



# UWP

UNIVERSAL WINDOWS PLATFORM

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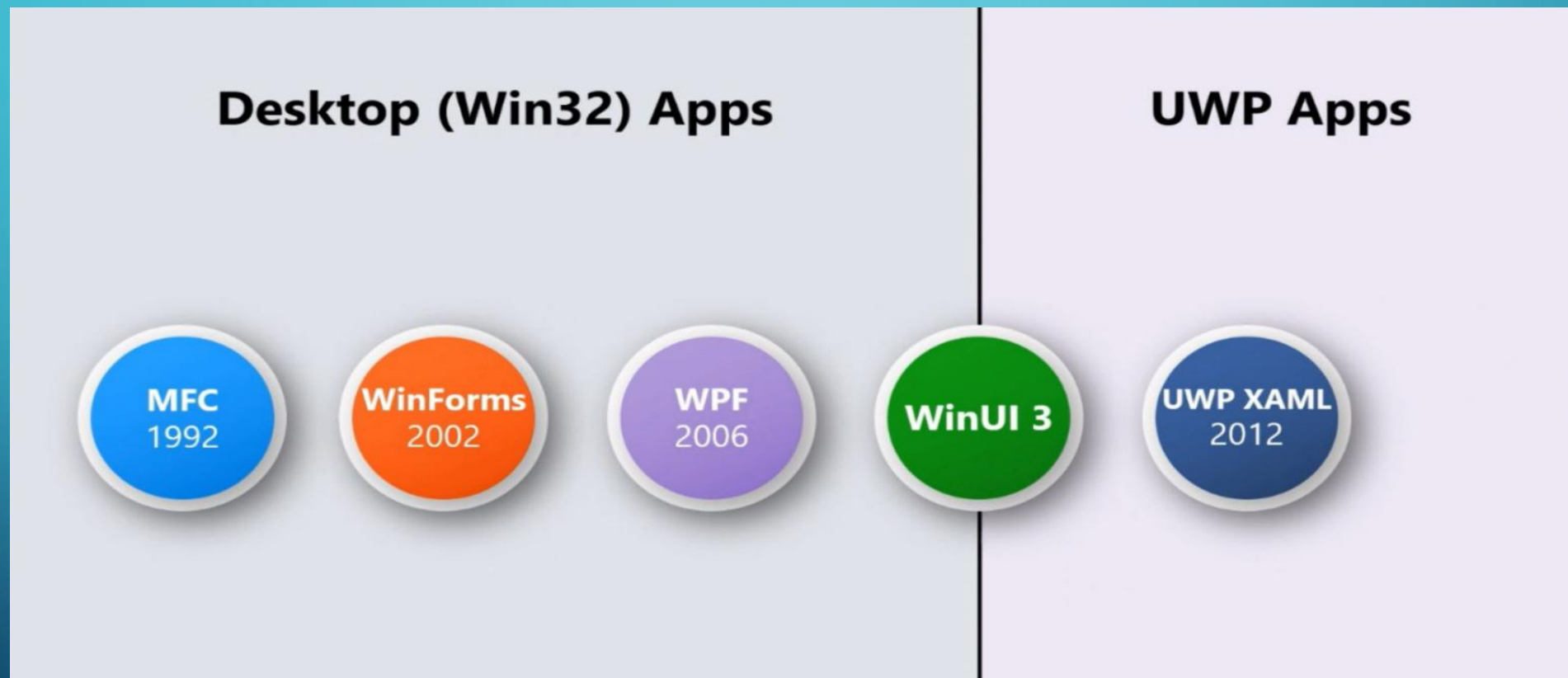
The background is a blue gradient. In the corners, there are white line-art patterns resembling electronic circuit boards, with lines and small circles representing components.

# DAY 1

# Introduction



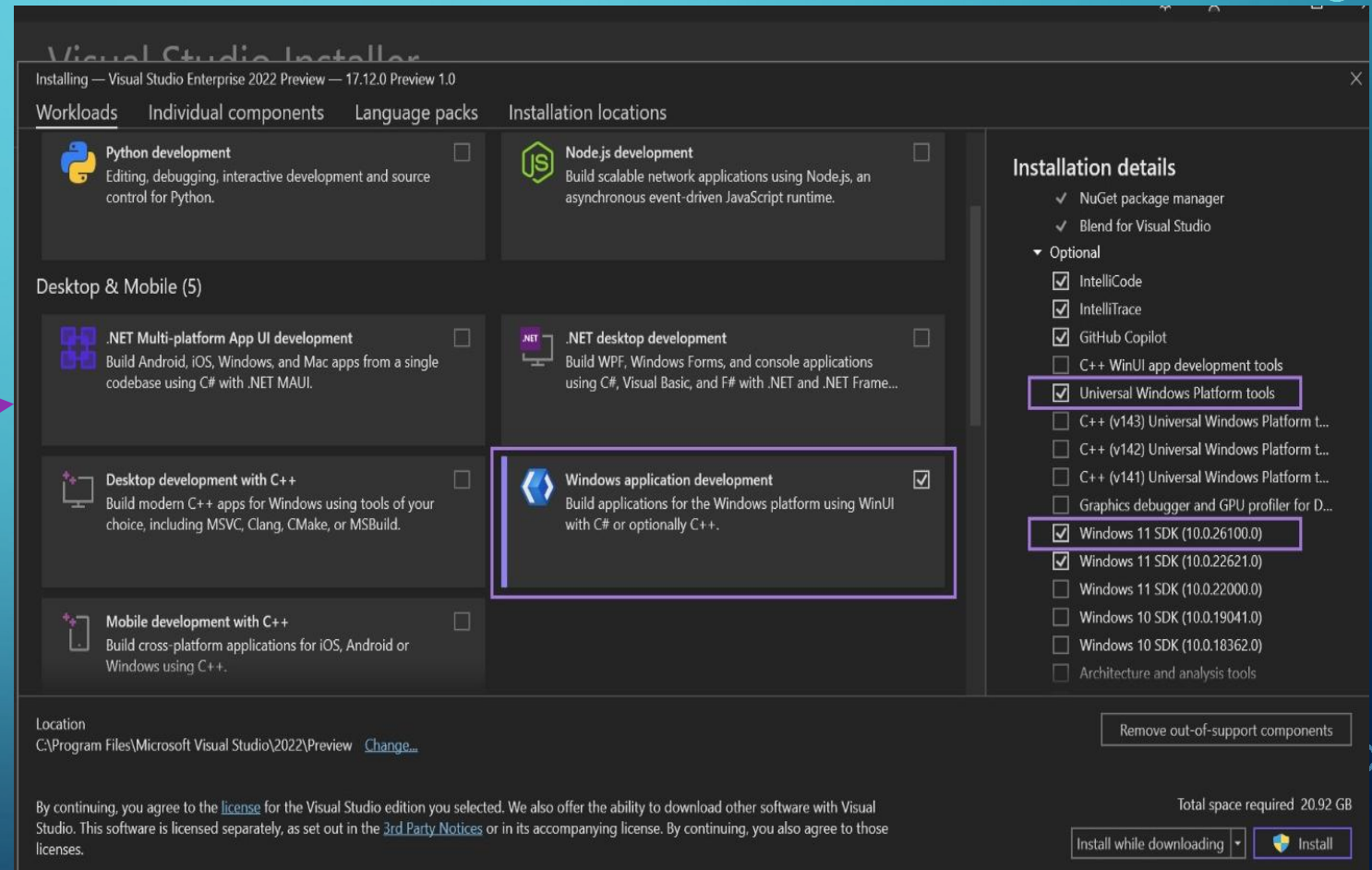
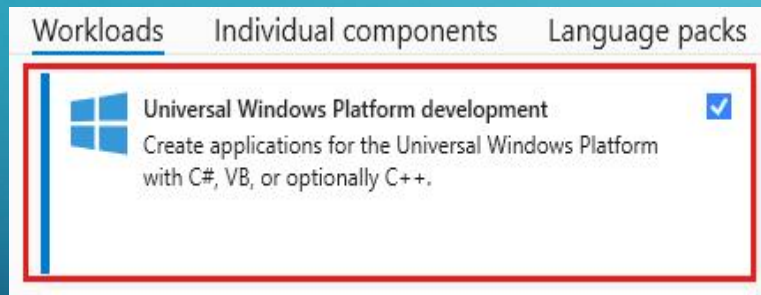
# Introduction



# Agenda

- Day 1
  - Overview of UWP.
  - Setup the development environment.
  - Introduction to XAML Syntax.
  - Layouts ( StackPanel – Grid – Canvas - ..... ).
  - Controls ( Content Control ).
- Day 2
  - Controls ( Item Controls ).
  - Resources.
  - Brushes.
  - Data Binding.
- Day 3
  - Continue Data Binding.
  - Adaptive Design and Responsive Layouts.
  - Working With Adaptive Triggers.
  - Testing and Optimizing applications for various screen sizes.

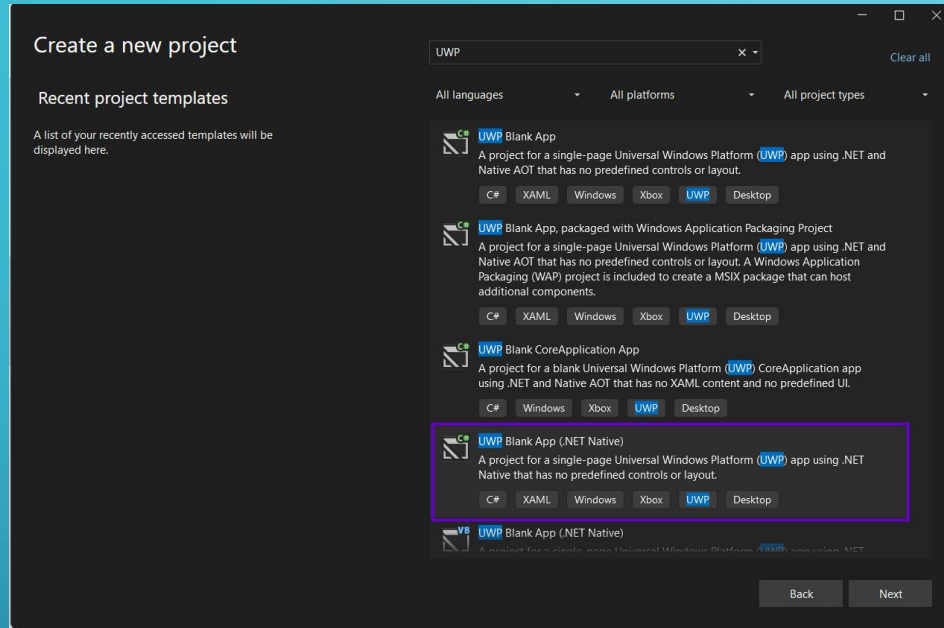
# Install UWP



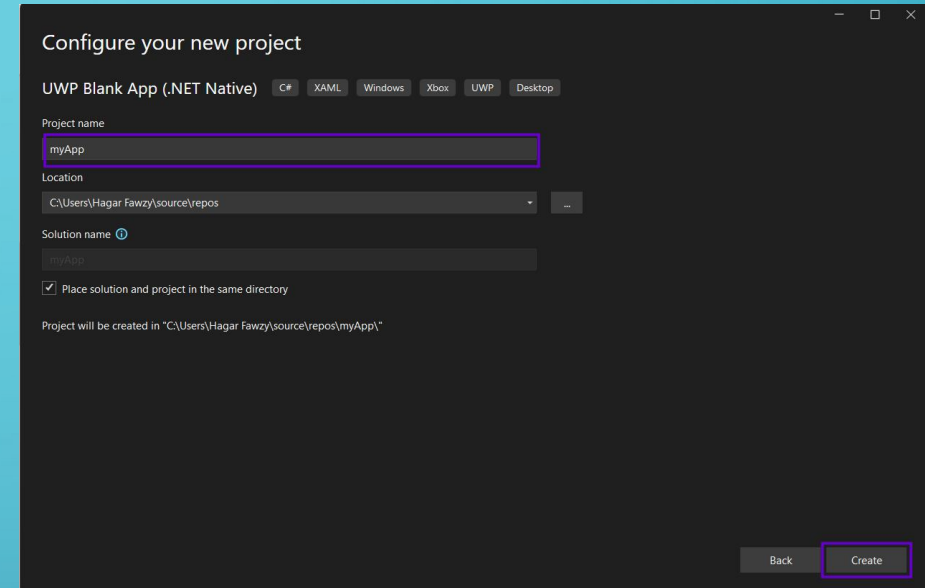


# Create New Project

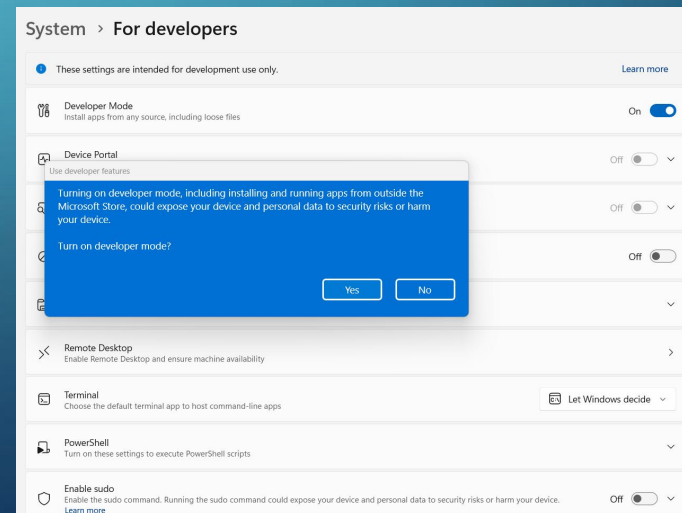
## Step 1



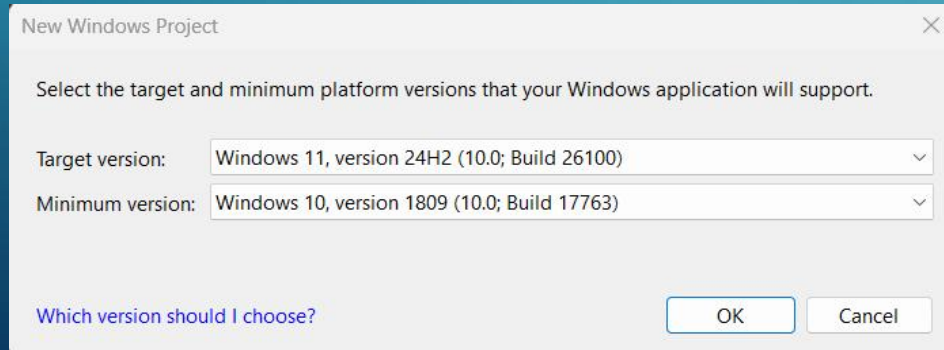
## Step 2



## Step 4



## Step 3



# XAML

- It's extensible Application Markup Language.
- It's the markup standard you use to define UWP user interfaces.
- XAML allows you to build a Page without writing code.





# Layouts Cont.

## RelativePanel

```
<RelativePanel BorderBrush="Gray" BorderThickness="1">
  <Rectangle x:Name="RedRect" Fill="Red" Height="44" Width="44"/>
  <Rectangle x:Name="BlueRect" Fill="Blue"
    Height="44" Width="88"
    RelativePanel.RightOf="RedRect" />

  <Rectangle x:Name="GreenRect" Fill="Green"
    Height="44"
    RelativePanel.Below="RedRect"
    RelativePanel.AlignLeftWith="RedRect"
    RelativePanel.AlignRightWith="BlueRect" />

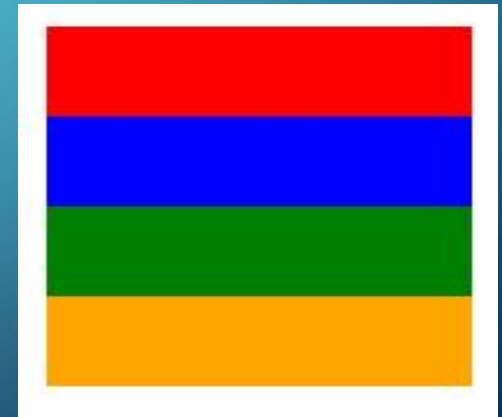
  <Rectangle Fill="Orange"
    RelativePanel.Below="GreenRect"
    RelativePanel.AlignLeftWith="BlueRect"
    RelativePanel.AlignRightWithPanel="True"
    RelativePanel.AlignBottomWithPanel="True" />
</RelativePanel>
```



# Layouts Cont.

## StackPanel

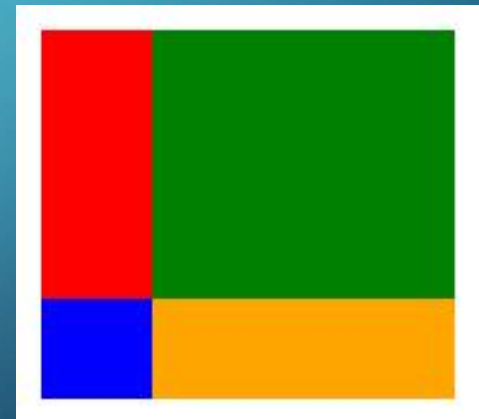
```
<StackPanel>  
  <Rectangle Fill="Red" Height="44"/>  
  <Rectangle Fill="Blue" Height="44"/>  
  <Rectangle Fill="Green" Height="44"/>  
  <Rectangle Fill="Orange" Height="44"/>  
</StackPanel>
```



# Layouts Cont.

## Grid

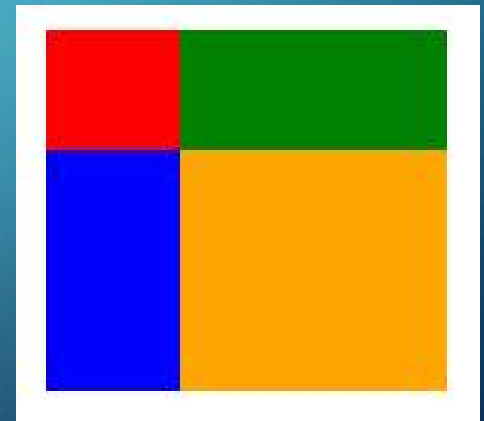
```
<Grid>
  <Grid.RowDefinitions>
    <RowDefinition/>
    <RowDefinition Height="44"/>
  </Grid.RowDefinitions>
  <Grid.ColumnDefinitions>
    <ColumnDefinition Width="Auto"/>
    <ColumnDefinition/>
  </Grid.ColumnDefinitions>
  <Rectangle Fill="Red" Width="44"/>
  <Rectangle Fill="Blue" Grid.Row="1"/>
  <Rectangle Fill="Green" Grid.Column="1"/>
  <Rectangle Fill="Orange" Grid.Row="1" Grid.Column="1"/>
</Grid>
```



# Layouts Cont.

## VariableSizedWrapGrid

```
<VariableSizedWrapGrid MaximumRowsOrColumns="3" ItemHeight="44" ItemWidth="44">  
  <Rectangle Fill="Red"/>  
  <Rectangle Fill="Blue"  
    VariableSizedWrapGrid.RowSpan="2"/>  
  <Rectangle Fill="Green"  
    VariableSizedWrapGrid.ColumnSpan="2"/>  
  <Rectangle Fill="Orange"  
    VariableSizedWrapGrid.RowSpan="2"  
    VariableSizedWrapGrid.ColumnSpan="2"/>  
</VariableSizedWrapGrid>
```

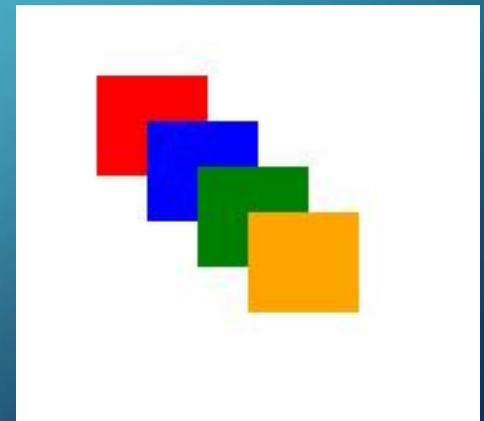




# Layouts Cont.

## Canvas

```
<Canvas Width="120" Height="120">  
  <Rectangle Fill="Red" Height="44" Width="44"/>  
  <Rectangle Fill="Blue" Height="44" Width="44" Canvas.Left="20" Canvas.Top="20"/>  
  <Rectangle Fill="Green" Height="44" Width="44" Canvas.Left="40" Canvas.Top="40"/>  
  <Rectangle Fill="Orange" Height="44" Width="44" Canvas.Left="60" Canvas.Top="60"/>  
</Canvas>
```





# Controls (Content Control - Item Control ).

- Button
- Calendar Date Picker
- CheckBox
- ComboBox
- Dialogs and flyouts
- Flip view
- Forms
- Slider
- Toggle button
- Time picker
- PasswordBox
- TextBox
- Hyperlink
- Auto-Suggest box
- Content dialog
- Contact card
- Content dialog
- RichTextBox
- .....