WINDOWSPROGRAMMERING LEKTION 4

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AGENDA

Data Template
- ListBox

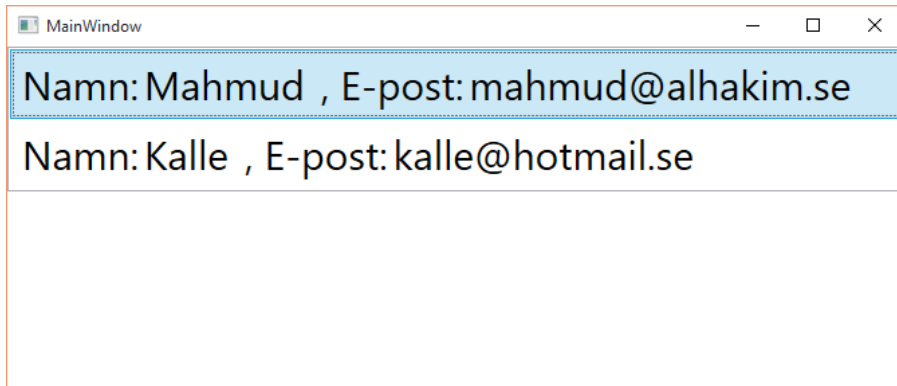Resource Dictionary

Stilmallar (Style)

Avancerade kontroller
- Statusbar
- Hyperlänkar
- WebBrowser
- TabControl
- Ribbon

LISTBOX

KLASSEN PERSON

```csharp
public class Person {
    public string Name { get; set; }
    public string Epost { get; set; }

    public static List<Person> GetPersoner() {
        var personer = new List<Person>();
        personer.Add(new Person() { Name = "Mahmud", Epost="mahmud@alhakim.se" });
        personer.Add(new Person() { Name = "Kalle" , Epost="kalle@hotmail.se"  });
        return personer;
    }
} }
```

DATAKONTEXT

```csharp
public MainWindow()
{
        InitializeComponent();
        DataContext = Person.GetPersoner();
}
```

EN ENKEL LISTBOX

ItemsSource
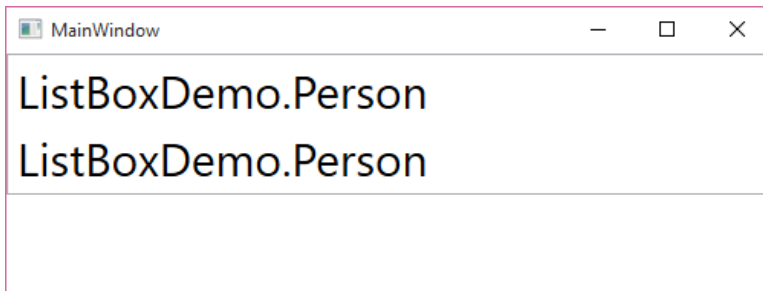Gets or sets a collection used to generate the content of the System.Windows.Controls.ItemsControl

```xml
<ListBox Name="Lista"
          ItemsSource="{Binding}"
          FontSize="30" >
</ListBox>
```

NÅGOT SAKNAS !

Vi behöver en **DataTemplate**

MainWindow		□	×

ListBoxDemo.Person

ListBoxDemo.Person

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DATATEMPLATE

```xml
<ListBox Name="Lista" ItemsSource="{Binding}" FontSize="30" >
  <ListBox.ItemTemplate>
    <DataTemplate>
      <StackPanel Orientation="Horizontal" Margin="2">
       <TextBlock Text="Namn:" Margin="2" />
       <TextBlock Text="{Binding Name}" Margin="2" />
       <TextBlock Text=" , E-post:" Margin="2" />
       <TextBlock Text="{Binding Epost}" Margin="2" />
      </StackPanel>
    </DataTemplate>
  </ListBox.ItemTemplate>
</ListBox>
```

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ÖVNING

Skapa en lista över ett antal produkter

- Skapa en klass som heter Produkt med följande egenskaper: ProduktID, Titel, Pris (lägg till flera egenskaper om du vill)
- Skapa en statisk metod som returnerar ett antal produkter.
- XAML-gränssnittet ska ha av en enkel ListBox.
- Använd "Object Binding" för att binda till gränssnittet.
- Skapa en Data Template som enbart visar produktnamn och pris (visa två decimaler).

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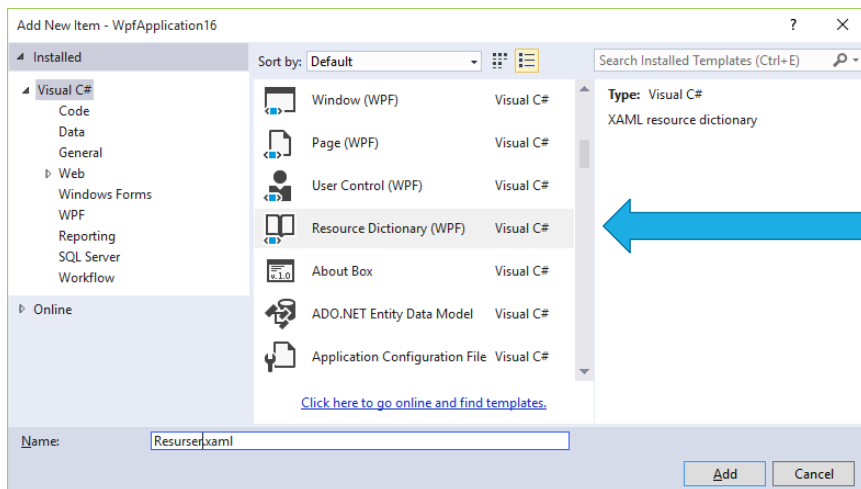# ARBETA MED RESURSER (RESOURCE DICTIONARY)

```
<Window.Resources>
    <SolidColorBrush x:Key="myColor" Color="#FFFF1111" />
</Window.Resources>
<Grid>
    <StackPanel Orientation="Vertical">
        <TextBlock Text="Ett" Foreground="{StaticResource myColor}" />
        <TextBlock Text="Två" />
        <TextBlock Text="Tre" Foreground="{StaticResource myColor}" />
</StackPanel>
```
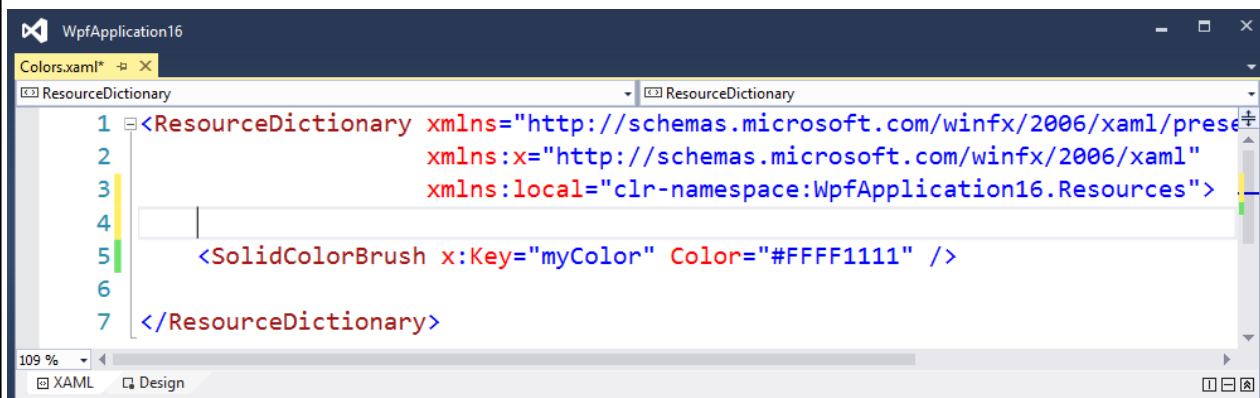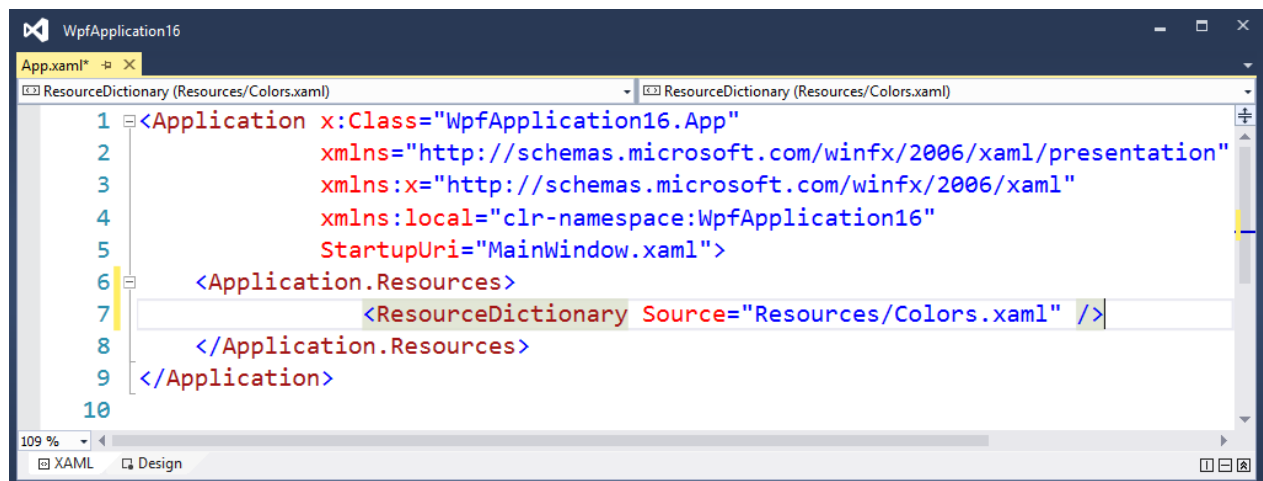
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SKAPA RESURSER I SEPARATA FILER

EN RESURSFIL (T.EX. COLORS.XAML)

ANGE RESOURCE DICTIONARY I APP.XAML

```xaml
WpfApplication16
App.xaml*

ResourceDictionary (Resources/Colors.xaml)          ResourceDictionary (Resources/Colors.xaml)

1  <Application x:Class="WpfApplication16.App"
2               xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
3               xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
4               xmlns:local="clr-namespace:WpfApplication16"
5               StartupUri="MainWindow.xaml">
6      <Application.Resources>
7          <ResourceDictionary Source="Resources/Colors.xaml" />
8      </Application.Resources>
9  </Application>
10

109 %
XAML   Design
```

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STILMALLAR – STATISKA RESURSER

Stilen har en nyckel…

```xaml
<Window.Resources>

 <Style TargetType="TextBlock" x:Key="MahmudStyle">

    <Setter Property="FontSize" Value="100" />

 </Style>

</Window.Resources>

<Grid>

 <TextBlock Style="{StaticResource MahmudStyle}">

    Lite text och annat smått och gott.

 </TextBlock>

</Grid>
```

Koppling sker med hjälp av en
StaticResource

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STILMALLAR – ARV

```xml
<Window.Resources>
        <Style TargetType="TextBlock" x:Key="MahmudStyle">
            <Setter Property="FontSize" Value="50" />
        </Style>
        <Style TargetType="TextBlock" x:Key="AlhakimStyle"
               BasedOn="{StaticResource MahmudStyle}">
            <Setter Property="Foreground" Value="Green" />
        </Style>
</Window.Resources>
<Grid> <TextBlock Style="{StaticResource AlhakimStyle}">
            Lite text och annat smått och gott.
        </TextBlock> </Grid>
```

> AlhakimStyle äver från (BasedOn) MahmudStyle

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AUTOMATISKA STILMALLAR

> En stilmall som kopplas till alla TextBlock i detta fönster Ingen nyckel behövs!

```xml
<Window.Resources>
        <Style TargetType="TextBlock">
            <Setter Property="FontSize" Value="20" />
            <Setter Property="Foreground" Value="Blue" />
            <Setter Property="HorizontalAlignment" Value="Left" />
        </Style>
</Window.Resources>
<Grid> <TextBlock>Lite text och annat smått och gott.
        </TextBlock>
        <TextBlock>Lite text och annat smått och gott.
        </TextBlock> </Grid>
```

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LOKALA STILMALLAR

> En stilmall som enbart gäller detta fönster!

```xml
<Window.Resources>
        <Style TargetType="TextBlock">
                <Setter Property="FontSize" Value="20" />
                <Setter Property="Foreground" Value="Blue" />
                <Setter Property="HorizontalAlignment" Value="Left" />
        </Style>
</Window.Resources>
<Grid> <StackPanel Orientation="Vertical">
                <TextBlock Text="Ett" />
                <TextBlock Text="Två" FontSize="30" />
                <TextBlock Text="Tre" />
</StackPanel>
</Grid>
```
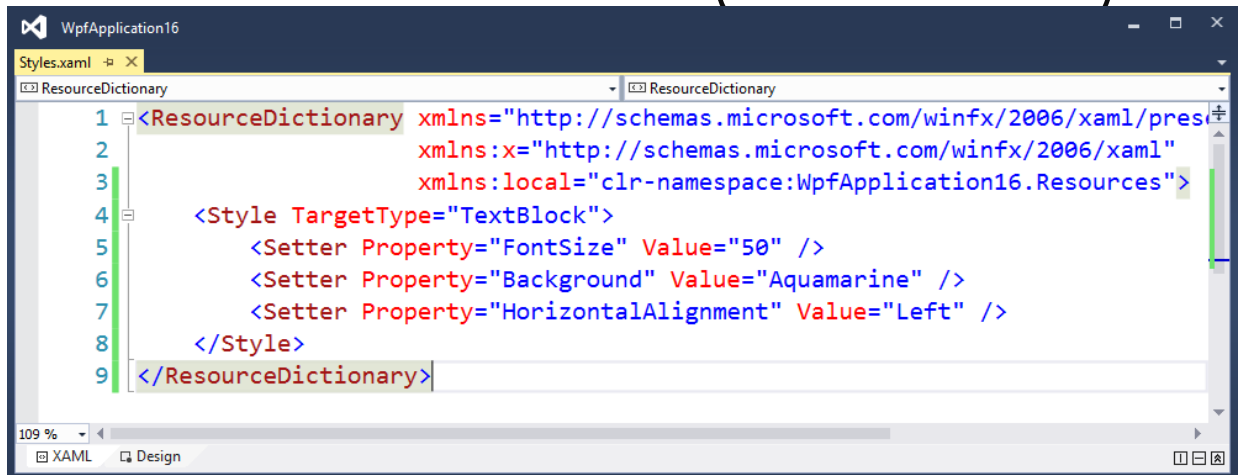
> OBS! Inline-formatering har högre prioritet

GLOBALA STILMALLAR I APP.XAML

```xml
<Application.Resources>
 <Style TargetType="TextBlock" x:Key="MahmudStyle">
            <Setter Property="FontSize" Value="50" />
  </Style>
  <Style TargetType="TextBlock" x:Key="AlhakimStyle"
               BasedOn="{StaticResource MahmudStyle}">
            <Setter Property="Foreground" Value="Green" />
 </Style>
</Application.Resources>
```

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EXTERNA STILMALLAR
FLYTTA STILAR TILL EN NY FIL (T.EX. STYLES.XAML)

```
WpfApplication16

Styles.xaml

ResourceDictionary                                      ResourceDictionary

1  <ResourceDictionary xmlns="http://schemas.microsoft.com/winfx/2006/xaml/pres
2                      xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
3                      xmlns:local="clr-namespace:WpfApplication16.Resources">
4      <Style TargetType="TextBlock">
5          <Setter Property="FontSize" Value="50" />
6          <Setter Property="Background" Value="Aquamarine" />
7          <Setter Property="HorizontalAlignment" Value="Left" />
8      </Style>
9  </ResourceDictionary>

109 %

XAML    Design
```

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UPPDATERA APP.XAML

```
<Application.Resources>

        <ResourceDictionary>

            <ResourceDictionary.MergedDictionaries>

                <ResourceDictionary Source="Resources/Colors.xaml" />

                <ResourceDictionary Source="Resources/Styles.xaml" />

            </ResourceDictionary.MergedDictionaries>

        </ResourceDictionary>

</Application.Resources>
```

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STATUSBAR

```xml
<StatusBar VerticalAlignment="Bottom" Background="Beige">
    <StatusBarItem>
        <TextBlock>Copyright 2016 Mahmud Al Hakim</TextBlock>
    </StatusBarItem>
</StatusBar>
```
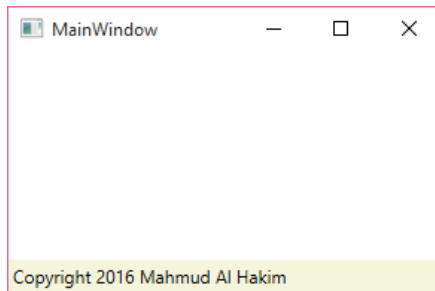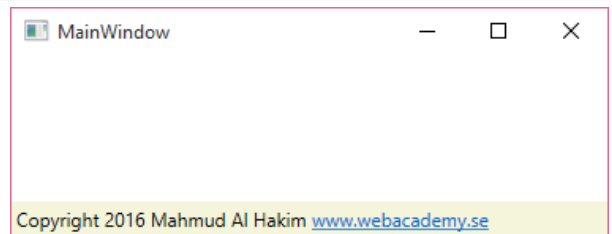

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HYPERLÄNKAR


```xml
<TextBlock>Copyright 2016 Mahmud Al Hakim
    <Hyperlink NavigateUri="http://webacademy.se"
            RequestNavigate="Hyperlink_RequestNavigate">
        www.webacademy.se
    </Hyperlink>
</TextBlock>
```

```csharp
private void Hyperlink_RequestNavigate(object sender, RequestNavigateEventArgs e)
{
    Process.Start(e.Uri.AbsoluteUri);
}
```
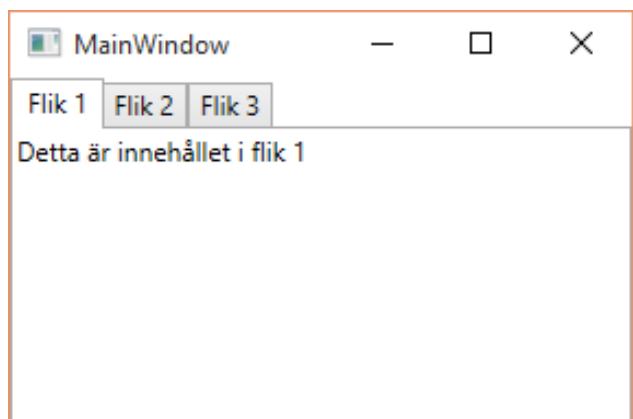
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WEBBROWSER

```xml
<Grid>
    <WebBrowser
     Name="MahmudBrowser"
     HorizontalAlignment="Stretch"
     VerticalAlignment="Stretch"
     Loaded="MainBrowser_Loaded"/>
</Grid>
```

```csharp
private void MainBrowser_Loaded(object sender, RoutedEventArgs e)
{
    WebBrowser wb = sender as WebBrowser;
    wb.Navigate("http://alhakim.se");
}
```
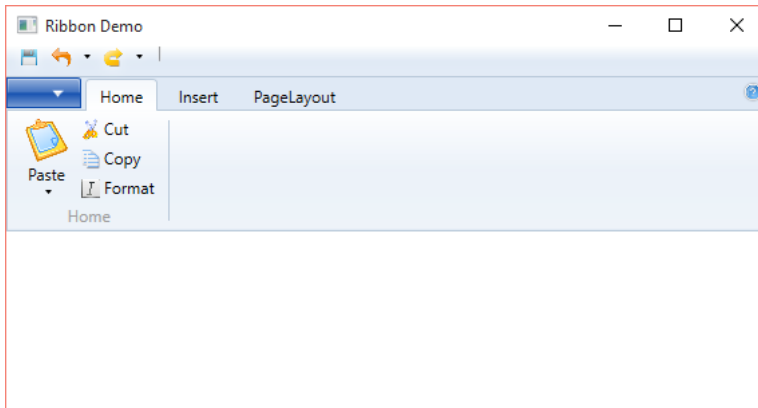
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TABCONTROL


```xml
<TabControl>
    <TabItem Header="Flik 1">Detta är innehållet i flik 1</TabItem>
    <TabItem Header="Flik 2">Detta är innehållet i flik 2</TabItem>
    <TabItem Header="Flik 3">Detta är innehållet i flik 3</TabItem>
</TabControl>
```

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RIBBON

Tips!
http://www.c-sharpcorner.com/UploadFile/0b73e1/ribbon-control-in-wpf-4-5/

LÄGG TILL EN REFERENS

FÖRBERED EN PLATS TILL DIN RIBBON

```xml
<Grid>
      <Grid.RowDefinitions>
            <RowDefinition Height="Auto" />
            <RowDefinition />
      </Grid.RowDefinitions>
      <Ribbon x:Name="RibbonWin"  SelectedIndex="0" >

      </Ribbon>
</Grid>
```

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HELPPANECONTENT

```xml
<!-- Help Pane, located at the right-hand side -->
<Ribbon.HelpPaneContent>
    <RibbonButton SmallImageSource="Images\help.png" />
</Ribbon.HelpPaneContent>
```

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QUICKACCESSTOOLBAR

```xml
<!-- Quick Access Toolbar - located at the upper-left corner -->
<Ribbon.QuickAccessToolBar>
    <RibbonQuickAccessToolBar>
        <RibbonButton x:Name ="Save" SmallImageSource="Images\save.png" />
        <RibbonSplitButton x:Name ="Undo" SmallImageSource="Images\undo.png" >
            <RibbonSplitMenuItem Header="Undo 1" />
        </RibbonSplitButton>
        <RibbonSplitButton x:Name="Redo" SmallImageSource="Images\redo.png" >
            <RibbonSplitMenuItem Header="Redo 1" />
        </RibbonSplitButton>
    </RibbonQuickAccessToolBar>
</Ribbon.QuickAccessToolBar>
```

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APPLICATIONMENU

```xml
<!-- Application Menu, located at the left-hand side (down arrow) -->
<Ribbon.ApplicationMenu>
    <RibbonApplicationMenu KeyTip="F">
        <RibbonApplicationMenuItem Header="Options"
            ImageSource="Images\options.png" />
        <RibbonApplicationMenuItem Header="Exit"
            ImageSource="Images\quit.png" />
    </RibbonApplicationMenu>
</Ribbon.ApplicationMenu>
```

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RIBBONTAB OCH RIBBONGROUP

```xml
<!-- Ribbon Tab #1: Home -->
<RibbonTab Header="Home" KeyTip="H" >
        <!-- Home  group-->
        <RibbonGroup x:Name="ClipboardGroup" Header="Home">
           <RibbonMenuButton LargeImageSource="Images\paste.png" Label="Paste" KeyTip="V">
              <RibbonMenuItem ImageSource="Images\paste.png" Header="Keep Text Only" KeyTip="T"/>
              <RibbonMenuItem ImageSource="Images\paste.png" Header="Paste Special..." KeyTip="S"/>
           </RibbonMenuButton>
           <RibbonButton SmallImageSource="Images\cut.png" Label="Cut" KeyTip="X" />
          <RibbonButton SmallImageSource="Images\copy.png" Label="Copy" KeyTip="C" />
           <RibbonButton SmallImageSource="Images\format_painter.png" Label="Format" KeyTip="F" />
        </RibbonGroup>
</RibbonTab>
```

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FLERA FLIKAR

```xml
<!-- Ribbon Tab #2: Launch -->
<RibbonTab Header="Insert" KeyTip="I">


</RibbonTab>


<!-- Ribbon Tab #2: Launch -->
<RibbonTab Header="PageLayout" KeyTip="L">


</RibbonTab>
```
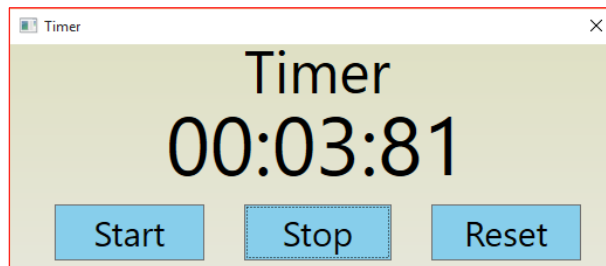
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ÖVNING

Skapa en enkel WPF-Applikation som visar en Timer (Stop Watch) enligt bilden.

Skapa en extern stilmall (separat fil) som formaterar alla knappar (valfritt utseende).

Tips!

http://www.wpf-tutorial.com/misc/dispatchertimer/

http://miteshsureja.blogspot.se/2012/01/how-to-create-stop-watch-application-in.html

http://www.c-sharpcorner.com/blogs/creating-a-simple-stop-watch-application-in-wpf1

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