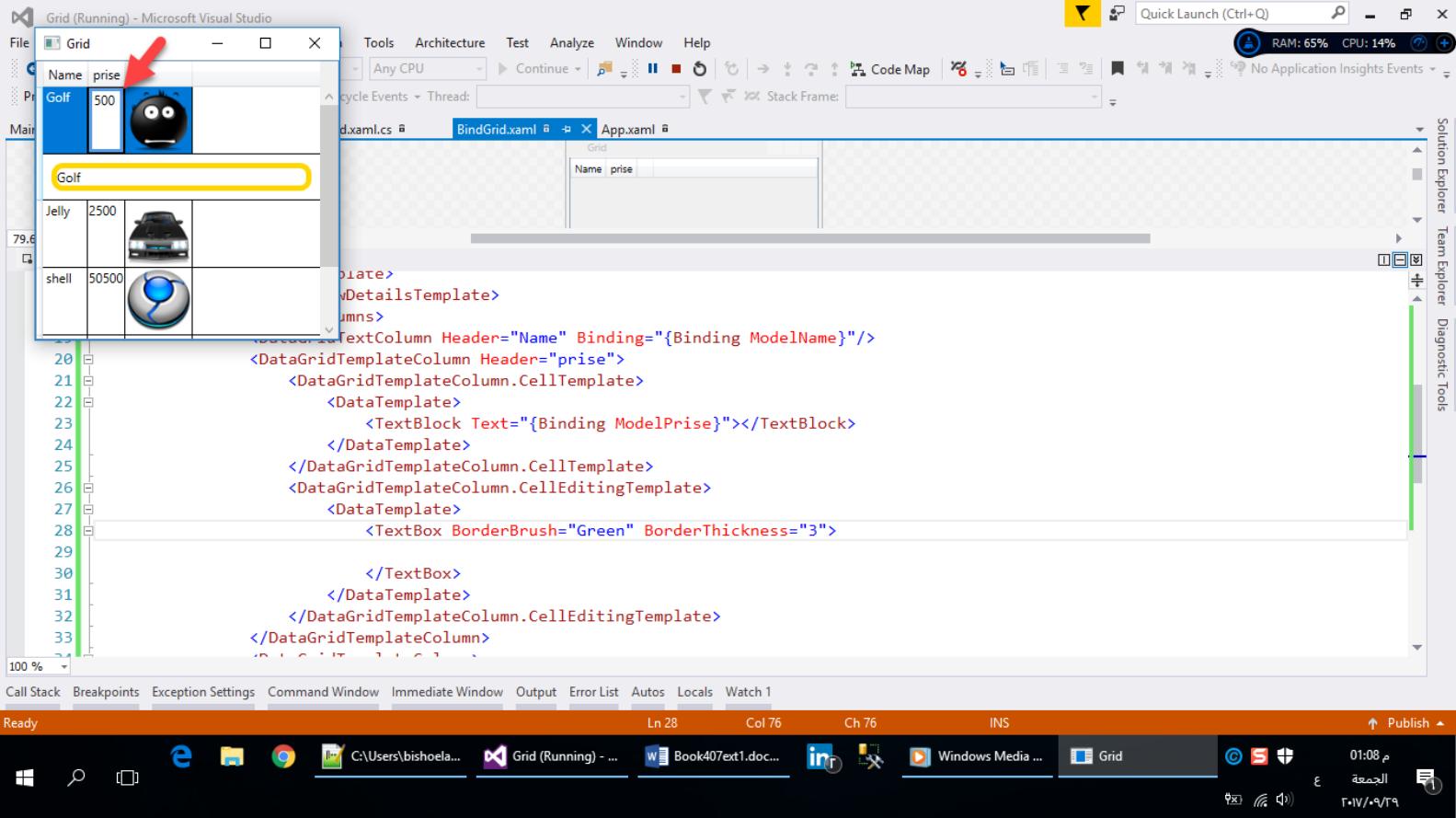
Ln 28 Col 76 Ch 76 INS

```
</DataTemplate>
</DataGridRowDetailsTemplate>
<DataGrid.Columns>
    <DataGridTextColumn Header="Name" Binding="{Binding ModelName}"/>
    <DataGridTemplateColumn Header="prise">
        <DataGridTemplateColumn.CellTemplate>
            <DataTemplate>
                <TextBlock Text="{Binding ModelPrise}"></TextBlock>
            </DataTemplate>
        </DataGridTemplateColumn.CellTemplate>
        <DataGridTemplateColumn.CellEditingTemplate>
            <DataTemplate>
                <TextBox BorderBrush="Green" BorderThickness="3">
                    </TextBox>
                </DataTemplate>
            </DataGridTemplateColumn.CellEditingTemplate>
        </DataGridTemplateColumn>
    <DataGridTemplateColumn>
```

100 % Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Locals Watch 1



هندوس على السعر

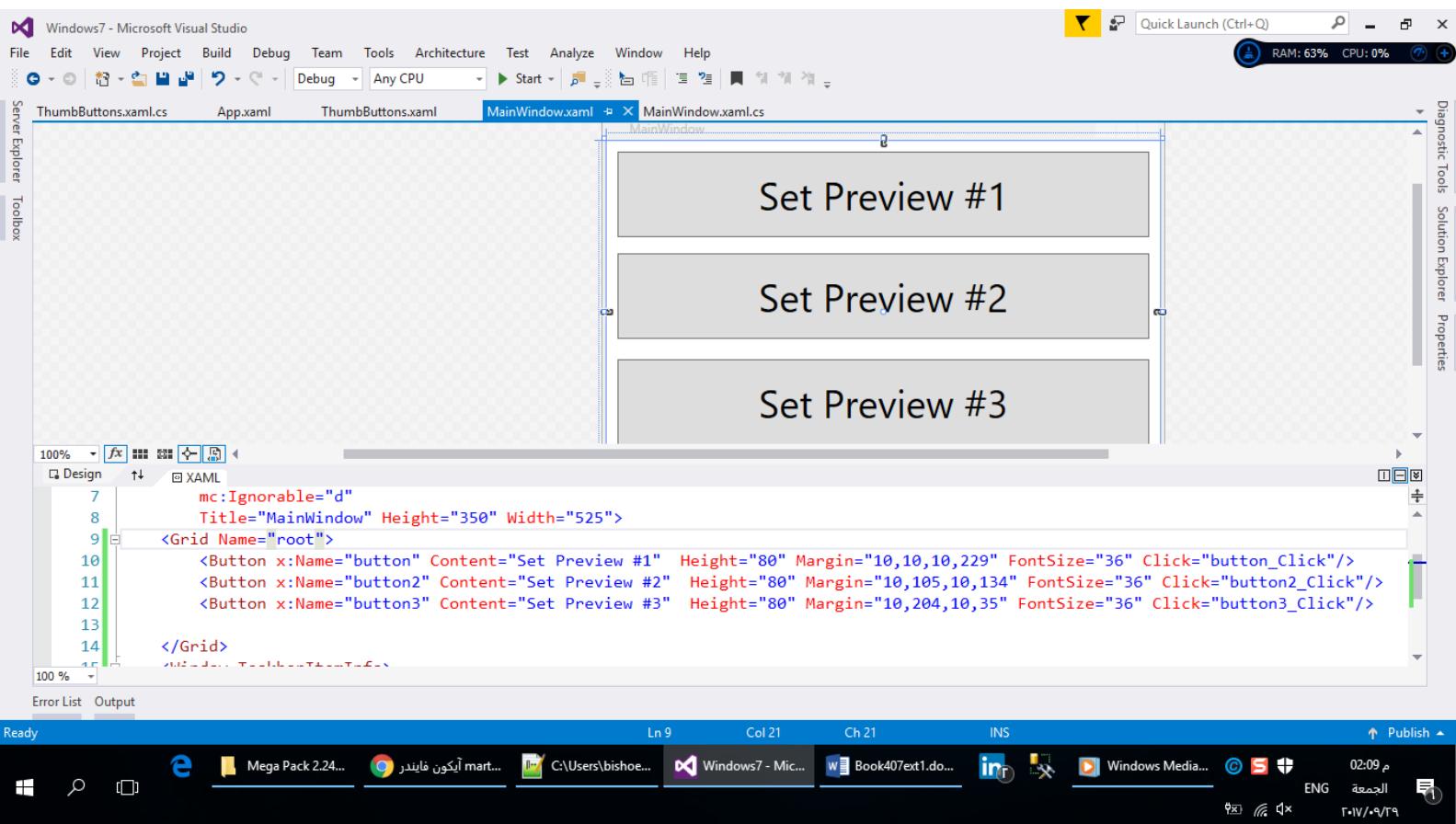


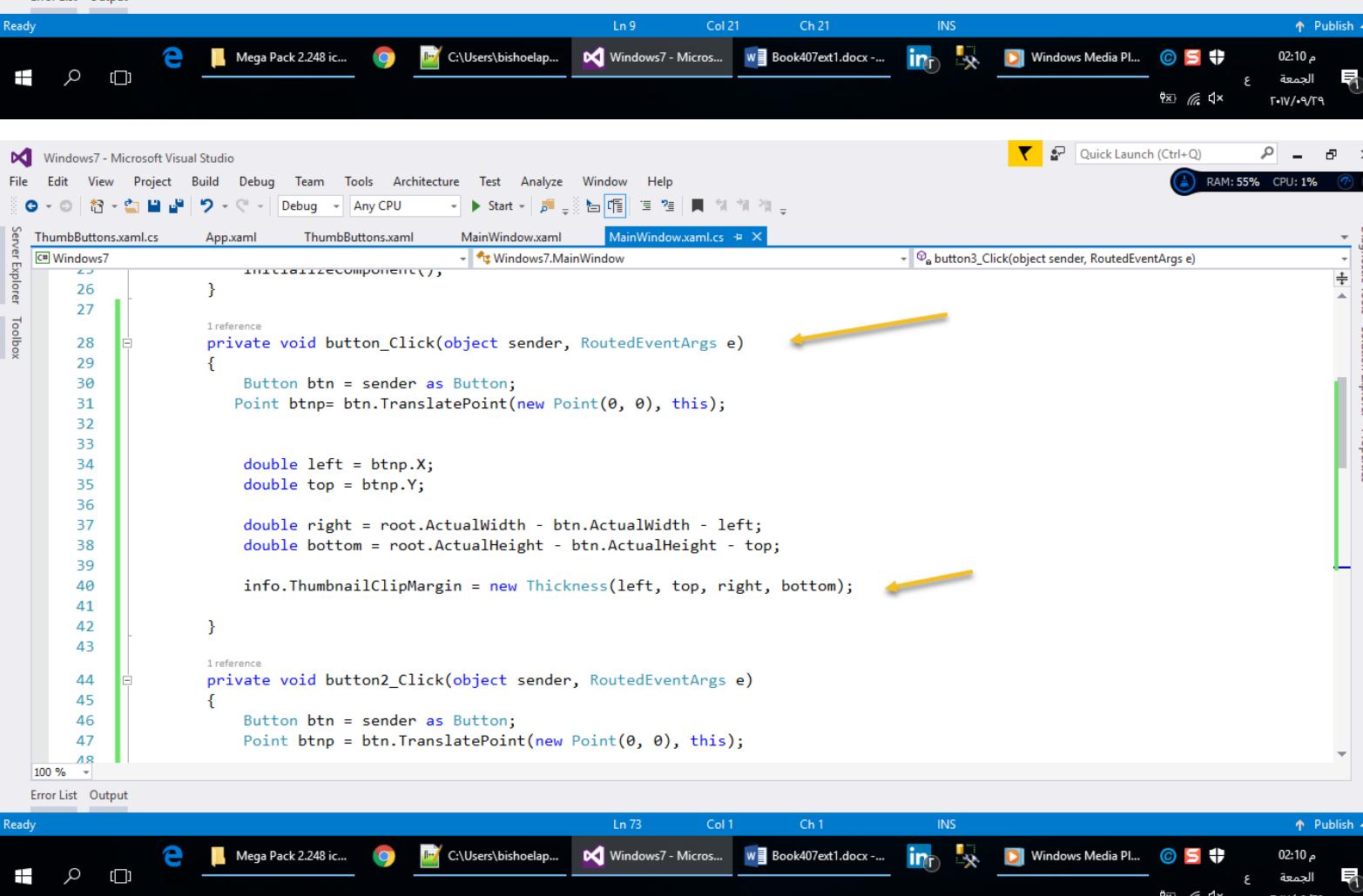
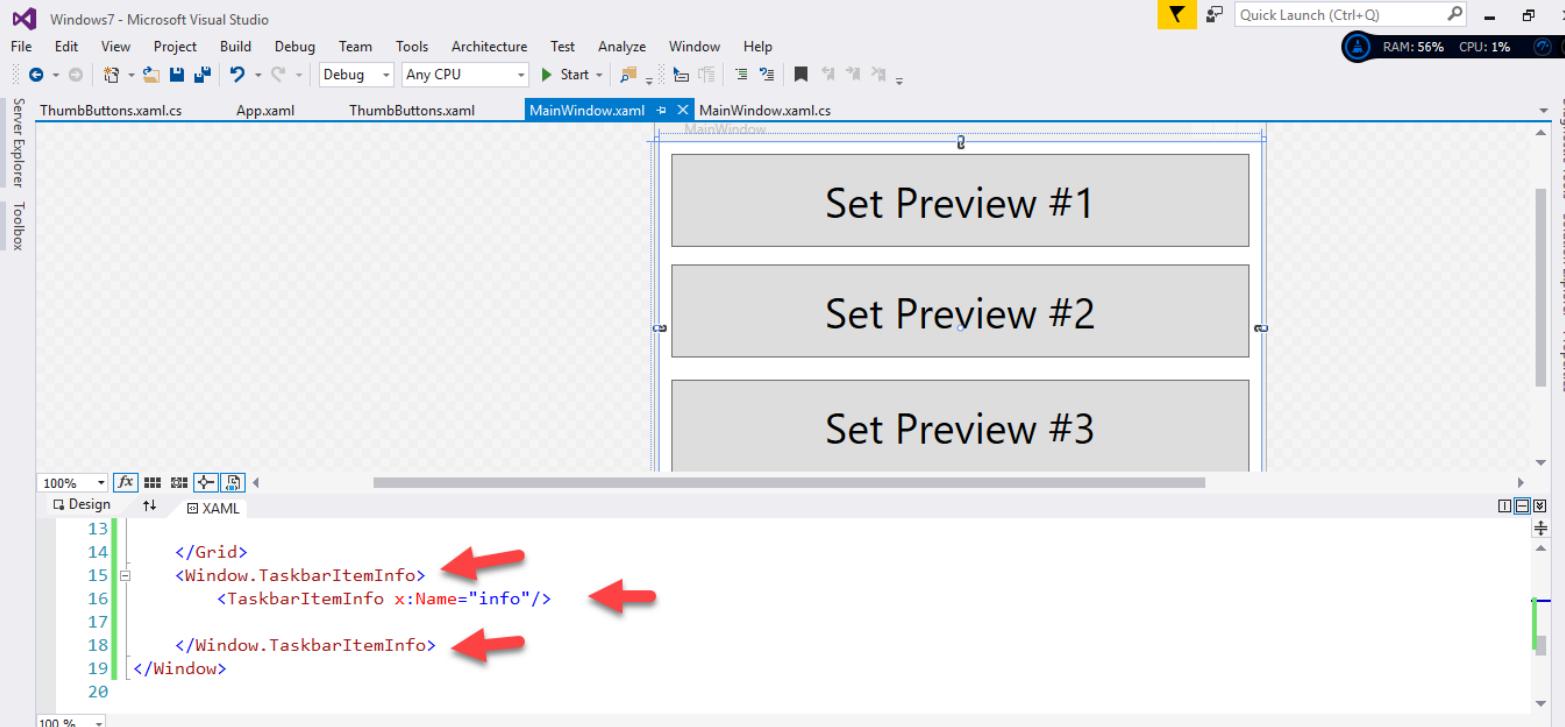
عدله اهو وحوله لتيكست بوكس واشيل الماوس هيرجع لقيمه الطبيعيه زى ماعارفينا عشان ميحصلش ايرور ومعموله كده للحماية من الايرور
وممكن بدل التيكست بوكس احط اى كنترول

Windows7



عازین لما نفق على برنامج شغال فى التاسك بار يطلعى زراير تحكم زى ما واضح كده فى الصورة





نحدد له الزر ثم بنقوم بقص الزر

```
Point btmp= btn.TranslatePoint(new Point(0, 0), this)
```

يُبتدئ من 0 و 0 باتجاه الوبيندو نفسها

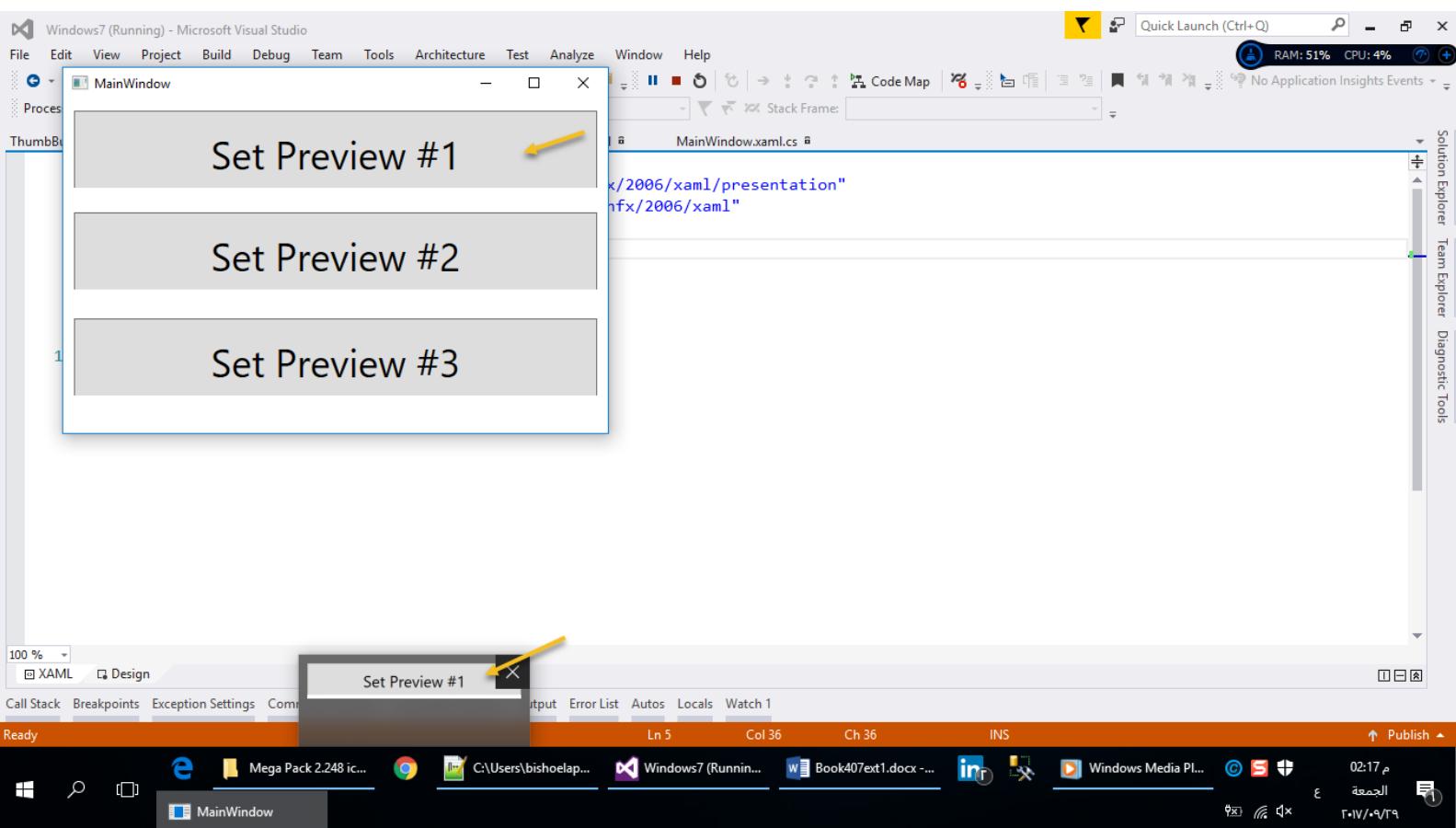
يندخله باقى المقاسات ثم تحت بقوله العنصر الى، اسمه

Info

هـ الـلـي عـمـلـتـه فـي

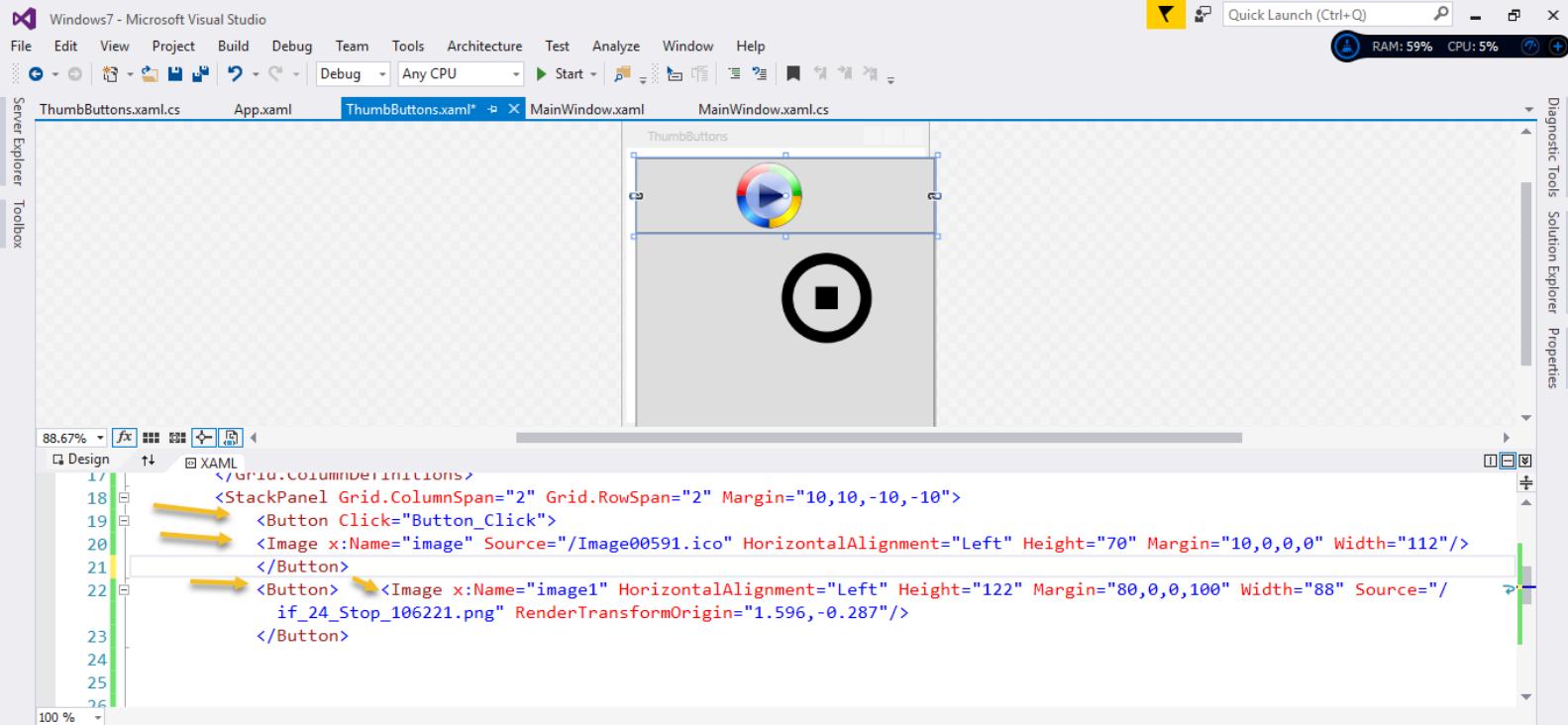
Xaml

وامر لـ المطلوب ونشغل

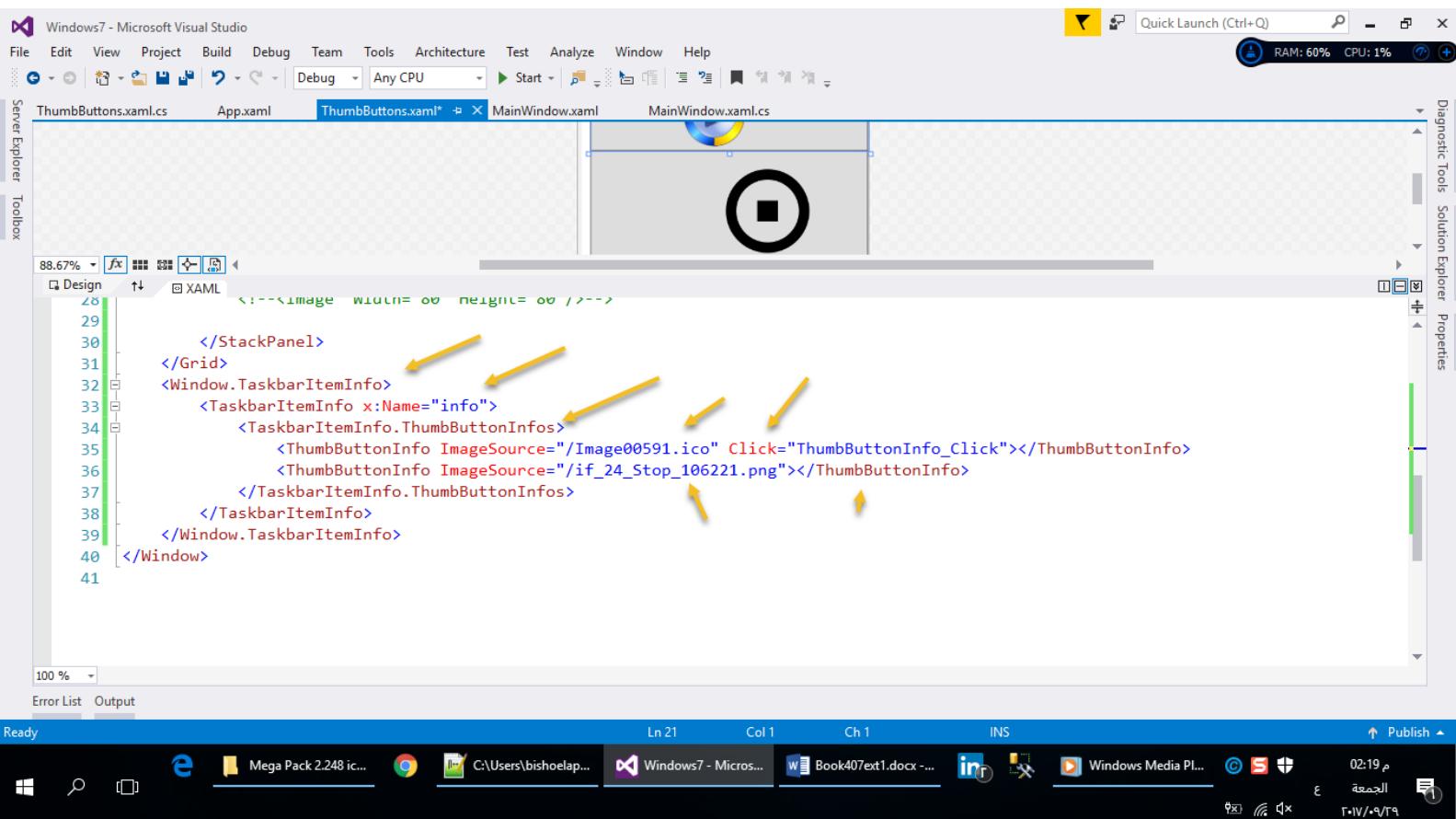


دوست على الزر وشوف تحت جابلى الزر المطلوب بنجاح

عمل برناجمنا يكون له ازار فى التاسك بار زى الوبيندوز ميديا بلاير



بخط زر وصورة وزر وصورة ونعمل



Windows7 - Microsoft Visual Studio

File Edit View Project Build Debug Team Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) RAM: 61% CPU: 1%

Server Explorer Toolbox Diagnostic Tools Solution Explorer Properties

ThumbButtons.xaml.cs App.xaml ThumbButtons.xaml* MainWindow.xaml MainWindow.xaml.cs Windows7

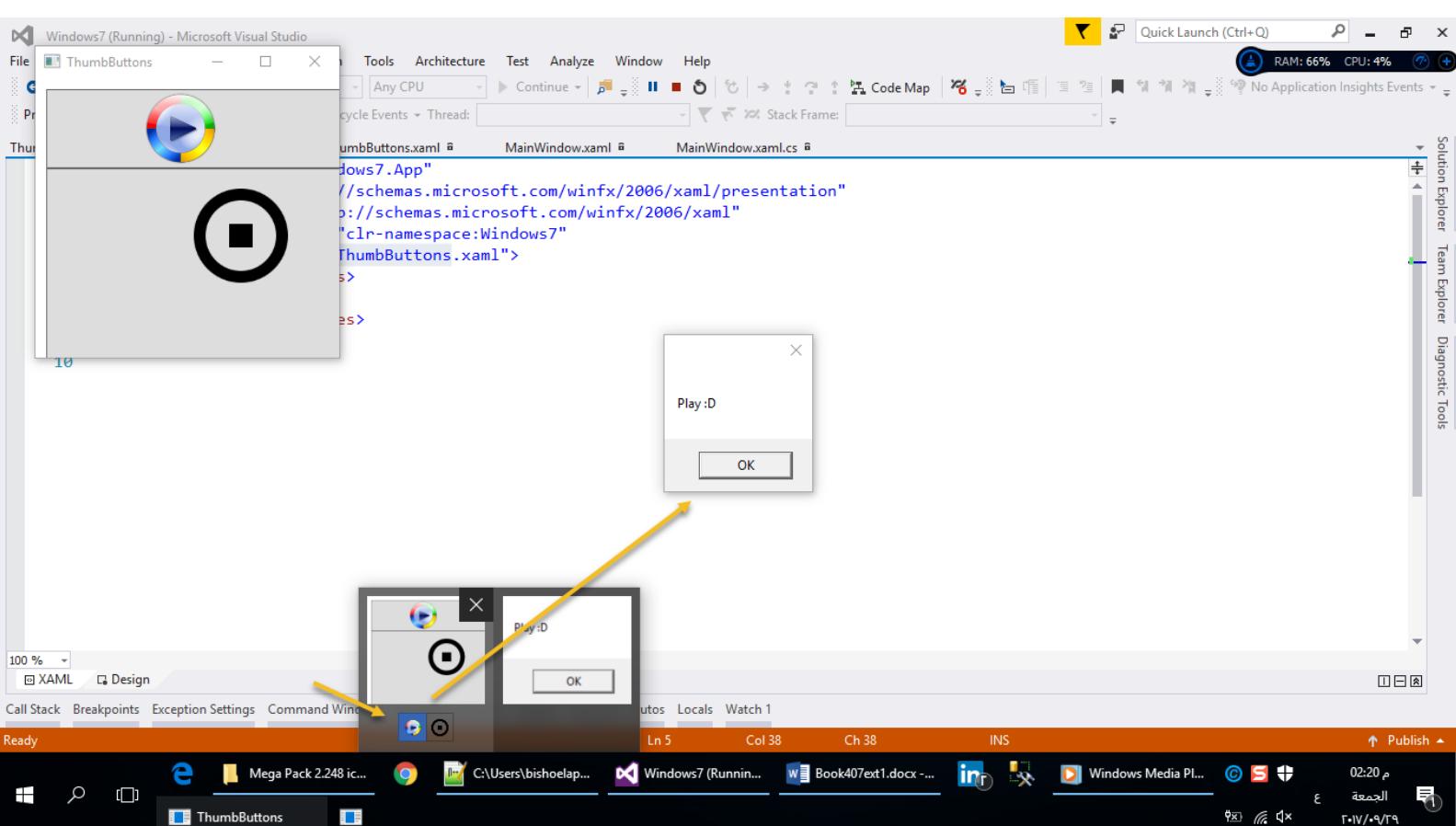
```
19     /// </summary>
20     public partial class ThumbButtons : Window
21     {
22         public ThumbButtons()
23         {
24             InitializeComponent();
25         }
26
27         private void Button_Click(object sender, RoutedEventArgs e)
28         {
29             //MessageBox.Show("Play :D");
30         }
31
32         private void ThumbButtonInfo_Click(object sender, EventArgs e)
33         {
34             MessageBox.Show("Play :D");
35         }
36     }
37 }
```

100 % Error List... Output

Item(s) Saved

Ln 29 Col 42 Ch 42 INS

Windows7 - Microsoft Visual Studio 02:20 م الجمعة ٢٠١٧/٩/٣٩



دوست عليه فعلا الزر والصورة ظهروا واشتغلوا بنجاح