

XAML Questions Mostly Asked in Paper:

```
Grid.SetZIndex(layer1, 1)
```

```
Grid.SetZIndex(layer2, 0)
```

What's the purpose of this code?

Write Purpose of this code?

The purpose of this code is to set the z-index of two layers. The z-index determines the order in which elements are rendered in an HTML page. In this code, layer1 will be rendered first, followed by layer2.

Write XAML code to create a Grid layout with two columns and five rows.

```
<Grid>
  <Grid.ColumnDefinitions>
    <ColumnDefinition Width="2*" />
    <ColumnDefinition Width="3*" />
  </Grid.ColumnDefinitions>
  <Grid.RowDefinitions>
    <RowDefinition Height="1*" />
    <RowDefinition Height="1*" />
    <RowDefinition Height="1*" />
    <RowDefinition Height="1*" />
    <RowDefinition Height="1*" />
  </Grid.RowDefinitions>
</Grid>
```

What are possible values of Dockpanel.Dock property in XAML?

Ans: Dock attached property has left, right, top, bottom values. Last child fills space unless lastchildfill=false.

Write a code in XAML to create ha TextBox.

```
<TextBox Name="textBox1" Width="200" Height="50" />
```

Write an xaml code on wpf window with 3 gradient colors?

```
<Grid>
  <Grid.Background>
    <LinearGradientBrush StartPoint="0,0" EndPoint="1,1">
      <GradientStop Color="Red" Offset="0" />
      <GradientStop Color="Green" Offset="0.5" />
      <GradientStop Color="Blue" Offset="1" />
    </LinearGradientBrush>
  </Grid.Background>
</Grid>
```

Given below in XAML code for stack panel.

You are required to modify the given code to give the stack panel gradient background. Use three colors in gradient.

```
<StackPanel>
  <StackPanel.Background>
    <LinearGradientBrush StartPoint="0,0" EndPoint="1,1">
      <GradientStop Color="Red" Offset="0" />
      <GradientStop Color="Green" Offset="0.5" />
      <GradientStop Color="Blue" Offset="1" />
    </LinearGradientBrush>
  </StackPanel.Background>
</StackPanel>
```

Write the XAML code to create a list box with three items.

```
<ListBox>
  <ListBoxItem>Item-1</ListBoxItem>
  <ListBoxItem>Item-2</ListBoxItem>
  <ListBoxItem>Item-3</ListBoxItem>
</ListBox>
```

OR

```
<ListBox>
  <ListBoxItem Content="Item-1"/>
  <ListBoxItem Content="Item-2"/>
  <ListBoxItem Content="Item-3"/>
</ListBox>
```

Create a single instance application using WPF.

```
bool mutexIsNew;
using (System.Threading.Mutex m =
    new System.Threading.Mutex(true, uniqueName, out mutexIsNew))
{
    if (mutexIsNew)
        // This is the first instance. Run the application.
    else
        // There is already an instance running. Exit!
}
```

Write down the Purpose of block in objective c.

Block in Objective-C is an anonymous type of closure that can be used to encapsulate code and data. Blocks give developers the ability to easily write short pieces of code that will be executed asynchronously, move data between functions, and store references to functions for later use. Blocks are often used for callbacks, notification handlers, animation completion handlers, thread synchronization, and more.

Write down 3 resources generates that are executed during program?

Bitmap, fonts, string tables

Two categories of applications binary resources.

Localizable (change depending on the current culture) and Non Localizable (do not change based on culture).

Which type of information is provided in following windows properties in WPF?

a) Owner b) OwnedWindows

The owner property contains the information of parent window while

OwnedWindows contains the information about the list of child window.

What are the five types of HTML?

Five types of html in use:

1. HTML 4.01 Transitional
2. HTML 4.01 Strict
3. XHTML 1.0 Transitional
4. XHTML 1.0 Strict
5. HTML5

What is static and dynamic resources.

Static resources are resources that remain the same, like an image or a text file. Dynamic resources are resources that can change, like a web page that contains data from a user database.

What is get and post method?

Get Method: Get method is used to request data from a specified source. It is used to retrieve data from a database or to generate a web page. Get method is an HTTP request method used for retrieving data from a server.

POST Method: The POST method is used to send data to a server to create or update a resource. It is often used when uploading a file or when submitting a completed web form. The data sent to the server with POST is stored in the request body of the HTTP request.

Define “dealloc msg” and who is responsible for sending message in objective-C?

dealloc is called as a result of memory management. Once an objects

"retainCount" reaches 0 then a dealloc message is automatically sent to that

Object

How we can convert Synchronous method into asynchronous in C#?

We can convert a synchronous method into an asynchronous method by using the async and await keywords. The asynchronous method will start an asynchronous task in the background and allow the calling code to continue executing while the task is running.

We can also use Task-based Asynchronous Pattern (TAP) which allows us to write asynchronous code in a more natural way by using the Task, Task<T> and TaskCompletionSource classes. Finally, we can also use the Parallel.ForEach and Parallel.Invoke methods to convert our methods into asynchronous code.

How to define binary resource and what are the categories of binary resources in WPF?

Binary resources are what rest of .net framework consider a resource. To define a binary resource, add a file and set the build action resource or content (loose file).

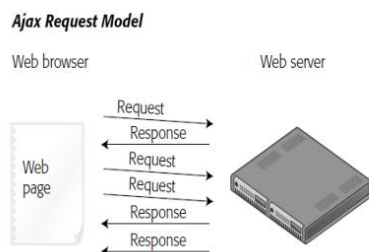
Binary resource has two categories Binary resource can be embedded to assembly Binary resource can be loose file that may or may not be known at compile time. It can be localizable or not.

Identify Application & Components Commands.

- . ApplicationCommands—Close, Copy, Cut, Delete, Find, Help, New, Open, Paste, Print, PrintPreview, Properties, Redo, Replace, Save, SaveAs, SelectAll, Stop, Undo, and more
- . ComponentCommands—MoveDown, MoveLeft, MoveRight, MoveUp, ScrollByLine, ScrollPageDown, ScrollPageLeft, ScrollPageRight, ScrollPageUp, SelectToEnd, SelectToHome, SelectToPageDown, SelectToPageUp, and more

Write steps to talk to a webserver while using AJAX

1. Create an XMLHttpRequest object.
2. Open a request to the webserver using the open() method.
3. Specify the type of request and the URL of the webserver in the open() method.
4. Set the content type of the request, if necessary.
5. Set the callback function to be called when the response is received.
6. Send the request using the send() method.
7. Process the response in the callback function.



Define ClipToBounds property also write its possible values.

ClipToBounds property is used to Clip the elements of child if the area of child elements cross the boundary of parent elements. It's used in Canvas.

Possible values of ClipToBounds property is "True" & "False"

Avoid overflow from clipping in XAML.?

Avoid overflow you can use the ClipToBounds property and set it to ClipToBounds= "False" which will clip any elements that extend beyond the bounds of their parent element.

CS-411 Paper (5-03-2023) Abdullah

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

Write the purpose of this code.

This code creates a Grid with two columns, where the first column's width is set to "Auto" and the second column's width is left unspecified. This Grid can then be used to display and organize UI elements in a two-column format.

OR

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

Write the purpose of this code.

This code creates a Grid object with two ColumnDefinitions. The first ColumnDefinition has a Width of "Auto", and the second has a width of "*". This is commonly used in GUI development to set up the layout of elements within a window or container.

What are the five types of HTML? 5 Marks

1. HTML 4.01 Transitional
2. HTML 4.01 Strict
3. XHTML 1.0 Transitional
4. XHTML 1.0 Strict
5. HTML5

List three commands define by "Icommand" interface.

icommand defines Execute, canexecute, canexecutechanged as a Command.

Update the user interface from worker thread then we forwarded the UI thread. How we can achieve this in WPF. 5 Marks

In WPF, you can use the Dispatcher object to run code in a UI thread. You can call the Dispatcher.Invoke() method from a worker thread, then it will execute that code in UI thread.

You may also use the async/await pattern to execute the code in a non-blocking way from the worker thread, which wraps the Dispatcher.Invoke() into something more manageable.

Consider the following code lines and explain what we are trying to achieve from them. 5 marks

Msbuild/t:updateuid

Projectname.csproj.locBaml/parse

Projectname.g.en-US .resources/out.enUS.csv

This code is trying to update the Unique Identifier (UID) of a particular project, which is identified by the given project name. Specifically, it is running the MSBuild (Microsoft Build Engine) tool, with the target command line parameter set to 'updateuid' to update the UIDs of the given project. It is also running the BAML (Binary Application Markup Language) parser on the .locBaml file associated with the ProjectName.csproj file and outputting the en-US translation strings from the .g.en-US.resources file into the out.enUS.csv file.

What are the two possible destinies for object marked as auto release using object-C. Also declares an object as autorelease.

The two possible destinies for an object marked as auto release using Objective-C are

- a) it will be released when the current autorelease pool drains, **OR**
- b) it will be released when the last strong reference to the object is released.

To declare an object as autorelease, use the following code:

```
MyObject *object = [[[MyObject alloc] init] autorelease]; OR  
[myObject autorelease];
```

Explain at-least two memory management problems using Objective-C

1. Memory Leaks: Memory leaks are caused when objects are not properly released when they are no longer needed. This can occur when an object reference is maintained after an instance of an object is deallocated, and can result in an application crashing or consuming more memory than necessary.
2. Reference Counts: The reference count approach in Objective-C imposes a burden on the programmer to indicate when objects should be deallocated, which can lead to incorrect implementation and cause errors. If an object is not released properly, it can prevent other objects from being released and lead to memory problems.