

CS411 Current Midterm Mcqs Paper 2023

1. In tunneling, event move from? **Top to Down**
2. Attribute of a program can be retrieved from its assembly metadata through? **Reflection**
3. The elements in a ____ are always stored in a contiguous block of memory. **Array**
4. There are ____ type(s) of padding in WPF element. **Four**
5. XML document is readable by. **Machine and Human both**
6. The only ____ .Net language has an intrinsic understanding of dependency Properties. **Xaml**
7. Types not defined in any namespace are said reside in the ____ namespace. **Global**
8. An event is a list of. **Delegates**
9. Events and ____ work hand in hand. **Delegates**
10. When the data is passed from one place to another in chunks, this data is called. **Stream**
11. XAML is a declarative programming language for creating and initializing objects. **XAML**
12. XML is a stricter version of. **HTML**
13. Every ____ is represented by an event-object. **Event**
14. CLI stands for. **Common Language Infrastructure**
15. Multiple ____ are conventionally stored in multiple files. **Classes**
16. Attributes add declarative ____ to your programs. **Information**
17. Events are based on the principle of. **Decoupling**
18. WPF4 was released in? **2010**
19. Extension methods can only be defined in class. **Static class**

By **J.c FIA**

20. is a static class in the System namespace? **Console**
21. The easiest way to declare an event is to put the event keyword in front of a member.
Delegate
22. Which symbol is used to declare the preprocessor directives? **#**
23. Tasks that proceed independently of one another are said to execute? **Asynchronous**
24. Each _____ in a GridView is represented as a BoundField. **Column**
25. Which keyword is used to declare the indexers? **This**
26. Which of the following is an insertion operator in C++? **<<**
27. If we want to move an object in the 2-D x-y coordinate system then which transform class will be used? **Translate Transform**
28. What is a correct syntax to output "Hello World" in C#? **Console.WriteLine("Hello World");**
29. C# is an alias of C++ **False**
30. Which data type is used to create a variable that should store text? **String**
31. Which keyword is used to return a value inside a method? **Return**
32. Which statement is used to stop a loop? **Break**
33. How do you start writing an if statement in C# **if (x > y)**
34. In C#, it is possible to inherit fields and methods from one class to another. **True**
35. To declare an array in C#, define the variable type with **[]**
36. Which operator can be used to compare two values? **==**
37. Which operator is used to add together two values? **The + sign**
38. What is the correct syntax of the declaration which defines the XML version? **<?xml version="1.0"?>**
- 39.
- 40.

Arranged by **Jc FIA**

CURRENT MIDTERM TODAY'S CS411 PAPERS SOLVED BY ZAIN NASAR

1. Every _____ is represented by an event-object.

Information

Entity

Object

Event page10

2. Which statement is True about interfaces?

An interface can contain only methods, variables, events, and indexers.

An interface can contain only variables, properties, events, and indexers.

An interface can contain only methods, properties, variables, and indexers.

An interface can contain only methods, properties, events, and indexers. Page 40

3. Which one is the correct syntax for declaring attribute?

[Obsolete] page 48

{Obsolete}

(Obsolete)

*Obsolete

4. An "object" element can have _____ type/s of children.

Four

Three Page 73

Two

One

5. _____ allows to keep the user interface description and implementation separate.

1) GDI

2) WPF (Page#61)

3) Avalon

4) Altia

6. There is/are _____ type(s) of padding in WPF element.

One

Two

Three page 91

Four

7. Which of the following is not a feature of "C#"?

Operator overloading is not allowed. Page 17

Multiple Inheritances is not supported but interfaces are supported.

Enumeration members are scoped.

Global variables or functions are not allowed.

8. Stylus can behave like a _____ but has _____ resolution.

Keyboard, lower

Mouse, lower

Mouse, higher page 122

Keyboard, higher

9. Attributes are declared _____ the class/function.

Within

After

Above

Outside

10. If we want that "Stretch" property of child element takes the available "height or width of parent" and shape of child element doesn't change, then we should write "Stretch = _____".

Fill page 109

UniformToFill

Uniform

11. The code given below is equivalent to _____.

<SolidColorBrush>White</SolidColorBrush>

<WhiteBrush >MyWhiteBrush </ WhiteBrush>

<SolidColorBrush Color="White"/> (Page#65)

<Brush Style= "SolidWhite"

> None of the given options

12. Visual Studio has a snippet called _____ that automatically expands into a definition of a dependency property, which makes defining one much faster than doing all the typing yourself!

Propdp (Page#77)

Property extension

Dpprop

Dependency property

13. Multiple _____ are conventionally stored in multiple files.

Functions

Values

Variables

Classes (Page#22)

14. "Situation" is an event occurrence that requires a (n) _____.

Reaction page 10

Class

Object

Action

15. We have two buttons "b1" and "b2". If we want to place "b1" on "b2" then value of "ZIndex" of "b1" should be _____ the value of "ZIndex" of "b2".

Less than

Greater than

Equal to

No need to give value of ZIndex of b1 page99

Events can be _____.

Specialized

All of the given options page 15

Composed

Generalized

Wpf 3.5 released in

2005

2006

2008

2009

The corresponding type converter class for "Brush" class will be _____.

BrushConverter

CastBrush

BrushCast

None of the given options

Which "transform" property can help us to flip the element from its center?

ScaleY

None of given options

ScaleX

RenderTransformOrigin page 126

CLI stands for _____.

Compact Language Infrastructure

Common Language Infrastructure page18

Console Language Infrastructure

Control Language Infrastructure

The elements in a/an _____ are always stored in a contiguous block of memory.

Tree

Array

Variable

Struct

The _____ statement iterates over each element in an "enumerable" object.

Foreach page 191

Dowhile

While

For

If we want that "Stretch" property of child element takes the available "height or width of parent" and shape of child element doesn't change, then we should write

"Stretch = _____".

1

Fill page 109

UniformToFill

Uniform

We are checking that whether an element is eligible for focus or not, which property will help us in this testing?

Focus

IsFocus

IsFocusable

Focusable page 121

Directory is the class of _____.

System.Collections.Generic

System.Reflection

System.Text

System.IO

Q: how ali will make xaml document name ?write the sythnx? Kuch asa tha. 2marks

To create a XAML document in the context of a WPF (Windows Presentation Foundation) application, the file name can be determined by following a specific syntax. Here's an example of how Ali can name a XAML document:

Syntax: `<DocumentName>.xaml`

For instance, if Ali wants to create a XAML document for a login window, he could name it "LoginWindow.xaml" or any other suitable name based on the purpose of the document.

Q:Why most WPF classes are inherently thread-unsafe?

Ans: Most WPF classes derive from dispatcherobject and are therefore inherently

thread-unsafe. The Dispatcher part of the name refers to wpfs version of a Win32-like

message loop,

Q:Name the properties supported by the ScaleTransform also write its default values of

each of Them?

ScaleTransform

ScaleTransform enlarges or shrinks an element horizontally, vertically,

or in both directions. This transform has four straightforward double properties:

. ScaleX—Multiplier for the element's width (default value = 1)

. ScaleY—Multiplier for the element's height (default value = 1)

. CenterX—Origin for horizontal scaling (default value = 0)

. CenterY—Origin for vertical scaling (default value = 0)

<Button.RenderTransform>

<ScaleTransform ScaleX="2" ScaleY="2"/>

</Button.RenderTransform>

Q:Consider the following code snippet and write the output:

```
XmlDocument xmlDoc = new XmlDocument();  
xmlDoc.LoadXml("<uni name='Virtual'> university Node</uni.'");  
console.WriteLine(xmlDoc.DocumentElement.Name);  
console.WriteLine(xmlDoc.DocumentElement.InnerText);  
console.ReadLine();
```

uni
university Node

ANS: Element Name: Virtual Inner Text: University Node

Q:What we achieve from ZIndex codes?

ZIndex is an

integer with a default value of 0 that you can set to any number (positive or negative). Elements with larger ZIndex values are rendered on top of elements with smaller ZIndex values, so the element with the smallest value is in the back, and the element with the largest value is in the front.

ZIndex codes are used in graphical user interfaces (GUIs) to control the stacking order or layering of elements. The ZIndex property determines the visual order of overlapping elements along the Z-axis, which is the depth or front-to-back order in a 2D or 3D space.

By specifying ZIndex codes for elements, you can control which element appears in front of or behind other elements when they overlap on the screen.

Difference b/w Margin and padding??? 5 marks ka tha.

Margin and Padding

Margin and Padding are two very similar properties that are also related to an element's size. All FrameworkElements have a Margin property, and all Controls (plus Border) have a Padding property. Their only difference is that Margin controls how much extra space gets placed around the outside edges of the element, whereas Padding controls how much extra space gets placed around the inside edges of the element.

Both Margin and Padding are of type System.Windows.Thickness, an interesting class that can represent one, two, or four double values. The meaning of these values is demonstrated in Listing 4.1, which applies various Padding and Margin settings to Label controls. The second set of Labels is wrapped in Borders because the margin settings would not be noticeable otherwise. Figure 4.2 shows the rendered result for each Label if each one is individually placed in a Canvas (a panel covered in the next chapter).

Although not shown in this figure, Margin permits negative values. Padding does not.

Q:1 Dock panel may fill k option nahi hoty tu ager hum ko fill karna ha tu kia option use karygay2 marks ka tha.

We will set Background = "Red"

Q:2 How many children an object can have, name them (3 marks)

ANS:An object element can have three types of children

1. A value for a content property,

2. Collection items

3. A Value that can be type-converted to the object element.

Q:3 which functionality is actually a super set of stack panel functionality.(3 marks)

ANS: Stack Panel is popular, simple, useful, stacks sequentially. It is one of the few panels that dont

```
<DockPanel>
  <Button DockPanel.Dock="Top" Content="Top" />
  <Button DockPanel.Dock="Bottom" Content="Bottom" />

  <Button Content="Fill" Background="Red" />
</DockPanel>
```

even

define an attached property. Orientation can be horizontal or vertical (which is default). Default horizontal

direction is based on flow direction

Q:5 default value btani thi “ Max height “ “Min Height “ “ Max width” R “Minm Width” (5 marks)

The default values for the properties you mentioned are as follows:

1. MaxHeight: The default value is `Double.PositiveInfinity`, indicating that there is no maximum height constraint applied to the element.
2. MinHeight: The default value is `0`, meaning there is no minimum height constraint applied to the element.
3. MaxWidth: The default value is `Double.PositiveInfinity`, indicating that there is no maximum width constraint applied to the element.
4. MinWidth: The default value is `0`, meaning there is no minimum width constraint applied to the element.

These default values allow the element to expand or shrink freely within its parent container, subject to any layout rules or constraints imposed by the parent container or the surrounding elements



MCQ's 20 thay approximatly sary 12 lecturs tak thay Long Questions yah hay

2 Marks)What are the types of Row & Column Definition?

2 Marks) Why one should care about Logical Tree, Explain with Example?

Logical tree exists even if there is no xaml. Properties, events, resources are tied to logical trees. Properties propagated down and events can be routed up or down the tree. Its a simplification of whats actually going on when rendered. Visual tree can be thought of as an extension of the logical tree though some things can be dropped as well. Visual tree exposes visual implementation details e.g. A listbox is a border, two scrollbars and more.

3 Marks)Why C# let us Develop devices resulation independent graphics?

Now a days, various type of devices with varying screen sizes are available. C# enable us to develop device independent graphics so that same application/ GUI have same aspect ratio and appearance on all kind of displays. e.g. Windows phone, Windows PC etc.

The length converter type converter associated with various length properties supports specifying explicit units of cm, pt, in, or px (the default). Default are device independent pixels. These logical pixels are 1/96 in regardless of screen DPI setting. They are always stored as "double". A typical display is 96 DPI.

Important to note that all measurements are DPI independent.

3 Marks)Name the properties supported by the ScaleTransform also write its default values of each of Them?

ScaleTransform

ScaleTransform enlarges or shrinks an element horizontally, vertically, or in both directions. This transform has four straightforward double properties:

- . **ScaleX**—Multiplier for the element's width (default value = 1)
- . **ScaleY**—Multiplier for the element's height (default value = 1)
- . **CenterX**—Origin for horizontal scaling (default value = 0)
- . **CenterY**—Origin for vertical scaling (default value = 0)

```
<Button.RenderTransform>  
  <ScaleTransform ScaleX="2" ScaleY="2"/>
```

```
</Button.RenderTransform>
```

5 Marks) Write the code for making 2 buttons with colors 1st is Red and Other is Green?

```
<Window x:Class="midPrep.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        Title="MainWindow" Height="350" Width="525">
    <Grid>
        <Grid.RowDefinitions>
            <RowDefinition/>
            <RowDefinition/>
        </Grid.RowDefinitions>
        <Grid.ColumnDefinitions>
            <ColumnDefinition/>
            <ColumnDefinition/>
        </Grid.ColumnDefinitions>
        <Button Grid.Row="0" Name="button1" Background="Red" Foreground="Black" >
            <Label Name="b1">Button 1</Label>
        </Button>
        <Button Grid.Row="1" Grid.Column="1" Name="button2" Background="Green"
Foreground="Black">
            <Label Name="b2" >Button 2</Label>
        </Button>
    </Grid>
</Window>
```



5 Marks) C# code is given below write its equivalent XAML Code?

5 marks) Name five builtin transform with default values

RotateTransform

RotateTransform, demonstrated in the preceding section, rotates an element according to the values of three double properties:

- . **Angle**—Angle of rotation, specified in degrees (default value = 0)
- . **CenterX**—Horizontal center of rotation (default value = 0)
- . **CenterY**—Vertical center of rotation (default value = 0)

ScaleTransform

ScaleTransform enlarges or shrinks an element horizontally, vertically, or in both directions. This transform has four straightforward double properties:

- . **ScaleX**—Multiplier for the element's width (default value = 1)
- . **ScaleY**—Multiplier for the element's height (default value = 1)
- . **CenterX**—Origin for horizontal scaling (default value = 0)
- . **CenterY**—Origin for vertical scaling (default value = 0)

SkewTransform

SkewTransform slants an element according to the values of four double properties:

- . **AngleX**—Amount of horizontal skew (default value = 0)
- . **AngleY**—Amount of vertical skew (default value = 0)
- . **CenterX**—Origin for horizontal skew (default value = 0)
- . **CenterY**—Origin for vertical skew (default value = 0)

TranslateTransform

TranslateTransform simply moves an element according to two double properties:

- . **X**—Amount to move horizontally (default value = 0)
- . **Y**—Amount to move vertically (default value = 0)

MatrixTransform

MatrixTransform is a low-level mechanism that can be used to create custom 2D transforms.

MatrixTransform has a single **Matrix** property (of type

`System.Windows.Media.Matrix`) representing a 3x3 affine transformation matrix. In case you're not a linear algebra buff, this basically means that all the previous transforms (or any combination of them) can also be expressed using MatrixTransform.

The 3x3 matrix has the following values:

M11 M12 0

M21 M22 0

OffsetX OffsetY 1

The final column's values are fixed, but the other six values can be set as properties of the Matrix type (with the same names as shown) or via a constructor that accepts the six values in row-major order.

3 marks) Explain Grid splitter

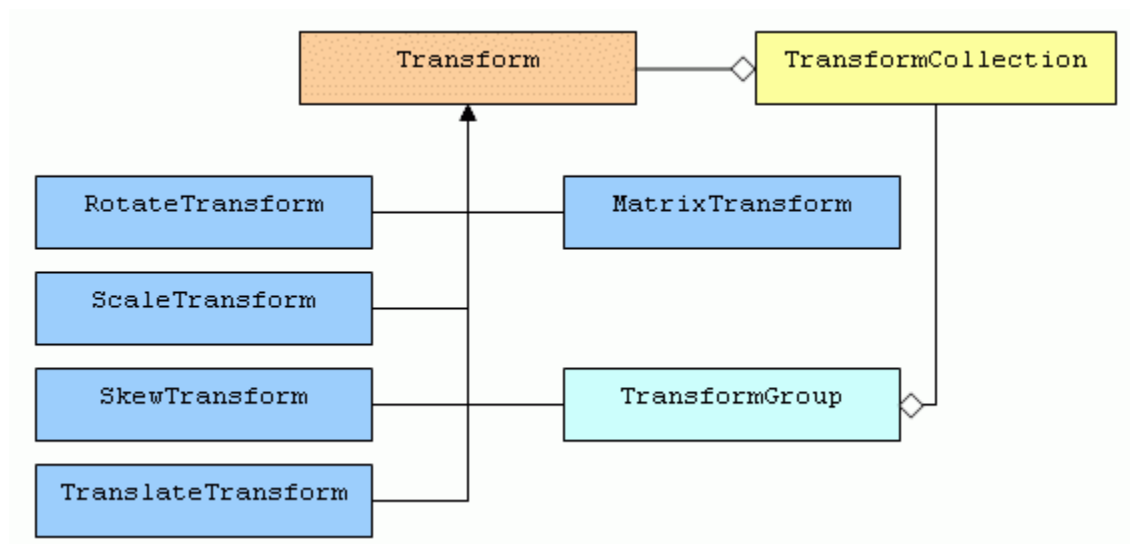
Another attractive feature of Grid is its support for interactive resizing of rows and columns using a mouse or keyboard (or stylus or finger, depending on your hardware). This is accomplished with the GridSplitter class from the same namespace. You can add any number of GridSplitter children to a Grid and give them Grid.Row, Grid.Column, Grid.RowSpan, and/or Grid.ColumnSpan attached property values like any other children. Dragging a GridSplitter resizes at least one cell. Whether the other cells resize or simply move depends on whether they use proportional or nonproportional sizing

For which class WPF are derived? 2

`using System.Windows;`

What is the purpose of WPF 2D transform classes? 2

Transformations are available through the System.Windows.Media namespace. The base class for the transformations hierarchy is Transform.



WPF combines the best attribute of some systems. write the names of three. 3

WPF aims to combine the best attributes of systems

DirectX
Windows Forms
Adobe Flash
HTML

(3D and hardware acceleration),
(developer productivity),
(powerful animation support) and
(declarative markup)

Q. Name 5 built in 2D transform which are supported by "System.Windows.Media" namespace. 5

Built-in transforms are:-

1. Rotate Transform,
2. Scale Transform,
3. Skew Transform,
4. Translate Transform
5. Matrix Transform

Consider the following code snippet and write the output:

```
XmlDocument xmlDoc = new XmlDocument();  
  
xmlDoc.LoadXml("<uni name='Virtual'> university Node</uni.>");  
  
console.WriteLine(xmlDoc.DocumentElement.Name);  
  
console.WriteLine(xmlDoc.DocumentElement.InnerText);  
  
console.ReadLine();
```

How many children an object can have, name them

An object element can have three types of children:

1. A value for a content property,
2. Collection items
3. A Value that can be type-converted to the object element.

what is the purpose of using xaml extensions?

Markup extensions, like type converters, enable you to extend the expressiveness of XAML. Both can evaluate a string attribute value at runtime (except for a few built-in markup extensions that are currently evaluated at compile time for performance reasons) and produce an appropriate object based on the string. As with type converters, WPF ships with several markup extensions built in.

aik ZIndex ka question tha,

ZIndex is an integer with a default value of 0 that you can set to any number (positive or negative). Elements with larger ZIndex values are rendered on top of elements with smaller ZIndex values, so the element with the smallest value is in the back, and the element with the largest value is in the front.

aik code tha us me 'ClickMe' name ka method bana k us ko register karna tha or phir us ko call karna tha,

using 'markup extensions' create a button with rectangle and use coding to reset background to null, is tarah aik question tha...

```
<Button xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
Background="{x:Null}"
Height="{x:Static SystemParameters.IconHeight}"
Content="{Binding Path=Height, RelativeSource={RelativeSource Self}}"/>
```

Page 33 WPF

Question: 1 (2 Marks)

What is the biggest feature of dependency property?

Arguably the biggest feature of a dependency property is its built-in ability to provide change notification.

Question: 2 (2 Marks)

When two or more independent grids need to be synchronized, then how can we synchronize them?

SharedSizeGroup is then used to keep these three independent Grids in sync when they need to be (that is, the docked case). Figure

Question: 3 (3 Marks)

Write two differences between WPF and DirectX?

They are two different things. WPF is made for designers to create vector-based applications using XML and managed code. It uses DirectX as the rendering engine under the covers.

DirectX is a set of APIs that abstracts access to modern graphics rendering hardware, as well as other technologies such as sound or input devices.

WPF is not designed for any significant game programming, other than, say, a simple card game. Nor is it designed with the intention of allowing you to create a 3D user interface into your DirectX game.

Question: 5 (5 Marks)

Write the XAML code to create a “DockPanel” having four buttons with dock settings i.e. Top, Bottom, Right and Left.

```
<DockPanel>
<Button DockPanel.Dock="Top" Background="Red">1 (Top)</Button>
<Button DockPanel.Dock="Left" Background="Orange">2 (Left)</Button>
<Button DockPanel.Dock="Right" Background="Yellow">3 (Right)</Button>
122 CHAPTER 5 Layout with Panels
<Button DockPanel.Dock="Bottom" Background="Lime">4 (Bottom)</Button>
<Button Background="Aqua">5</Button>
</DockPanel>
```

Question: 6 (5 Marks)

What will be the easiest way if someone wants to know whether a certain string is a number or not? Elaborate your answer with an example.

`IsNumeric(String s)`

This method is used to find if the string is numeric or not.

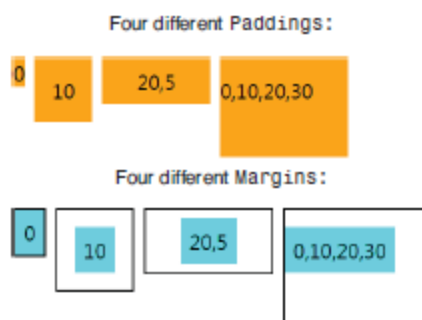
Difference b/w Margin and padding??? 5 marks ka tha.

Margin and Padding

Margin and Padding are two very similar properties that are also related to an element's size. All FrameworkElements have a Margin property, and all Controls (plus Border) have a Padding property. Their only difference is that Margin controls how much extra space gets placed around the *outside* edges of the element, whereas Padding controls how much extra space gets placed around the *inside* edges of the element.

Both Margin and Padding are of type `System.Windows.Thickness`, an interesting class that can represent one, two, or four double values. The meaning of these values is demonstrated in Listing 4.1, which applies various Padding and Margin settings to Label controls. The second set of Labels is wrapped in Borders because the margin settings would not be noticeable otherwise. Figure 4.2 shows the rendered result for each Label if each one is individually placed in a Canvas (a panel covered in the next chapter).

Although not shown in this figure, Margin permits negative values. Padding does not.



1 marks ki coding thi related to triggers.

Transform ki wo type bato jo sab frame work elements may hoti ha....3 marks ka tha

Transforms are from the base class System.Windows.Media.Transform. All framework elements have

- 1. LayoutTransform and**
- 2. RenderTransform**

Uielements have renderTransformOrigin

Dock panel may fill k option nahi hoty tu ager hum ko fill karna ha tu kia option use kary gay2 marks ka tha

We will set Background = "Red"

These were Mcqs, Its with out choices. But i think enough for idea.

- Every event_____ is represented by an event object
- 'Situation' is an event occurrence that requires a(n) reaction_____
- Advantages of 'Event Handling' are _____ and _____
- Console is a/an static_____ class in the 'System' namespace
- The range of "sbyte" is _____
- When any variable is declared as _____ then it is treated as class variable.
- Due to metadata_____, "Assembly" Files are self-describing.
- There is/are _____ type/s of parameter/s for attribute
- XML document is readable by Machine and human both
- File.Move_____ Method is used to move the file from one directory to another.
- For which of the following, WPF does not provide any type converter?
- Compiling XAML involves 3 _____ steps
- One of the key goals of WPF and XAML is the separation of front-end and back-end_____
- The only xaml_____ .Net language had an intrinsic understanding of dependency.
- Routed events are like dependency properties _____ on top of .Net properties.

- By convention “tunneling event” names are prefixed with Preview_____ and just come before_____ the bubbling event occurs.
- We are checking whether an element is eligible for focus or not, which property will help us in this testing?
- Stylus can behave like a mouse_____ but has higher_____ resolution

CS411-Visial Programming

Midterm Current Papers updated (Fall 2022)

[Made by RAjpoOt](#)

Contact us: [Click here](#)

- 1) Rotate & skew transforms are _____ in WPF (XAML).
 - A. Built-in
 - B. User defined
 - C. Customized
 - D. Non-default
- 2) C++ most often used with some implementation of the _____.
 - A. Compact language Interface
 - B. Control language Infrastructure
 - C. Control language Interface
 - D. Common language Infrastructure
- 3) The default constructor initializes the integers with _____ value.
 - A. Empty
 - B. NULL
 - C. Zero (0)
 - D. One (1)
- 4) Compiling XAML involves _____ step(s).
 - A. Four
 - B. Three
 - C. Two
 - D. One
- 5) _____ are special dependency properties that can be attached to arbitrary objects.
 - A. Attached Properties
 - B. Global Properties
 - C. Static Properties
 - D. Procedural Properties
- 6) "Situation" is an event occurrence that requires a(n) _____.
 - A. Reaction
 - B. Coupling
 - C. Decoupling
 - D. Action
- 7) Which statement is true about Interface?
 - A. An interface can only contain declaration of methods, variables, events, and indexers.
 - B. An interface can only contain declaration of variables, properties, events, and indexers.
 - C. An interface can only contain declaration of methods, properties, variables, and indexers.

D. An interface can only contain declaration of methods, properties, events, and indexers.

8) Attributes e.g.: [Obsolete] was declared _____ the class/function.

- A. Outside
- B. Within**
- C. After
- D. Above

9) Out of the ways to get instance of a class is _____.

- A. System array
- B. Factory method**
- C. Sequential heap
- D. XAML compiler

10) Correct way of setting font size of text element in stack panel

- A. FontSize="20"
- B. TextElement Size="20"
- C. TextElement FontSize="20"**
- D. TextElement Font="20"

11) How to set flow direction of an element in stack panel?

- A. FlowDirection="LeftToRight"**
- B. Flow.Direction="LeftToRight"
- C. Flow="LeftToRight"
- D. Direction="LeftToRight"

12) In XAML 2006, x:AsyncRecords takes (by default) _____ msec in between loading different chunks.

- A. 200msec**
- B. 400msec
- C. 600 msec
- D. 800msec

13) Which of the following is called insertion operator in C++?

- A. >>
- B. <<**
- C. >
- D. <

14) Valid size of float data type in C# is _____.

- A. 10 Byte
- B. 6 Byte
- C. 4 Byte**
- D. 8 Byte

15) _____ method is used to read all the lines in a file at once.

- A. File.Read

- B. File.ReadAllText
- C. File.ReadAllLines**
- D. ReadLine

16) Identify the Correct Statement

- A. The catch block may or may not be written immediately after the try block.**
- B. The catch block is written immediately after the try block.
- C. The catch block is written before the try block
- D. The finally block is written immediately after the try block.

17) Identify the correct way of declaring nullable type

- A. NullInt Unitsinstock =5;
- B. Int Unitstock = null;
- C. Int? Unitsinstock = 5;**
- D. Int Unitsinstock = ?

18) Identify correct statement

- A. All XML elements must be lower case
- B. All XML elements must have DTD
- C. All XML elements must have a closing tag**
- D. All XML elements must be lower case and have DTD

19) _____ method is used to move the file from one directory to another.

- A. Move**
- B. Export
- C. Import
- D. Transport

20) Unlike type converters, markup extensions are invoked from XAML with _____.

- A. Bridge assemblies
- B. Wrapper code
- C. Explicit and Consistent syntax**
- D. Bridge assemblies and Wrapper code.

21) _____ is the only .Net language which has an intrinsic understanding of dependency properties.

- A. Vb.net
- B. C#
- C. J#
- D. XAML**

22) "Canvas" has a property of "Zindex" and its function is _____

- A. Overlapping of elements one each other**
- B. Position the element on y-axis of canvas
- C. Position the element on z-axis of canvas
- D. Position the element on x-axis of canvas

23) Information is _____ in event driven mechanism

- A. Pushed**
- B. Pulled

- C. Entered
- D. Required

24) OpenGL, works with _____

- A. Graphics cards
- B. Plotter
- C. Printer
- D. Monitors

25) XNA gives managed libraries for _____.

- A. DirectX
- B. .net
- C. C++
- D. GDI

26) Markup Extensions are written within _____.

- A. Square Brackets
- B. Curly braces
- C. Parentheses
- D. Angle brackets

27) While compiling XAML, it first converts it into _____.

- A. Decimal Format
- B. Hexa Format
- C. Binary Format
- D. Octa Format

28) Whenever an attribute value is enclosed in curly braces “{}”, the XML compiler/parser treats it as a/an _____ rather than a/an_____.

- A. Markup extension value, literal string
- B. Markup event, property
- C. Markup property, event
- D. literal string, Markup extension value

29) To communicate with unmanaged COM, _____attribute is used.

- A. [Obsolete]
- B. [Assembly]
- C. [STA thread]
- D. [Obsolete attribute]

30) When any variable is declared as _____ then it is treated as class variable

- A. Protected
- B. Private
- C. Public
- D. Static

31) Which of the following is the best tool for development of games?

- A. Avalon
- B. XNA**
- C. GDI
- D. WPF

32) A/an _____ is a set of associated events.

- A. Event consumer
- B. Event producer
- C. Event stream**
- D. Event channel

33) XML files attach the project as _____

- A. System resources**
- B. Partial assembly
- C. Binary resources
- D. Machine independent resources

34) If we “using” keyword with file stream, it will automatically _____ the file.

- A. Open
- B. Append
- C. Close**
- D. Create

35) The syntax of “CDATA” section is _____.

- A. <![CDATA[some code here]]>**
- B. <?![CDATA[some code here]]?>
- C. <![CDATA{some code here }]>
- D. <!(CDATA(some code here))>

36) _____ is used to generate simple notification for an object at runtime in C#

- A. Delegate**
- B. Interface
- C. Namespace
- D. Attribute

37) In C#, Anonymous method can be used as _____

- A. File handler
- B. Event handler**
- C. Class handler
- D. Data handler

38) _____ keyword is used for casting in C#.

- A. Of
- B. Is
- C. us
- D. as**

39) _____method in console enables to read individual inputs directly from the keyboard.

- A. Read ()
- B. ReadByte ()
- C. ReadLine ()
- D. **ReadKey ()**

40) Identify correct statement.

- A. All the XML elements must be lower case
- B. All the XML elements must have DTD
- C. **All the XML elements must have a closing tag**
- D. All the XML elements must be lower case and have DTD

41) In C# _____method is used to read all the lines one by one in a file.

- A. File.Read
- B. File.ReadAll text
- C. **File.ReadAllLines**
- D. ReadLine

42) Choose the correct syntax to show a message box in C#.

- A. **MessageBox.Show("Hello");**
- B. MessageBox.Print("Hello");
- C. MessageBox.Write("Hello");
- D. MessageBox.ReadLine("Hello");

43) WCF stand for _____

- A. Windows communicate framework
- B. Windows control framework
- C. **Windows communicate foundation**
- D. Windows common framework

44) In WPF dependency properties are represented by:

- A. System shapes dependency property
- B. System windows dependency property
- C. **System dependency property**
- D. System windows properties dependency property

45) If we execute the following code, then identify the correct option from below

```
<canvas>
```

```
<button canvas Zindex="10"background="red">B1</button>
```

```
<button canvas Zindex="10"background="blue">B1</button>
```

```
</canvas>
```

- A. Button B2 will be on the top of B1
- B. Value of Zindex of first button cannot be greater than second
- C. Button B1 will be on the top of B2
- D. **Button B1 will be on the bottom of B2**

3 Marks Question

Q. Can we initialize non-static data fields within the static constructor in C# language? Give your answer in YES or No with solid reason. (3 Marks).

Answer:

Yes, It is possible. But we have to create an object of the class inside the static constructor and then initialize the non-static member through the object reference.

Q. What are the two ways to use "using" keyword in C#? (3 Marks)

Answer:

There are two ways to use the "using" keyword in C#:

1. Using Directive: The "using" keyword can be used as a directive to include a namespace in the current code file, making all the types within that namespace available without having to specify the full namespace name. This is done by adding a "using" statement at the top of the code file, followed by the namespace name. This allows you to use the types within the namespace without having to qualify them with the namespace name.

Example: using System;

2. Using Statement: The "using" keyword can also be used to create a block of code, called a "using block", that automatically disposes of an object when the block is exited. This is done by instantiating an object within a "using" block, and the object's Dispose method is called automatically when the block is exited, even if an exception occurs. This ensures that unmanaged resources are properly cleaned up, and it is commonly used when working with resources such as file streams and database connections.

Example:

```
using (FileStream stream = new FileStream("file.txt", FileMode.Open))
{
    // code that uses the stream
}
```

In this example, the using block ensures that the FileStream object's Dispose method is called, even if an exception occurs within the block.

5 Marks Question

Q. Identify “Real-Time Events” and “Computing System Events” From the list given below

Timer Interrupt

Place an Order

Phone rings

Banking alerts

Reading a newspaper

Answer:

"Real-Time Events"

Timer Interrupt

Phone rings

Banking alerts

"Computing System Events"

Place an Order

Reading a newspaper

Real-Time events are those events that are time-critical, meaning that they require immediate attention and handling. They are typically related to the external environment, such as physical interactions or external systems, and they have a direct impact on the operation of the system. Examples of real-time events are Timer Interrupt, Phone rings, Banking alerts

Computing System Events are those events that are related to the internal operation of the system. They are not time-critical, and they do not have a direct impact on the operation of the system.

Examples of computing system events are Place an Order, Reading a newspaper

Q. Consider the following code snippet and represent it with Logical Tree

```
<StackPanel Orientation="Horizontal" HorizontalAlignment="Center">  
<Label>Hello</Label>  
<Button MinWidth="75" Margin="10">Help</Button>  
<Button MinWidth="75" Margin="10">OK</Button>
```

```
</StackPanel>
```

Answer:

StackPanel (Orientation="Horizontal", HorizontalAlignment="Center")

Label ("Hello")

Button (MinWidth="75", Margin="10") ("Help")

Button (MinWidth="75", Margin="10") ("OK")

Q. Make five Button using stack panel with min width or in center.

Answer:

```
<stackpanel Orientation="Horizontal" horizontalalignment="Center">  
<Button minwidth="75" Margin="10">Home</Button>  
<Button minwidth="75" Margin="10">File</Button>  
<Button minwidth="75" Margin="10">Canel</Button>  
<Button minwidth="75" Margin="10">Help</Button>  
<Button minwidth="75" Margin="10">OK</Button>  
</stackpanel>
```

Q. Name the five built in 2D transforms which are supported by System.Window.Media"namespace.

Answer:

The five built-in 2D transforms supported by the "System.Windows.Media" namespace are:

1. ScaleTransform
2. SkewTransform
3. RotateTransform
4. TranslateTransform
5. MatrixTransform.

Q. What does [STAThread] do?

Answer:

STAThread is an attribute in C# and other languages that indicates that the Main method of the application will be executed in a single-threaded apartment (STA) model. This is typically used for Windows Forms applications and other GUI-based programs that need to interact with COM objects that require an STA environment. It ensures that the main thread of the application is always an STA thread, which is necessary for some COM components to work correctly.

Q. How can we name XAML element "Text Box"? Also provide its syntax.

Answer:

In XAML, you can give a name to a "Text Box" element by using the x:Name attribute. The syntax would be as follows:

```
<TextBox x:Name="textBoxName" />
```

Where "textBoxName" is the name you want to give to the element.

You can also use Name attribute to name the element, it is equivalent to x:Name attribute.

```
<TextBox Name="textBoxName" />
```

Once you've given the element a name, you can reference it in your code-behind file using that name

Q. If we execute the following code then identify the correct option from the given below;

```
<Canvas>
```

```
<Button Canvas.Zindex = *10* Background='Red'>B1</Button>
```

```
<Button Canvas.Zindex = *9* Background='Blue'>B1</Button><
```

```
</Canvas>
```

Answer:

The given code creates two buttons within a canvas. The first button has a Z-index of 10 and a background color of red, and the second button has a Z-index of 9 and a background color of blue.

The Z-index property determines the order in which elements are layered on top of each other within a container, with elements having a higher Z-index appearing on top of those with a lower one.

So the first button will appear on top of the second button because it has a higher Z-index value.

The background color of the first button will be Red and second button will be blue.

Q. Write the output of the following code snippet given in C# Language.

```
Using system.IO;

Using system

Class Program
{
    Static void Main()
    {
        Int[ ][ ]multi=new int [2][ ];
        Multi[0]=new int[8];
        Multi[1] =new int[8];
        {
            For (int j=0;j<8;j++)
            {
                multi[i][j]=i*j;
            }
        }
        For (int j=0;j<8;j++)
        {
            Console.WriteLine(*Value at "+i+,+j+",'multi[i][j]);
        }
    }
}
```

```
}  
}
```

Answer:

The given code creates a 2-dimensional array of integers called "multi" with 2 rows and 8 columns. It then assigns values to each element in the array using a nested for loop. The outer loop iterates through the rows (i) and the inner loop iterates through the columns (j).

The values of each element are calculated using the formula $\text{multi}[i][j] = i * j$.

Then again it iterates through the array using a nested for loop and prints the value of each element using Console.WriteLine() function in this format 'Value at "i,j" : multi[i][j]', where i and j are the indexes of the element.

However there are some errors in the given code snippet,

The variable i is not declared and used in the nested for loop.

There is a typo in the Writeline function, it should be Console.WriteLine() instead of Console.Writeline()

The * sign before Value should be removed

So the code will not run as it is, it needs to be corrected first before running.

Types of constructor:

In C#, constructors can be divided into 5 types ⌚ Default Constructor. ⌚ Parameterized Constructor. ⌚ Copy Constructor. ⌚ Static Constructor. ⌚ Private Constructor.

Attributes in xml 2006

Attribute syntax is the XAML markup syntax that sets a value for a property by declaring an attribute on an existing object element

difference between event producer and event consumer

EVENT PRODUCER: An event producer is an entity at the edge of an event processing system that introduces events into the system.

EVENT CONSUMER: An event consumer is an entity at the edge of an event processing system that receives events from the system.

Name the Properties Supported by Scale Transform, write their**default values?**

Answer:

Scale Transform has

scalex, scaley = 1; by default.

centerx, centery = 0; by default.

▪ Can static constructor initialize to non static constructor?**Give your answer with yes or no with solid reason?**

Static constructor can initialize only static variable but non-static constructor can initialize both static and non-static variable. Static constructor do not have any access specifier but non-static constructor have access specifier.

Elaborate stateful agent idea?

Stateful (master/slave) resource agents may use a more elaborate monitoring scheme where they can provide "hints" to the cluster manager identifying which instance is best suited to assume the Master role.

Implementation of color brush?

A SolidColorBrush is the most common type of Brush that is used for many possible UI properties that use a Brush to fill some or all of an object's visual area in app UI. Examples of some of the most commonly-used properties that use a Brush value include: Control.Background, Control.Foreground, Shape.Fill, Control.BorderBrush, Panel.Background, TextBlock.Foreground.

What is the difference between HorizontalAlignment and HorizontalContentAlignment inside the stackpanel?

HorizontalAlignment will align your textbox in relation to its containing parent whereas HorizontalContentAlignment will align the text of your textbox in relation to itself.

What is the different type of properties are available in c#?

There are the following 4 types of Properties:

1. Read-Write Property
2. Read-Only Property
3. Static Property
4. Indexer Property

: Difference b/w Margin and padding???

Both the margin property and the padding property insert space around an element. However, the difference is that margin inserts the space around the border, while padding inserts the space within the border of an element. Margin permits negative values. Padding does not.

Is finally block always executes while working with try and catch clause. Explain with reasons?

A finally block always executes, regardless of whether an exception is thrown. The following code example uses a try/catch block to catch an ArgumentOutOfRangeException. The Main method creates two arrays and attempts to copy one to the other.

3 features of java

Following are the notable features of Java:

Object Oriented. In Java, everything is an Object. ...

Platform Independent. ...

Simple. ...

Secure. ...

Architecture-neutral. ...

Portable. ...

Robust. ...

Multithreaded.

Write a C program to check whether a given number is even or odd???

using System;

public class Exercise2

{

 public static void Main()

 {

 int num1, rem1;

 Console.Write("\n\n");

 Console.Write("Check whether a number is even or odd :\n");

 Console.Write("-----");

 Console.Write("\n\n");

 Console.Write("Input an integer : ");

 num1= Convert.ToInt32(Console.ReadLine());

 rem1 = num1 % 2;

 if (rem1 == 0)

 Console.WriteLine("{0} is an even integer.\n",num1);

 else

```
Console.WriteLine("{0} is an odd integer.\n",num1);  
  
}  
  
}
```

How does a graphical user interface work?

A GUI uses windows, icons, menus, and buttons to show the user how to execute commands. This can be done with a pointer, keyboard, or touch screen. For example, you can open a file icon on your desktop by pointing and clicking with your mouse.

Purpose of Event Driven.

Answer:

Event-driven architecture (EDA) is a software design pattern that enables an organization to detect “events” or important business moments.

What are main Benefits of Event Driven Architecture?

Answer:

These are Following:

- ❖ Impure competitive advantage
- ❖ Create operational Efficacies
- ❖ More Robust Information
- ❖ Better Scalability and Fault Tolerance
- ❖ Increase Versatility
- ❖ Casting Functionality

100: Write XAML code to create a "stackpanel" having four Buttons with dock setting i.e. Top, center, Bottom and Stretch

Answer:

```
<stackpanel>
<Button horizontalalignment="Left" Background="Red">Left</Button>
<Button horizontalalignment="Center" Background="Orange">Center</Button>
<Button horizontalalignment="Right" Background="Yellow">Right</Button>
<Button horizontalalignment="Stretch" Background="Lime">Stretch</Button>
</stackpanel >
```

101: Write XAML code to create a "stackpanel" having four Buttons with dock setting i.e. left and top except button which overrides it. Textblock doesn't stretch like a control.

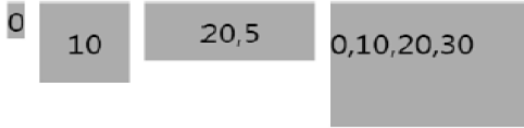
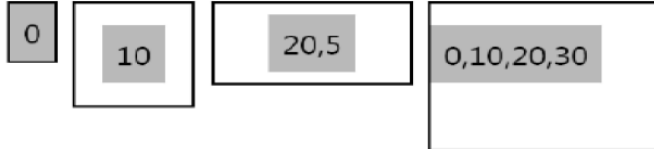
Answer:

```
<stackpanel>
<Button horizontalcontentalignment="Left" Background="Red">Left</Button>
<Button horizontalcontentalignment="Center" Background="Orange">Center</Button>
<Button horizontalcontentalignment="Right" Background="Yellow">Right</Button>
<Button horizontalcontentalignment="Stretch" Background="Lime">Stretch</Button>
</stackpanel >
```

	CS411	Midterm upto 2015	MC130401237
Visual Programming	Subjective Solved		M. Kamran Khan
No.	Question Statement		
1	Name the Built-in Transforms - Their Default Values? Name 5 built in 2D transform which are supported by "System.Windows.Media" namespace.		
Ans.	1. Translate Transform 2. Skew Transform - AngleX, AngleY, CenterX & CenterY (default value = 0) 3. Scale Transform 4. Rotate Transform – Angle, Centrex, Centery = 0; 5. Matrix Transform		
2	<u>Consider the following code snippet and write the output:</u> XmlDocumentxmlDoc = new XmlDocument(); xmlDoc.LoadXml("<uni name='Virtual'>University Node</uni.>"); console.WriteLine(xmlDoc.DocumentElement.Name); console.WriteLine(xmlDoc.DocumentElement.InnerText); console.ReadLine();		
Ans.	Element Name: Virtual Inner Text: University Node		
3	Which Option to be Used to Fill the Dock Panels?		
Ans.	Dock panel allows easy docking of elements to an entire side. Dock attached property has left, right, top, bottom values. Last child fills space unless lastchildfill=false.in We can also do this by setting Background = “Red”		
4	Write Code to Delete Non-Empty Cell?		
Ans.	{ cell.value = string.empty }		
5	Can BAML be Decompiled back into XAML? Explain with Valid Reason.		
Ans.	Yes, BAML can be converted back to XAML. BAML is binary application markup language. It just a compressed representation of XAML. There is even a BAML reader available.		
6	<u>What are Default Values of These?</u> 1. Max Height 2. Min Height 3. Max Width		

	4. Min Width
Ans.	Min=0 and Max=Infinity by default. All framework elements have Height and Width properties of type double.
7	How can we know which cells are directly affected by the resizing of "GridSplitters"?
Ans.	It depends on Gridsplitter's alignment values. Default horizontal alignment=right and vertical alignment=stretch. When all proportionally sized, changes co-efficients accordingly. When absolute sizing, changes only top or left of the cells. Remaining cells pushed down or right.
8	Which provide multi-touch support, WPF3 or WPF4?
Ans.	WPF 4.0 includes multi-touch support.
9	Name of three type of row-definition and column-definition sizing that are supported by WPF "GRID" panel? 3 Ways of Rows and Columns Sizing?
Ans.	1. Absolute sizing: device independent pixels means no grow shrink, 2. Auto-sizing: size to content. 3. Proportional or Star sizing: grows or shrinks.
10	How to make xml document name? Write the syntax?
Ans.	<code>XmlDocument xmlDoc = new XmlDocument();</code>
11	Types of Transform?
Ans.	LayoutTransform RenderTransform. One applied before layout and one after.
12	<u>Convert Xml into C#?</u> <code>Span id="IL_AD1" class="IL_AD">Button xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation" Content="OK"/></code>
Ans.	1 <code>System.Windows.Controls.Button b = new System.Windows.Controls.Button();</code> 2 <code>b.Content = "OK";</code>
13	Write the C# code line to take any string as input from user and the write that string to a file named "Student.txt"?
Ans.	<code>using System; class Program { static void Main() { while (true) // Loop indefinitely</code>

	<pre> { Console.WriteLine("Enter input:"); // Prompt string line = Console.ReadLine(); // Get string from user if (line == "exit") // Check string { break; } // Write the string to a file. { System.IO.StreamWriter file = new System.IO.StreamWriter("c:\\student.txt"); file.WriteLine(lines); } file.Close(); </pre>
14	Which panel functionality is actually a superset of “stack panel” functionality?
Ans.	Dock panel is a superset of stack panel, Dock attached property has left, right, top, bottom values.
15	For what purpose XAML is used in WF and WCF?
Ans.	XAML is primarily used to describe interfaces in WPF and Silverlight. It is also used to express activities and configurations in workflow foundation (WF) and windows communication foundation (WCF). It's a common language for programmers and other experts e.g. UI design experts. Field specific development tools can be made. Field experts are graphic designers. They can use a design tool such as expression blend. Other than co-ordinating with designers, XAML is good for a concise way to represent UI or hierarchies of objects, encourages separation of front-end and back-end, tool support with copy and paste, used by all WPF tools.
16	WPF Panels are Derived from Which Class?
Ans.	Panels are parents supporting layout of multiple children. They derive from the abstract System.Windows.Controls.Panel class.
17	How matrix transform is work like translate transform and give example?
Ans.	Translate Transform has X — Amount to move horizontally (default value = 0), Y — Amount to move vertically (default value = 0). It has no effect as a layout transform. Matrix Transform has a single Matrix property (of type System.Windows.Media.Matrix) representing a 3x3 affine transformation matrix.
18	Padding and margin, illustrate 3 instances?
Ans.	Next is margin and padding. All framework elements have margin, controls (and Border) have padding. Margin is extra space “outside” and padding is “inside” edges of the element. They are of type Thickness that can represent 1, 2, or 4 values. Negative margin is possible. Label's default padding=5. Xaml specification is helped by type converter.

	Four different Paddings :  Four different Margins : 
19	<u>Write xml code of given C# code?</u> <pre> StakPanelstackpanel = new StakePanel Button button = new system.window.control Button; button.width = 50; button.Hight = 70 button.HOrizontelAlligenemtn = right; stakepanel.child.add(button); </pre>
Ans.	<pre> <?xml version="1.0" encoding="UTF-8" ?> <root> <0> <StakPanelstackpanel = new StakePanel> Button button = new system.window.control Button; </StakPanelstackpanel = new StakePanel> </0> <1> <StakPanelstackpanel = new StakePanel> button.width = 50;</StakPanelstackpanel = new StakePanel> </1> <2> <StakPanelstackpanel = new StakePanel> button.Hight = 70 </StakPanelstackpanel = new StakePanel> </2> <3> <StakPanelstackpanel = new StakePanel> button.HOrizontelAlligenemtn = right; </StakPanelstackpanel = new StakePanel> </pre>

	<pre> </3> <4> <StackPanelstackpanel = new StakePanel> stackpanel.child.add(button); </StackPanelstackpanel = new StakePanel> </4> </root> </pre>
20	Name the Properties Supported by Scale Transform, write their default values?
Ans.	Scale Transform has scalex, scaley = 1; by default. centerx, centery = 0; by default.
21	Write names of 3 children of an object?
Ans.	An object element can have three types of children: - A value for a content property - Collection items - A value that can be type-converted to the object element
22	When Context Overflow in Built-in Panel Arise, How to Fix That?
Ans.	Content overflow is when parents and children can't agree on the use of available space. Content overflow can be dealt with Clipping, Scrolling, Scaling, Wrapping and Trimming.
23	Logical Tree of the Code?
Ans.	Logical tree exists even if there is no xaml. Properties, events, resources are tied to logical trees. Properties propagated down and events can be routed up or down the tree. Its a simplification of whats actually going on when rendered. Visual tree can be thought of as an extension of the logical tree though some things can be dropped as well. Visual tree exposes visual implementation details e.g. A listbox is a border, two scrollbars and more. Only things from visual or visual3d appear in a visual tree. Avoid depending on visual tree in your code.
24	Syntax of CDATA Section?
Ans.	<pre> <x:Code> <![CDATA[Void button_Click(object sender, routedeventargs e) { This.Close(); }]]> </x:Code> </pre>

25	Explain Routed Events?
Ans.	Routed events are like dependency properties on top of .net properties. Similarly routed events are a layer on top of .net events. They can travel up or down a visual or logical tree. Helps apps remain oblivious to the visual tree. E.g. Button exposes Click based on mouseleftbuttondown and keydown but actually buttonchrome or textblock visual child fires it. Event travels up the tree and Button eventually sees it. Or like in a previous example rectangle on top of button. So arbitrary complex content but Click still raised. Otherwise would require custom code on inner content or consumers. Very similar to dependency property concept.
26	WPF Read-Only?
Ans.	Read only properties: 1. Desiredsize 2. Rendersize 3. Actualheight 4. Actualwidth. They are useful to act programmatically on final size.
27	What We Achieve from ZIndex Codes?
Ans.	ZIndex is an integer with a default value of 0 that you can set to any number (positive or negative). Elements with larger ZIndex values are rendered on top of elements with smaller ZIndex values, so the element with the smallest value is in the back, and the element with the largest value is in the front.
28	Why Most WPF Classes are Inherently Thread-Unsafe?
Ans.	Since WPF classes derive from dispatcherobject therefore they are inherently thread-unsafe. Reason: Dispatcherobject is the base class meant for any object that wishes to be accessed only on the thread that created it.
29	Which transforms all framework elements have?
Ans.	1. Layout Transform 2. Render Transform
30	What will be the easiest way if someone wants to know whether a certain string is a number or not? Elaborate your answer with an example?
Ans.	IsNumeric(String s) This method is used to find if the string is numeric or not.
31	Write the XAML code to create a “DockPanel” having four buttons with dock settings i.e. Top, Bottom, Right and Left.
Ans.	<pre><DockPanel> <Button DockPanel.Dock="Top" Background="Red">1 (Top)</Button> <Button DockPanel.Dock="Left" Background="Orange">2 (Left)</Button> <Button DockPanel.Dock="Right" Background="Yellow">3 (Right)</Button> <Button DockPanel.Dock="Bottom" Background="Lime">4 (Bottom)</Button> <Button Background="Aqua">5</Button> </DockPanel></pre>

32	Write two differences between WPF and DirectX?
Ans.	WPF is made for designers to create vector-based applications using XML and managed code. It uses DirectX as the rendering engine under the covers. DirectX is a set of APIs that abstracts access to modern graphics rendering hardware, as well as other technologies such as sound or input devices. WPF is not designed for any significant game programming, other than, say, a simple card game. DirectX is designed with the intention of allowing you to create a 3D user interface into your game.
33	When two or more independent grids need to be synchronized, then how can we synchronize them?
Ans.	Sharedsizegroup is used to synchronized when they are docked.
34	What is the biggest feature of dependency property?
Ans.	Its built-in ability to provide change notification.
35	What is the purpose of using xaml extensions?
Ans.	To extend the expressiveness of XAML.
36	WPF combines the best attribute of some systems. write the names of three?
Ans.	WPF aims to combine the best attributes of systems such as: - DirectX (3D and hardware acceleration), - Windows Forms (developer productivity), - Adobe Flash (powerful animation support) - HTML (declarative markup)
37	What is the purpose of WPF 2D transform classes?
Ans.	To rotate, scale, move (translate), and skew FrameworkElement objects.
38	For which class WPF are derived?
Ans.	using System.Windows;
39	Why C# let us Develop devices resulation independent graphics?
Ans.	C# enable us to develop device independent graphics so that same application/ GUI have same aspect ratio and appearance on all kind of displays. e.g. Windows phone, Windows PC etc.
40	Which term is used to refer to an object that derives from "UIElement" or "FrameworkElement"?
Ans.	Uielement is the base class for all 2D visual objects. System.Windows.UIElement Frameworkelement is the base class that adds support for styles, data binding, resources etc. System.Windows.FrameworkElement
41	Name the three routed strategies?
Ans.	• Tunneling—The event is first raised on the root, then on each element down the tree until the source element is reached (or until event is marked as handled).

	• Bubbling—The event is first raised on the source element, then on each element up the tree until the root is reached (or until the event is marked as handled). • Direct—The event is only raised on the source element. Only source element is given the chance to invoke handlers in response.
42	Name the three parameters of Handlers for routed events?
Ans.	Two are known - third is unknown. 1. Sender Type: System.Object - The source of the event. 2. E Type: System.EventArgs - An object that contains no event data.
43	Why "Grid" panel is the best choice for most complex layout scenarios?
Ans.	The grid is a layout panel that arranges its child controls in a tabular structure of rows and columns. Its functionality is similar to the HTML table but more flexible. A cell can contain multiple controls, they can span over multiple cells and even overlap themselves.
44	Why C# let us Develop devices resolution independent graphics?
Ans.	Fortunately for us, C# makes it very easy. The File class, from the System.IO namespace comes with pretty much everything we could possibly want, making it very easy to do simple reading and writing of a file. File.ReadAllText File.WriteAllText Also AppendAllText
45	What happens when an event is moved up?
Ans.	It's actually called bubbling in routed events. Bubbling—The event is first raised on the source element, then on each element up the tree until the root is reached (or until the event is marked as handled).
46	Why events are used in pairs? explain with example?
Ans.	In VPL, a program is created by assembling pairs of one event and one or more action blocks. For example, a pair composed of a <i>button</i> event and a <i>motors</i> action tells the robot to move when a button is touched on the robot.

Little Research is Required at Your End as Some of the Answers are Not Absolutely Perfect



www.ranapk.com

Rana Abubakar Khan

If you want to learn computer programming then contact with me

truefriendlion@gmail.com

JOIN FB GROUP FOR VU HELP

www.facebook.com/groups/vu1234/

1. If we pass NULL value to "GetDC" function, it retrieves the DC for the:

Select correct option:

Entire Screen

Parent Window

Client Window

It does not retrieves DC

2. Two types of Subclassing are:

Select correct option:

Automated Subclassing and Manual Subclassing

Static Subclassing and Dynamic Subclassing

Local Subclassing and Global Subclassing

Instance Subclassing and Global Subclassing

3. Long chain of keywords in declaration can be shortened. Above line is the advantage of _____.



www.ranapk.com

Select correct option:

Typedef

Struct

Union

None of given

4.Result of _____ of two bits is TRUE (1) if only if both are TRUE (1)

Select correct option:

OR (|)

XOR

AND (&)

NOR

5.DOS boxes are also called _____

Select correct option:

Main Window

Console Window

Dialogue Box

Arrays

6._____ function is used to invalidate a window or part of it

Select correct option:

InvalidateRect

InvalidateWindow



www.ranapk.com

InvalidateClient

InvalidateApp

7.The _____ function draws a rectangle

Select correct option:

SetRectCoords(...)

ShowRectangle(...)

DrawRectangle(...)

Rectangle(...)

8._____ is the handle to icon associated with Window Class.

Select correct option:

hIcon

hCursor

HINSTANCE

UINT

9.The SelectObject function selects an object into the specified:

Select correct option:

Object Context (OC)

Device Context (DC)

Window Context (WC)



www.ranapk.com

Class Context (CC)

10. A thread can not share all of its resources

Select correct option:

TRUE

FALSE

11. Union Person { char name[30]; //30 bytes int age; float height; }; Union Person abc, *ptr; Ptr = &abc; ptr = ptr +1; How many bytes will skip after executing ptr = ptr +1.

Select correct option:

38 bytes will skip after executing ptr = ptr +1.

30 bytes will skip after executing ptr = ptr +1.

31 bytes will skip after executing ptr = ptr +1.

32 bytes will skip after executing ptr = ptr +1.

12. There cannot be multiple _____ messages in message queue.

Select correct option:

WM_PAINT

WM_TIMER

WM_QUIT

WParam

13. _____ acts as a buffer between applications and output devices.

Select correct option:



www.ranapk.com

GDI

Kernel32

OS

CPU

14.If first non wide space character will be #, so it will be called ____.

Select correct option:

Preprocessor Directives

Preprocessor Folder Not Sure

Preprocessor Director

None of Given

15.The ____ function retrieves a handle to a display device context (DC) for the client area of a specified window or for the entire screen.

Select correct option:

GetHwnd

GetDC

GetGDI

GetStockObject

16._____ tell the operating system about the characteristics and physical layout of its windows.

Select correct option:

Register Class



WWW.RANAPK.COM

www.ranapk.com

Object Class

Window Class

Common Class

17. Line can be drawn using _____ Functions

Select correct option:

MoveToEx and LineTo

SelectPts and DrawLine

SelectPts and DrawPOLY

None of the giving options

18. A Window that has a parent is called a ____ Window

Select correct option:

Parent

Main

Child

Owner Window

19. Whenever a window is resized, system sends "WM_SIZING" message to the application that owns the window

Select correct option:

TRUE

FALSE



www.ranapk.com

20. _____ is used to check the predefined identifiers.

Select correct option:

#include

#ifdef

#def

#elif

21. What kind of messages can be display using messagebox function?

Select correct option:

Long messages

Short messages

Null values

None of the given

22. We can create a window using _____

Select correct option:

RegisterClass ()

WNDClass

CreateWindow ()

DestroyWinndow()



www.ranapk.com

23. A thread _____

Select correct option:

is a path of execution through a program

is smallest unit of execution that Win32 schedules

consists of a stack

All of given options

24. A thread can not share all of its resources

Select correct option:

TRUE

FALSE

25. If a window owns child Windows, and we destroy owner Window then _____.

Select correct option:

Only owner window will be destroyed

Only its owned window will be destroyed

Both owner and owned Windows will be destroyed

The application will be crashed

26. A Window that has a parent is called a ____ Window

Select correct option:

Parent

Main



www.ranapk.com

Child

Owner Window

27._____ is a technique that allows an application to intercept messages destined for another window.

Select correct option:

Subclassing

SuperClassing

Message Dispatching

None of given options

28._____ is unique identifier of the registered window class return by Registeredclass ()

Select correct option:

Handle

Cursor

Object

ATOM

29._____ tell the operating system about the characteristics and physical layout of its windows.

Select correct option:

Register Class

Object Class

Window Class

Common Class



www.ranapk.com

30. Result of _____ of two bits is TRUE (1) if only if both are TRUE (1)

Select correct option:

OR (|)

XOR

AND (&)

NOR

31. Whenever a window is resized, system sends "WM_SIZING" message to the application that owns the window

Select correct option:

TRUE

FALSE

32. Regarding Win32, an application cannot subclass a Window or Class that belongs to another process

Select correct option:

TRUE

FALSE

33. Ptr -> age is equivalent to _____

Select correct option:

*ptr.age



www.ranapk.com

ptr.age

(ptr).age

(*ptr).age

34.If a window owns child Windows, and we destroy owner Window then _____.

Select correct option:

Only owner window will be destroyed

Only its owned window will be destroyed

Both owner and owned Windows will be destroyed

The application will be crashed

35._____ handles user inputs and responds to user events independently.

Select correct option:

User-Interface Thread

Worker Thread

Kernel Thread

None of given options

36._____ provides the functionality to create and manage screen windows and most basic controls

Select correct option:

GDI

Common Dialog Box

Common Control Library

User Interface



www.ranapk.com

37. _____ acts as a buffer between applications and output devices.

Select correct option:

GDI

Kernel32

OS

CPU

38. The _____ function writes a character string at the specified location, using the currently selected font, background color, and text color

Select correct option:

printf(...)

PrintText(...)

TextOut(...)

cout<<

39. A _____ is commonly used to handle background tasks

Select correct option:

Worker thread

User Interface thread

Parent thread

Process thread



www.ranapk.com

40. The system paints the background for a window or gives the window, the opportunity to do so by sending it a _____ message

Select correct option:

WM_FILLBKGD

WM_ERASEBKGD

WM_SYSCOMMAND

WM_OVERLAPPED

41. Name of Two dimensional array is the address of _____

Select correct option:

First Column

First Row

Last Row

Last Column

42. A thread _____

Select correct option:

is a path of execution through a program

is smallest unit of execution that Win32 schedules

consists of a stack

All of given options



www.ranapk.com

43. $*(a+i)$ can also be written as _____

Select correct option:

a [i]

a[i+1]

*a

*a+1

44. GDI presents _____

Select correct option:

Device-independent view

Device-dependent view

Monitor-dependent view

None of given

45. What will be the entry point to a Windows program?

Select correct option:

WinMain

Main

Java.main

System.main



WWW.RANAPK.COM

www.ranapk.com

46. GDI is implemented through _____

Select correct option:

GDI.dll

Win32.dll

GDI32.dll

Kernel

47. A _____ is a structure that defines a set of graphic objects and their associated attributes, as well as the graphic modes that affect output.

Select correct option:

Kernel

Pen

Bitmap

Device Context