

CS411-Visual Programming FINAL TERM SUBJECTIVE

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Q1: Which event combines information from independent touch devices updating simultaneously and package data in an easy-to-consume form?

Answer:

`startUpdatingLocation` and `stopUpdatingLocation`

Q2: when we set filter property to null, what will happen?

Answer:

To undo filtering, you can set the Filter property to null:

Nothing will happen
Filter: {category:null}

Q3: Selectors and declarations are two blocks of which website layer?

Answer:

A CSS rule set consists of a selector and a declaration block:

```
H1 {color:blue; font-size:12px;}
```

H1 is selector

The selector points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons. Each declaration includes a property name and a value, separated by a colon.

Q4: Write syntax to create instance of XMLHttpRequest?

Answer:

```
Xmlhttp = new
```

```
XMLHttpRequest();
```

```
xmlhttp.open("GET", "ajax_info.tx
```

```
t", true); xmlhttp
```

Q5: How you refresh current page in WPF Navigation based application?

Answer: `This.navigationservice.Refresh();`

Q6: Name and Explain two categories of binary's resources?

Answer:

Resource: embed resources into the assembly

Content: This leaves resources as loose files and upon compilation this resource information is not embedded into assembly

Q7: Enlist three benefits of ObjData Provider?

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Answer: By utilizing the XML or Object data providers, we can bind to different types of objects in our applications

ObjectDataProvider provides a convenient way to create and use objects as binding source objects in XAML

ObjectDataProvider enables you to create your object in XAML and make it available as a binding source. It provides the following properties that enable you to execute a query on your object and bind to the results.

Use the ConstructorParameters property to pass parameters to the constructor of your object. Use the MethodName property to call a method and use the MethodParameters property to pass parameters to the method. You can then bind to the results of the method.

Q8: Ajax is interaction of which type of technologies?

Answer:

Ajax interactions can be used to do things such as validate form entries (while the user is entering them) using server-side logic, retrieve detailed data from the server, dynamically update data on a page, and submit partial forms from the page.

Q9: Describe purpose of using navigation in page in one line? And how we perform navigation?

Answer: Navigation means managing the current item, not the other kind of navigation. navigation in three main ways: Calling the Navigate method, Using Hyperlinks, Using the journal.

Q10: Write Output:

```
msbuild /t:updateuid ProjectName.csproj  
LocBaml/parseProjectName_g_en_US.resources/  
out:-US-csv
```

Answer:
msbuild /t:updateuid ProjectName.csproj

running this gives every object element in every XAML file in the project on x:Uid directive with a unique value and

```
LocBaml /parse ProjectName.g.en-US.resources /out:en-US.csv
```

this generate a simple .csv file containing all the property values you should need to localize

Q11: When browser sends request to web server, in which formats server sends back information to web server? Give 4 examples?

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Answer:

Web servers receive request and responds as Html, plain text and XML, JSON

Q12: Ali wants to bind the entire set of XML data to Tree n Menue write the code?

Answer:

```
Text="{Binding Source={x:Reference treeview}, Path=selecteditem.Header}"  
<xmldataprovider x:Key="dataproducer" xpath="gamestats">
```

If you want to bind to xml tree.

```
<xmldataprovider x:Key="dataproducer" xpath="gamestats" Source="gamestats.xml"/>  
<Label Content="{Binding Source={staticresource  
dataproducer},Xpath=gamestat/highscore,  
Path=outerxml}"/>
```

Q13: How to localize binary resource. Write code.

Answer: localizing binary resources. Can partition into satellite assembly and use locbaml to manage string localization. To spec. A default culture and auto. Build a satellite assembly, you can to set uiculture. Need to open project file in a text ed. Add under debug, release etc. Or where it effects all prop. If you rebuild your project with this setting in place, youll find an en-US folder alongside yourassembly, containing the satellite assembly named assemblyname.resources.dll. Also mark assembly with the neutral resource language matching.

```
<Project >  
<propertygroup>  
<uiculture>en-US</uiculture>
```

```
[assembly:  
neutralresourceslanguage("en-US",  
Ultimateresourcefallbacklocation.S  
atellite)]
```

Next, apply Uid directive to any element needing localization. Msbuild /t:updateuid projectname.csproj. Locbaml /parse projectname.g.en-US.resources /out:en-US.csv. Now edit and localize all strings. Locbaml /generate Project-Name.resources.dll /trans:fr-CA.csv /cul:fr-CA. Thencopy the assembly with a name matching the locale. To test, System.Threading.Thread.currentthread.currentuiculture (and System.Threading.Thread.currentthread.currentculture) to an instance of the desired

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cultureinfo.

Q14: Which object is the core of Ajax?

Answer: GET or POST

The XMLHttpRequest object is a data transport object that is the core of AJAX



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Q15: Write code of the property which tells the location manager n accuracy.

Answer: Distancefilter and desiredaccuracy properties.

```
// Create location manager object
Locationmanager= [[CLLocationManager
alloc] init];
// We want all results from the location manager
[locationmanager
setdistancefilter:kCLLocationDistanceNone];
// And we want it to be as accurate as possible
// regardless of how much time/power it takes
[locationmanager
setdesiredaccuracy:kCLLocationAccuracyBest];
// Tell our manager to start looking for its location
immediately[locationmanager startUpdatingLocation];
// This line may say self.window, don't worry
about that[[self window] makeKeyandVisible];
Return YES;
}
```

Q16: Ali wants to select and hide all <p>tags from html. Give syntax for this in JavaScript and JQuery?

Answer:

```
var element =
document.getElementsByTagName("p"); for
(index = element.length - 1; index >= 0; index--)
{
element[index].parentNode.removeChild(element
[index]);
}
$(document).ready(function() {
$("button").Click(function() {
$("p").hide();
});
```

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});

Q17: How we can implement content, like add pictures, change content in a page?

Answer: `<listbox x:Name="picturebox"
ItemsSource="{Binding Source={staticresource photos}}" >
</listbox >`

The jquery simplifies all steps except that of changing the webpage simplest is load function which loads HTML into an area of web page e.g. Load news in a div from a web server

`$('#headlines').load('todays news.html');` can only load from same site... Relative urls possible to add only a part `$('#headlines').load('todays news.html #news');`;

Q18: How a server response to browser's request? Give at least 4 examples

Answer:

JS, server-side programming, and web browser, all work together. Web browser: XMLHttpRequest object. Makes ajax possible. Talks to web server and get response. JS: sends request, waits for response, process response, updates web page. Web server: receives request and responds as HTML, plain text, XML, JSON. Or application server for more complicated tasks. Need web server for ajax examples.

Q19: binding

Answer: In last lecture, we discussed data binding, binding object, markup extension, bind to any prop with `notifyPropertyChanged`, target must be dependency property, bind to obj. So no property path, binding to collection, is synchronized with current item, `dataContext`, `displayMemberPath`, `stringFormat`, `dataTemplate`, `valueConverter`.

Q21: Choose selected data items i.e target items just like last 7 days pictures?

Answer: Filtering gives a property Filter of type `Predicate<Object>`. Its null by default e.g. Show only photos from last 7 days.

Q22: JQuery code: `$('li:has(a)')` output ???

Answer:

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The code \$('li:has(a)') matches a if a <a> exists anywhere among its descendants, not just as a direct child.



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Q23: How can we prevent a window from automatically being activated when it is first shown?

Answer: There are Activated & Deactivated events. Activate method (like `setforegroundwindow`). `ShowActivated=false`, initially not shown

```
Public static void Main()
```

```
{
```

```
Mainwindow window =
```

```
new mainwindow();
```

```
Window.Show();
```

```
}
```

Q24: When is it preferable to use `begininvoke` then `invoke`?

Answer: Long running operations make application unresponsive. Because main thread used for rendering UI and responding to events. Start up worker thread and update UI when finished. But UI update usually possible only on UI thread. So, forward the request to UI thread.(or marshal it). Low level way is to call `begininvoke` or `Invoke` on the `Dispatcher` object. It takes a delegate and queues it on the UI thread. `Invoke` does same but then blocks until it is done. So you can return a value. But if you don't need `begininvoke` is better.

Q25: Identify client side languages and server side languages cold fusion, asp.net, java script and php?

Answer: Server-Side Coding

JS is a prog lang and can be used on server side. The document sent to the browser may often contain client-side scripts. ASP.NET, PHP, Java, ColdFusion, Perl, Python, and Ruby are examples of languages used for server-side coding.

Q26: What are the 2 problems of memory management in IOs?

Answer: Freeing or overwriting data that is still in use. This causes memory corruption, and typically results in your application crashing, or worse, corrupted

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user data.

Not freeing data that is no longer in use causes memory leaks. A memory leak is where allocated memory is not freed, even though it is never used again. Leaks cause your application to use ever-increasing amounts of memory, which in turn may result in poor system performance or (in iOS) your application being terminated.

Q27: Write the Properties of touch point?

Answer:

TouchPoint has Position, Size, Bounds, TouchDevice, Action(Down, Up, Move).

Q28: code was given and they said that selected properties are given with applied ascending and descending u are required to combined the 2 separate selected statements as one how can u do this??

Answer:

Q29: What is the technique used in Cocoa framework for memory management.

Answer:

Cocoa framework use reference counting model for memory management

Q30: When using navigation in WPF, content is typically organized in which element?

When using navigation in WPF, content is typically organized in Page elements. Page elements can then be hosted in one of two built-in navigation containers: NavigationWindow or Frame.

These containers provide a way to navigate from one page to another, a “journal” that keeps track of navigation history, and a series of navigation-related events.

Q31: why we write navigation in one line line in a web page? syntax of navigation?

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Answer: // Or navigate to a page via a URI
This.navigationservice.Navigate(new
Uri("photopage.xaml", urikind.Relative));
This.commandbindings.Add(new
commandbinding(applicationcommands.Help, helpexecuted,
helpcanexecuted));

Q32: Write properties of MousePoint?

Answer:

pageX page Y
screenX screenY

Q33: What is
"Command" in WPF?

Answer: Commands are a more abstract and loosely coupled version of events
e.g. cut copy paste commands. They are exposed in various ways. They can be
enabled disabled e.g. if there is nothing to paste.

Q34: identify Application commands and
component commands: close select to end
Help, find and Move to right

Answer:

Application commands: close , help, find

Component commands: move to right , select to end

Q35: which property tells the location manager about how accurate the location
finding should be? And why the accuracy is important?

Q36: how can we destroy an object in objective-C?

Answer:

Set the variable referencing to that object to nil.

Or

Destroy using [array Instance release]; Should also array Instance = nil;

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Otherwise dangling. but Sending message to nil is ok. nil is like null

Q37: Does Java script have any connection with java or not. Give valid reason?

Answer:

No connection with java

Actually java was popular before invention of JavaScript The first name of JavaScript was not

JavaScript.... Due to popularity of java. that new language change its name to JavaScript

Q38: what is the other name of JavaScript?

Answer:

JS has nothing to do with Java, originally named LiveScript but renamed to associate with the then hotJava

Q39: Media Commands, Navigation Commands, Editing Commands, application commands and components commands?

ApplicationCommands

e..g Close, Copy, Cut, Delete, Find, Help, New,

Open, Paste, Print, PrintPreview, Properties, Redo, Replace, Save, SaveAs, SelectAll, Stop, Undo, and more.

ComponentCommands

e.g. MoveDown, MoveLeft, MoveRight, MoveUp, ScrollByLine,

ScrollPageDown, ScrollPageLeft, ScrollPageRight, ScrollPageUp,

SelectToEnd, SelectToHome, SelectToPageDown, SelectToPageUp, and more.

MediaCommands

e.g. ChannelDown, ChannelUp, DecreaseVolume, FastForward,

IncreaseVolume, MuteVolume, Next-

Track, Pause, Play, PreviousTrack, Record, Rewind, Select, Stop, and more.

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NavigationCommands

e.g. BrowseBack, BrowseForward, BrowseHome, BrowseStop, Favorites, FirstPage, GoToPage, LastPage, NextPage, PreviousPage, Refresh, Search, Zoom, and more.

EditingCommands

e.g. AlignCenter, AlignJustify, AlignLeft, AlignRight, CorrectSpellingError, DecreaseFontSize, DecreaseIndentation, EnterLineBreak, EnterParagraphBreak, IgnoreSpellingError, IncreaseFontSize, IncreaseIndentation, MoveDownByLine, MoveDownByPage, MoveDownByParagraph, MoveLeftByCharacter, MoveLeftByWord, MoveRightByCharacter, MoveRightByWord, and more.

Q40 : Which element must be added to the project file to specify a default culture for resources automatically build an appropriate satellite assembly?

Answer:

Build a satellite assembly, you can to set UICulture. Need to open project file in a text ed. add underdebug, release etc. or where it effects all prop.

Q41: Which data provider exposes .NET object as a data source?

Answer:

ObjectDataProvider exposes .net object as a data source.

Q42: **what is difference between hover() and toggle()?**

Answer:

Difference b/w hover() and toggle() is that toggle() works by clicking it on and

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off whereas hover() works just by positioning the mouse over it.

Q43: Core Locations Framework contains which types of classes ?

Answer: Page 218

Core Locations classes that enable finding geographical position. distanceFilter and desiredAccuracy properties.

Q44: when we preferred BeginInvoke instead of Invoke method?

Answer:

There are times when you want to invoke a delegate and wait for its execution to complete before the current thread continues. In those cases the Invoke call is what you want.

In multi-threading applications, you may not want a thread to wait on a delegate to finish execution, especially if that delegate performs I/O (which could make the delegate and your thread block). In those cases the BeginInvoke would be useful.

Q45: what is difference between server Side programming and Client Side Programming? (3Marks)

Answer:

Server-side programming is the general name for the kinds of programs which are run on the Server.

Uses

- Process user input.
- Display pages.
- Structure web applications.
- Interact with permanent storage (SQL, files).

Much like the server-side, Client-side programming is the name for all of the programs which are run on the Client.

Uses

- Make interactive webpages.
- Make stuff happen dynamically on the web page.
- Interact with temporary storage, and local storage (Cookies, localStorage).

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Send requests to the server, and retrieve data from it.

Provide a remote service for client-side applications, such as software registration, content delivery, or remote multi-player gaming.

Also check [here](#) for more detail

Q46: define iOS feature of Block and also provide its syntax? (3 Marks)

Answer:

Blocks are a new feature that was introduced in iOS 4.0 and Mac OSX 10.6. Blocks can greatly simplify code. They can help you reduce code, reduce dependency on delegates, and write cleaner, more readable code.

A Block is a chunk of code that can be executed at some future time.

Blocks are first-class functions, which is a fancy way of saying that Blocks are regular Objective-C objects. Since they're objects, they can be passed as parameters, returned from methods and functions, and assigned to variables.

Syntax: `return_type (^block_name)(param_type, param_type, ...)`

Q47: Name of Touch Events only three?

Q48: write a note on Retain count and also its working and usage?

Answer:

"Retain count rules. Init, new, copy in name. Assume you own. Any other means. Assume in autorelease. If you don't own and want to make sure, call retain. No longer need and own than release or autorelease. When 0 count, dealloc called." - Direct from handbook, I have no idea what it means.

Q49: define in detail modes of data binding (5 marks)

Binding Modes:

One-Way

Two-Way

OneWayToSource

OneTime

One way : The target is updated whenever the source changes.

Two-Way Binding means change to either the target or source updates the other

OneWayToSource is the opposite of One-Way binding. the source is changed whenever the target changes.

One-Time binding is like one-way except changes to the source are not reflected at

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the target. The target retains a snapshot of the source at the time the Binding is initiated.

Q50: Define the term “ios application bundle” /2 marks

Answer:

"a bundle is a directory that allows related resources such as an application's executable and its graphics to be grouped together, appearing as a single file to the user." - Wikipedia

Q51: Can the operating system distinguish between windows with WPF contents and windows with Win32 contents?

Answer:

Yes, we can even create Host WPF content in a Win32 window. and vice versa.

Q52: As we know that ICollectionView has a property called “filter” which provides the facility for selective removal of items based on an arbitrary condition. this property is also known as Predicate<Object> type. What is meant by this Predicate<Object.type>? /2

Answer:

Filtering gives a property Filter of type Predicate<Object>.

Q53: Can Operating System distinguish between window contain WPF and window Contain Win32? (2 Marks)

Q54: what will be the efficient way of applying the same style on all paragraphs of HTML page? also provide an example?

Answer:

A technique is to collect all our CSS rules in one place, a style sheet, and then apply the style sheet to every single element on the page. An embedded style sheet affects every element on the page. In order to create an embedded style sheet, we need to go to the head of the document.

```
/span>html>  
/span>head>  
/span>title>Hello World</title>  
/span>style type="text/css">  
p {color: #008000; background: #ffff00}
```

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```
</style>
</head>
/span>body>
 /span>h1>Hello World</h1>
</body>
```

Q55: which property tells the location manager about how accurate the location finding should be? and why the accuracy is important? /3

Answer:

```
[locationmanager.setdefaultaccuracy:kCLLocationAccuracyBest];
```

Q54: we know that whatever we bind to a collection (anything that implements IEnumerable), a default view is implicitly inserted between the source and target objects. you are required to define the term "view" and also the names of the items which are supported by it.

Q56: how can you refresh the current page in WPF Navigation based application?

Answer:

```
This.navigationservice.Refresh();
```

Q57: Tasks using objective C

Create location manager object

Apply accuracy filter on location manager object created in first step Tell the manager to start looking for its location immediately

Answer:

```
// Create location manager object Locationmanager= [[CLLocationManager alloc]
init];
// We want all results from the location manager [locationmanager
setDistanceFilter:kCLLocationFilterNone];
```

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```
// And we want it to be as accurate as possible // regardless of how much  
time/power it takes[locationmanager  
setdesiredaccuracy:kCLLocationAccuracyBest];  
// Tell our manager to start looking for its location immediately  
[locationmanagerstartUpdatingLocation];
```

Q58: define Term "View" and also write name of items that are supported by it?

Q 59: What is Difference between Navigation Window and Frame?

ANSWER:

Navigation window gives you a navigation Bar by default while Frame does not. Navigation Window is more like a top-level window while Frame more like an HTML frame or iframe.

Q 59: Journal and stack

Answer:

). Journal provides logic behind back and fwd.

). Two internal stacks are:

Undo

Redo

Q 60: For example, you can set a title that is used in the drop-down menu associated with the Back and Forward buttons as follows:

Answer:

```
This.navigationController.Title = Main Photo Gallery Page;
```

Q 61: Navigation in three main ways:

Answer:

Calling the Navigate method, Using Hyperlinks, Using the journal.

Q 62: Navigate to a page instance?

Answer:

```
Photopage nextPage= new photopage();
```

```
This.navigationController.Navigate(nextpage);
```

Q 63: Navigate to a page via a URI

Answer:

```
This.navigationController.Navigate(new Uri("photopage.xaml", UriKind.Relative));
```

Q 64: Navigate to a page by instance or URI?

Answer:

```
Application.Properties["photoid"] = 10;
```

```
This.navigationController.Navigate("/{* */});
```

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```
If (Application.Properties["photoid"] != null)
Loadphoto((Application.Properties["photoid"]));
```

Q 65: What is difference between Clickonce caching VS increments ?

. Or you can clear cache mamory. Change some settings by its a xbab(xml browser application). But partial trust restricts many api. E.g. Above call exception. Requires fileiopermission which is not by default. Hit n trial to find what works. Local registry and file system, new windows (popups ok), unmanaged, but others dependent on browser, or on implementation details. Browserinterophelper.isbrowserhosted property to check if its a XBAP.

(Isi se related aik example he or iska jo question ban sakta he wo bhi diya howa he.)

Q 65: How to open file from local system?

Answer:

```
String filecontents = null;
Openfiledialog ofd= new openfiledialog
();
If(ofd.showdialog()== true)// Result could be true, false, or null
{
Using(Stream s= ofd.openfile())
Using(streamreader sr= new streamreader(s))
{
Filecontents= sr.readtoend();
}
}
}
```

Q 66: What are the binary resources and logical resources?

Answer:

Binary resources are .net framework. Even compiled(murattab) xaml stored as a resource. Can be embedded(sarayyat) in assembly. Loose file that may or may not be known at compile time. Can be localizable or not. Localizabl mean change dependency on the current culture. To define a binary resource, add a file and set the build action resource or content (loose file).

Logical resource

Logical resources are introduced by wpf. Arbitrary .net object stored and named in an elements Resources property. Base close of both Frameworkelement and framework content element both have a Resources property. Often are style or data providers

Q 67: There are also full-trust browser apps. In the project file you change?

Answer:

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<targetzone>Internet</targetzone> To this:
<targetzone>Custom</targetzone>

And in clickonce application manifest you add:

```
<permissionset class="System.Security.permissionset"
version="1" ID="Custom" samesite="site"
Unrestricted="true"/>
```

Q 68: What are the resources?

Answer:

Bitmap, fonts, string tables

Q 69: WPF builds on top, has binary?

Answer:

WPF builds on top, has binary resources and logical resources. Binary resources are what rest of .net framework considers a resource. Even compiled XAML stored as a resource. Can be embedded in assembly, loose file that may or may not be known at compiletime. Can be localizable or not. To define a binary resource, add a file and set the build action resource or content (loose file). Don't use embedded resource. Its misleading name but WPF doesn't fully support. Adding as content and loading directly are kind of equal but resource is neat. Should be embed if localizable or single binary file benefits. Let's see how to assign binary resource whether embed or loose. Won't work if not added to project. If not added be explicit about the path.

Q 70: How to specify default culture of the application?

ANSWER:

```
<Project>
  <propertygroup>
    <uiculture>en-US</uiculture>
  [assembly: neutralresourceslanguage("en-US",
    Ultimateresourcefallbacklocation.Satellite)]
```

Q 71: How to use logical resources?

ANSWER:

By using logical resources, you can change brushes in one place and have different effects.

Q 72: what is the difference between static resources and dynamic resources?

ANSWER:

Dynamic resource reapplied every time it changes nothing special about resources. Only if you want to see updates or not. Dynamic more overhead but demand loaded. Dynamic can only be used to set dep. Prop. Values. Static can also summarize the entire control.

Dynamic Resources can manipulate at runtime and are evaluated at runtime.

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While static resources cannot be manipulated at runtime.

```
<Window
xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
Xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml">
<Image Height="21" Source="zoom.gif"/>
</Window >
```

Is equivalent to this Window:

```
<Window
xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
Xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml">
<Window.Resources>
<Image x:Key="zoom" Height="21" Source="zoom.gif"/>
</Window.Resources >
<stackpanel>
<staticresource resourcekey="zoom"/>
</stackpanel >
</Window >
```

Q 73: How to change block of line background color in C# using XAML?

ANSWER:

C#:

```
Button.Background = SystemColors.WindowBrush;
```

(using XAML)

XAML:

```
<Button Background=" { staticresource SystemColors.WindowBrushKey}"/>
```

(color change karney kay bad resources kisterha se sat karney he)

C#:

```
Button.Background = (Brush)FindResource("SystemColors.WindowBrushKey");
```

XAML:

```
<Button Background="{ StaticResource {x:Static SystemColors.WindowBrush} }"/>
```

Q 74: What is data binding? With example.

ANSWER:

Data binding means an arbitrary .net obj. Data binding, data templates, data triggers are related concepts. Data can be collection obj, custom obj, xml file, web service, db table, even WPF element eg button. So data binding is typing together arbitrary objects. Classic scenario is a visual rep. (e.g. List box or data grid) of items in an xml file, db, or in-memory collection. Instead of iterating and adding items, tell listbox to get its data from another source, keep them up to date, format them etc. Binding binds two properties together and keeps a communication channel open. Setup

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Binding handles all the sync.

Example(imp)

```
Public mainwindow()
{
Initializecomponent();
Binding binding= new Binding();
// Set source object
Binding.Source=
treeview;
// Set source property
Binding.Path= new propertypath("selecteditem.Header");
// Attach to target property
Currentfolder.setbinding(textblock.textproperty, binding);
}
```

Q 75: How to display member path property to improve display? Listbox

ANSWER:

```
<listbox x:Name="picturebox"
Itemssource="{Binding Source={staticresource photos}}">
</listbox >
```

Q 76: write a program for synchronize? Or Example of synchronize?

ANSWER:

```
<listbox issynchronizedwithcurrentitem="True" displaymemberpath="Name"
Itemssource="{Binding Source={staticresource photos}}"></listbox>
<listbox issynchronizedwithcurrentitem="True" displaymemberpath="datetime"
Itemssource="{Binding Source={staticresource photos}}"></listbox>
<listbox issynchronizedwithcurrentitem="True" displaymemberpath="Size"
Itemssource="{Binding Source={staticresource photos}}"></listbox>
```

Q 77: Data context? Example of Data context?

ANSWER:

Implicit data source is provided by a Data Context. We set datacontext of a parent and then dont specify Source or elementname or set parent.datacontext = photos;. It is useful when plugging in resources: usage context or decl.context.

```
<stackpanel datacontext="{staticresource photos}">
<Label x:Name="numitemslabel"
Content="{Binding Path=Count}"/>
<listbox x:Name="picturebox" displaymemberpath="Name"
Itemssource="{Binding}">
</listbox >
</stackpanel >
```

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Q 78: How many ways of control rendering?

ANSWER:

There are three ways of control rendering.

String formatting

Data template

Value conversion. (Value convertor)

Q 79: What is data template?

ANSWER:

```
<listbox x:Name="picturebox"
Itemssource="{Binding Source={staticresource photos}}">
<listbox.itemtemplate>
<datatemplate>
<Image Source="{Binding Path=fullpath}" Height="35"/>
</datatemplate >
</listbox.itemtemplate >
</listbox >
```

Q 80: When you sort on one field?

ANSWER:

```
Sortdescription sort= new sortdescription("Name", listsortdirection.Ascending);
```

Q 81: When you sort on different field?

ANSWER:

```
View.sortdescriptions.Add(new sortdescription("datetime",
listsortdirection.Descending);View.sortdescriptions.Add(new sortdescription("Name",
listsortdirection.Ascending);
```

Q 82: Click event handlers for three different Buttons?

ANSWER:

```
Void sortbyname_Click(object sender,routedeventargs e)
Sorthelper("Name");
Void sortbydatetime_Click(object sender, routedeventargs e)
Sorthelper("datetime");
Void sortbysize_Click(object sender, routedeventargs e)
Sorthelper("Size");
Void sorthelper(string propertyname)
```

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Q 83: Get the default view

ANSWER:

```
Icollectionview view = collectionviewsource.getdefaultview(
This.findresource("photos"));
// Check if the view is already sorted ascending by the current
propertyIf(view.sortdescriptions.Count>0
&& view.sortdescriptions[0].propertyname== propertyname
&& view.sortdescriptions[0].Direction== "", listsortdirection.Ascending)
{
// Already sorted ascending, sot o g l eby sorting descending
View.sortdescriptions.Clear();
View.sortdescriptions.Add(new sortdescription(
Propertyname, listsortdirection.Descending));
}
Else
{
// Get the default view (ye bhi he)
Icollectionview view = collectionviewsource.getdefaultview(
This.findresource("photos"));
// Do the grouping
view.groupdescriptions.Clear();
View.groupdescriptions.Add(new
propertygroupdescription("datetime"));
<lizbox x:Name="picturebox"
```

Q 84: How to filter?

ANSWER:

```
Icollectionview view = collectionviewsource.getdefaultview(
This.findresource("photos"));
View.Filter= delegate(object o) {
Return((o as Photo).datetimedatetime.Now).Days<=7;
};
// Get the default view (iske default view k liye)
Icollectionview view = collectionviewsource.getdefaultview(
This.findresource("photos"));
```

Q 85: To binding project?

ANSWER:

```
"{Binding Path=/"}
```

Binding the date or time property?

```
"{Binding Path=/datetime}"
```

Binding pictures ya binding convert data sources

```
"{Binding Path=Photos/"}
```

Binding to the data time property of different data sources

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"{Binding Path=Photos/datetime}"

Q 86: What is navigation?

ANSWER:

Navigation means managing the current item, not the other kind of nav.

ICollectionview has current item current position and also methods for changing them.

Navigation means managing the current item not the other kind of nav. Navigation in three main ways: calling the navigation method, using hyperlinks, using journal.

Q 86: Properties for binding paths?

ANSWER:

Property Paths in Bindings are useful for master/detail interfaces. Sorting, grouping, filtering automatic

Q 87: Collectionviewsource

ANSWER:

Collectionviewsource can be used to create new views and applied to targets.

Collectionviewsource has its own sort descriptions and group descriptions properties and a Filter event to be used from XAML

Q 88: What are data providers?

ANSWER:

Data provider is the kind of classes. Which give access through simpler way in containing data. You could bind to db, registry, excelspreadsheet etc.

Xmldataprovider and objectdataprovider

```
<xmldataprovider x:Key="dataprovder" xpath="gamestats" Source="gamestats.xml"/>
<Label Content="{Binding Source={staticresource dataprovder},
Xpath=gamestat/highscore, Path=outerxml}"/>
```

Q 89: What is the use of data provider?

, data providers (xml and object), used xml data provider to fill a listbox.

Q 90: What is objectdataprovider?

ANSWER:

Objectdataprovider is .net object as a data source. So that we can add binding directly to a .net obj. We declare directly source object with a parameterized constructor. We have more options for asynchronous data binding. When binding not quickly asynchronous. So it does not stuck. WPF has two ways to mark asynchronous that are asynchronous property of Binding.

Q 91: Isasync prop of Binding and write in Details.

Answer:

1.Xmldataprovider, 2. objectdataprovider

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1. XmlDataProvider: Is used to declare xml data access for data binding.

The XmlDataProvider.IsAsynchronous property is set to true by default, which means that the XmlDataProvider retrieves data and produces the collection of XML nodes asynchronously by default.

2. objectDataProvider: It enable us to create object in xml and available it for binding source.

- ObjectDataProvider enables you to create your object in XAML.
- Make it available as a binding source.
- It provides the properties that enable you to execute a query on your object.

Q 92: How we can define the object data provider?

ANSWER:

```
<Window.Resources>
<local:Photos x:Key="photos"/>
<objectdataProvider x:Key="dataprovider"
Objectinstance="{staticresource photos}"/>
</Window.Resources >
</Window.Resources>
```

Q 94: What is method data binding? Example

ANSWER:

Binding to a method is useful for classes that are not designed for data binding. Imagine photos class had getfoldername method.

Example:

```
<objectdataProvider.constructorparameters>
<sys:Int32>23</sys:Int32>
</objectdataProvider.constructorparameters >
</objectdataProvider >
<objectdataProvider
x:Key="dataprovider"
Objecttype="{x:Type local:Photos}"
Methodname="getfoldername"/>
```

Data binding allows declaratively binding two different properties in XAML. In other words, data binding is a general technique that binds data sources from the provider and consumer together and synchronizes them. Binding binds two properties together and keeps a communication channel open.

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Q 95: What is different between convert method and convert back method?

ANSWER:

Convert method is used during bringing data from source to target.
While convert back used during bringing data from target to source.

Q 96: How many ways of binding mode explain one way with example or explain two ways with example?

ANSWER:

One way: The target is updated whenever the source changes.

Two-way: We can change either the target or updates source.

Onewaytosource: This is the opposite of oneway. The source is updated whenever the target changes. The target retains a snapshot of the source at the time the Binding is initiated.

Updatesourcetrigger. Do you want the two-way source to be updated on every key stroke. Propertychanged. Changed when target property value changes. Lostfocus. Changed when focus lost. Explicit. Call bindingexpression.updateSource which you can get from any frameworkelement.getBindingExpression

Q 97: Definition of validation rule?

ANSWER:

Validation rule are just like simple classes that are use to ensure the proper working of the application.

7: define exceptions validation rule?

Exceptions validation rule says that you can update a source if updating source does not cast an exception.

Q 98:

What is the purpose of concurrency?

ANSWER:

1. Responsive user interface.
2. Simultaneous requests.
3. Parallel programming.

Concurrency is the task of running and managing the multiple computations at the same time. While **parallelism** is the task of running multiple computations simultaneously.

Q 99: How to create a thread?

ANSWER:

Normal processes (programs in exec.) Have one thread. Multithreaded programs have

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more and can share data. Let's create one.

```
Class threadtest
{
  Static void Main()
  {
    Thread t= new
    Thread(writey);T.Start();

    For(int i=0; i<1000; i++) Console.Write("x");
  }

  Static void writey()
  {
    For(int i=0; i<1000; i++) Console.Write("y");
  }
}
```

Typical Output:

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

Q 100: What is time slicing?

ANSWER:

Handouts() . A thread is pre-empted because of time slicing. A threads isalive=true once starts and until ends. Name property, Thread.currentthread is the currently executing thread.

Join and Sleep. A thread is "blocked" when waiting

Q 101: What is thread safety?

ANSWER:

```
Class threadsafe
{
  Static bool _done;
  Static readonly object _locker= new object();
  Static void Main()
  {
    New
    Thread(Go).Start();
    Go();
  }

  Static void Go()
  {
    Lock(_locker)
    If(!_done){ Console.writeline("Done");_done= true; }
  }
}
```

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Q 102: What is locker variable?

ANSWER:

```
Class threadsafe
{
    Static bool _done;
    Static readonly object _locker= new object();
    Static void Main()
    {
        New
        Thread(Go).Start();
        Go();
    }
    Static void Go()
    {
        Lock(_locker)
        If(!_done) { Console.WriteLine("Done");_done= true; }
    }
}
```

Q 103:

Passing Data to Threads

ANSWER:

```
Static void Main()
{
    Thread t= new Thread(()=> Print("Hello from
t!"));T.Start();
}
Static void Print(string message) { Console.WriteLine(message);}
}
```

```
For(int i=0; i<10; i++)
New Thread (()=> Console.Write(i)).Start();
}
```

Typical Output:
0223557799

```
For(int i=0; i<10; i++)
{
    Int temp= i;
    New Thread (()=> Console.Write(temp)).Start();
}
}
```

Q 104: What is difference between begin invoke and Invoke?

OR

Which type of methods are begin invoke and invoke?

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ANSWER:

Long running operations make application unresponsive. Main thread used for rendering UI and responding to events. But UI updating usually possible only on UI thread. Begin invoke and invoke are such methods that can be called from any other thread. Begin invoke is a low level primitive. Invoke does same but then blocks until it is done. You can return a value. But if you don't need it begininvoke is better.

Invoke: calling thread waits for completion before continuing.

Begin Invoke: calling thread doesn't wait for completion.

EXAMPLE:

```
Partial class mywindow: Window
{
    Public mywindow()
    {
        Initializecomponent();
        New
        Thread(Work).Start();
    }
    Void Work()
    {
        Thread.Sleep(5000);
        Updatemessage("The
        answer");
    }
    Void updatemessage(string message)
    {
        Action action=()=> txtmessage.Text= message;
        Dispatcher.begininvoke(action);
    }
}
```

Q 105: How can we use thread pool?

ANSWER:

Threadpool save time of thread creation. Background can degrade performance. Threadpool creates or reduces real threads using a hillclimbing algo to maximize cpu usage and reduce slicing.

Property: Thread.currentthread.isthreadpoolthread

Q 106: How many ways for calling threads from threadpool?

ANSWER:

There are two ways.

```
Threadpool.queueuserworkitem(notused=> Console.writeline("Hello"));
```

```
Task.Run(()=> Console.writeline("Hello from the thread pool"));
```

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Q 107: How many ways or benefits of task?

ANSWER:

1. Easy return value from thread.
2. Exception handling.
3. Continuation.

```
Task.Run(()=> Console.WriteLine("Foo"));
New Thread (()=> Console.WriteLine("Foo")).Start();
```

```
Task task= Task.Run (()=>
{
Thread.Sleep (2000);
Console.WriteLine
("Foo");
});
Console.WriteLine (task.IsCompleted);
Task.Wait();
```

Q 108: What is result of this code?

ANSWER:

```
Var tcs= new TaskCompletionSource<int>();
New Thread (()=>{
Thread.Sleep(5000); tcs.SetResult(42);
}).Start();
Task<int> task = tcs.Task;
Console.WriteLine (task.Result)
```

Q 109: How to use delay method

ANSWER:

```
Task.Delay(5000).GetAwaiter().OnCompleted(()=> Console.WriteLine
(42));Task.Delay(5000).ContinueWith(ant=> Console.WriteLine (42));
```

Q 110: How many ways or benefits of task?

ANSWER:

1. Easy return value from thread.
2. Exception handling.
3. Continuation.

Q 111: What is the difference between Synchronous and Asynchronous?

ANSWER:

Asynchronous typically return quickly. Called non-blocking. Thread. Start, task. Run,

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attaching continuations.

Synchronous represents a set of activities that starts happening together at the same time. A synchronous call waits for the method to complete before continuing with program flow. An asynchronous method **runs synchronously until it reaches its first await expression**, at which point method is suspended until the awaited task is complete. In the meantime, control returns to the caller of the method. asynchronous typically return quickly. In asynchronous method calling in C#, **two or more method runs on different threads**. When you will call any method asynchronously then it creates another thread to complete that task. That's why in asynchronous call, calling method doesn't get blocked, and they can run simultaneously with called method.

A synchronous method call can create a delay in program execution that causes a bad user experience. An asynchronous method calls (creation of a thread) **will return immediately** so that the program can perform other operations while the called method completes its work in certain situations.

Asynchronous JavaScript and XML (AJAX) is a development technique used to create interactive web applications or rich internet applications. AJAX uses a number of existing technologies together, including: XHTML, CSS, JavaScript, Document Object Model, XML, XSLT, and the XMLHttpRequest object.

Q 112: How CPU bound Synchronization task?

ANSWER:

```
{
    Return
    Parallelenumerable.Range(start, count).Count(n =>
    Enumerable.Range(2,(int)Math.Sqrt(n) - 1).All(i=> n % i > 0));
}

Void displayprimecounts()
{
    For(int i= 0; i < 10; i++)
    Console.WriteLine(getprimescount(i* 1000000+2,
    1000000)+
    " primes between "+(i* 1000000)+ " and "+((i+1)* 1000000-1));
    Console.WriteLine("Done!");
}
```

Q 113: How to asynchronous Task displayprimecounts()?

ANSWER:

```
{
    For(int i=0; i<10; i++)
    Console.WriteLine(await getprimescountasync(i* 1000000+2,
    1000000)+" primes between "+(i* 1000000)+ " and "+((i+1)*
```

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```
1000000 - 1)); Console.WriteLine("Done!");  
}
```

Q 114: Write the syntax of “await”?

ANSWER:

```
Var result= await  
expression;Statement(s);
```

Q 115: What is difference between sync and await keywords?

ANSWER:

Eliminates plumbing for asynchronous code. As simple as sync code. “await” simplifies attaching continuations.

We can call it with await and use “asynchronous” keyword so compiler treats await specially. asynchronous can be applied to methods returning void or Task or Task<T>.

Q 116: how can we write the message loop?

ANSWER:

```
While(!Thisapplication.Ended)  
{  
Wait for something to appear in message  
queueGot something: what kind of message  
is it?  
Keyboard/mouse message-> fire an event handler  
User begininvoke/Invoke message-> execute delegate  
}
```

Q 117: How can we return a Task from void function without explicitly return?

ANSWER:

Enables synchronize call through chains. Compiler indirectly uses taskcompletingsource to implement methods returning Tasks. We can expand printanswertolife like this.

```
Async Task Go()  
{  
Await  
printanswertolife();  
Console.WriteLine("Done"  
);  
} Async Task printanswertolife()  
Int answer =  
Await getanswertolife();  
Console.WriteLine(answer);  
} Async Task <int> getanswertolife()  
{
```

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```
Await
Task.Delay(5000);Int
answer = 21 * 2;
Return answer;
}
Void Go()
Printanswertolife();
Console.writeline("Done");
}
Void printanswertolife()
{
Int answer =
getanswertolife();
Console.writeline(answer);
}
Int getanswertolife()
{
Thread.Sleep(500
0);Int answer=21
*2; Return
answer;
}
```

Q 118: how many steps to use asynchronous in programming?

Answer:

There are three steps

1. Write sync
2. Use asynchronous and await
3. Return the task in place of void.

This means only Task. Run for real parallel cpu task and TCS for real parallel IO task. Rest of TCS are taken care of by compiler.

Q 119: Write the code of asynchronous chaining?

ANSWER:

```
Async Task Go()
{
Var task=
printanswertolife();Await
task;
Console.writeline("Done");
}
```

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Q 120: What is parallelism?

ANSWER:

Parallelism is the ability to have parallel execution of two tasks at a time on the system that has multiple courses.

Parallelism is the task of running multiple computations simultaneously.

Example:

```
Var task1 = printanswertolife();
Var task2 = printanswertolife();
Await task1;
Await task2;
Async Task <int> getanswertolife()
{
    _x++;
    Await Task.Delay(5000);
    Return 21*2;
}
Async
```

Q 121: What is pseudo-concurrency?

ANSWER:

Pseudo-concurrency means a program is running and wait for something then resuming and then awaiting.

Q 122: What is Cancellation?

ANSWER:

```
Class cancellationtoken
{
    Public bool iscancellationrequested { get; private set; }
    Public void Cancel() { iscancellationrequested = true; }
    Public void throwifcancellationrequested()
    {
        If(iscancellationrequested)
        Throw new operationcanceledexception();
    }
}
```

Q 123: Cancellation by using task?

ANSWER:

```
Var cancelsource= new cancellationtokensource();
Task.Delay (5000).continewith(ant=> cancelsource.Cancel());
```

Q 124: What is async call graph execution?

ANSWER:

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1. Every await and return
2. When delay fights a thread
3. Remaining statements run.
4. Eventually go starts is not as completed.

Q 125: When Task Combinators is used?

- When we have one task we can use it.
- We can also use it in multiple tasks as well.

EXAMPLE:

```
Task<int> winningtask = await
Task.whenany(Console.WriteLine
("Done"); Console.WriteLine
(winningtask.Result); 4 (Delay1(),
Delay2(), Delay3()));
Int answer = await await Task.whenany(Delay1(), Delay2(), Delay3());
```

Q 126: When all tasks are combined ?

ANSWER:

```
await task1; await task2; await task3;
```

```
Task task1 = Task.Run (()=> { throw
null;}); Task task2 = Task.Run (()=> {
throw null;}); Task all = Task.whenall
(task1, task2);
Try { await all; }
Catch
{ Console.WriteLine (all.Exception.innerexceptions.Count); }
```

Q 127: How many steps partition of Task Parallel Library?

ANSWER:

1. Small chunks
2. process,
3. collate the results in thread-safe manner

Q 128: How many types of parallelism?

ANSWER:

1. Data parallelism

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2. Task parallelism

Q 129: What are the three steps of implementing parallelism? Also differentiate between data parallelism and task parallelism?

ANSWER:

Three steps of Parallelism:

- Partition Problem
- Process
- Combine the results

Data Parallelism

Data parallelism refers to **scenarios in which the same operation is performed** (that is, in parallel). In data parallel operations, the source collection is partitioned so that multiple threads can operate in different segments.

Task parallelism

- Task parallelism is **the process of running tasks in parallel.**
- Task parallelism divides tasks and allocates those tasks to separate threads for processing.

. It is based on unstructured parallelism. It means the parallel work unit may start and finish in places scattered according to executing of the program.

Q 130: Define parallelism with an example?

ANSWER:

```
Public static void Invoke(params Action[]
actions);Parallel.Invoke(
()=> new webclient().downloadfile("http://www.linqpad.net", "lp.html"),() => new
webclient().downloadfile ("http://www.jaoo.dk", "jaoo.html"));
```

Q 131: How many static methods of parallel class?

ANSWER:

There are three static methods of parallel class

1. Parallel.Invoke
2. Parallel.for
3. Parallel.foorieg

```
For(int i=0; i<100; i++)
Foo(i);
Parallel.For(0,100, i=> Foo(i));
Parallel.For(0,100, Foo);
Foreach(char c in "Hello,
world")Foo(c);
```

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Parallel.foreach("Hello, world", Foo);

Q 132: What is loop counter?

ANSWER:

Breaking out of loops, and using per-thread counters. Loop counters are easy with sequential. Use overloaded version

Q 133: What is parallel loop state? EXAMPLE

ANSWER:

```
Public class paralleloopstate
{
Public void
Break();Public
void Stop();
Public bool isexceptional {
get;}Public bool isstopped {
get;}
Public long? Lowestbreakiteration { get;}
Public bool shouldexitcurrentiteration {
get;}20 }
```

Q 134: Difference between Break and Stop?

ANSWER:

Break reaches at least the sequential point while stop does not reaches at least the sequential point.

Q 135: What Concurrent collections include?

ANSWER:

Concurrent collections include concurrent stack, concurrent queue, concurrent bag, concurrent dictionary.

Q 136: What is Blockingcollection? EXAMPLE

ANSWER:

```
[System.Runtime.Versioning.UnsupportedOSPlatform("browser")]
public class BlockingCollection<T> : IDisposable,
System.Collections.Generic.IEnumerable<T>,
System.Collections.Generic.IReadOnlyCollection<T>, System.Collections.ICollection
```

Q 137: What is Html?

ANSWER:

Hypertext markup language

Q 138: How many kinds of layers of web pages?

ANSWER:

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There are three types of layers.

1. Html (structural)
2. CSS (presentation)
3. JavaScript (behavioral) JavaScript was introduced in 95 by Netscape

Q 139: Version of java script.

ANSWER:

Their version of JS for IE. These days mostly handled. Standardization. Some quirks left. Called ecma script. The official standardization name. Refueled by high profile sites like google using JS in last decade.

Q 140: What is Java script?

ANSWER:

JS is a programming language. Jquery is a JS library. It make JS programming easier. Jquery solves JS complexity and browser incompatibilities. Can do things in single LOC (abbreviation (mukhafaf he) of lines of codes)

- HTML: structural layer
- CSS: presentation layer
- JS: behavioral layer.

Q 141: What are the five types of Html?

ANSWER:

There are 5 types

- HTML 4.01 Transitional
- HTML 4.01 Strict,
- XHTML 1.0 Transitional
- XHTML 1.0 Strict
- HTML5

Q 142: How many types of tags?

ANSWER:

There are three types of tags.

1. Html root tag
2. head tag containing title etc.
3. Body tag containing all parts to be rendered in browser window.

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```
<!DOCTYPE html >
<html>
<head>
<meta charset=utf-8>
<title>Hey, I am the title of this web page.</title>
</head >
<body>
```

Q 142: What is the difference between CSS and Html?

CSS

CSS stand for cascading style sheets. It is used to style the web documents. It provides the background color. It is also used to style the font and change its size. We can style many different web pages. It's a presentation layer.

Html

Html stands for hyper text markup language. It is the language used to define the structure of web page. Html is used along with CSS and java script to design web pages. Html is basic building block of website. It's a structural layer.

Q 143: What is Selector and declarationblock?

ANSWER:

Selector can be headline, paragraph of text, photo etc. Declaration block can turn text blue, addred border around a paragraph.

P color: red; font-size: 1.5em;selector,

Declaration block has declarations.

Q 144: What is difference between Client side and Server side?

ANSWER:

Prog lang for the web browser. Alternate is a server prog lang. Php, .net, asp, cold fusion, ruby on rails, etc. They run on web server. Log of intelligence by accessing DB, process CC, send emails. Visitors wait until response comes. Client side lang can re-act immediately. Responsive. Other client side technologies are applet's, silverlight, flash. Often requires a plugin or start slow because of downloading. Sometimes even diff to see if flash or JS. Once yahoo maps was flash. Then re-written. Rightclick and see if About the Flash Player Ajax brings client-side server-side together. JS talks to server, downloads content, and update webpage. Google maps Let's you move to new areas. JS is a prog lang andcan be used on server side. E.g. Node.js supports JS on server-side.

Q 145: What are Compiled and scripted languages?

ANSWER:

JS interpreter is in web browser.

```
<!Doctype html>
<html>
<head>
<meta charset="UTF-8">
```

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```
<title>My Web Page</title>
<script>
</script>
</head>
```

Q 146: Print hello word using Html?

ANSWER:

```
<!doctype html>
<html>
<head>
<meta charset="UTF-8">
<title>My Web Page</title>
<script src="navigation.js"></script>
<script src="slideshow.js"></script>
<script>Alert('hello world!');</script></head>
```

Q 147: How many basic selectors?

ANSWER:

There are three basic selectors.

Basic selectors are ID selectors, element selectors, class selectors.

Q 147: How many advanced selectors?

ANSWER:

- Descendent selectors \$(' #navbar a') ,
- Child selectors \$(' body > p') ,
- Adjacent sibling \$(' h2 + div') ,
- Attribute selectors \$(' img[alt]') ,

Q 149: Let's see jquery functions to add content?

```
<div id="container">
<div id="errors">
<h2>Errors:</h2>
</div >
</div >
```

Q 150: What are events?

ANSWER:

Things happen to webpage. Page loading, mouse move, key press you respond to events.

Q 150: What are Mouse events?

ANSWER:

click, dblclick, mousedown, mouseup, mouseover, mouseout, mousemove.

Q 151: What are Document window events?

ANSWER:

Load, unload, resize, scroll,

Q 152: What are Form events?

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Submit, reset, change, focus, blur

Q 153: Keyboard events?

ANSWER:

keypress (over n over), keydown, keyup.

Q 154: What is difference between Ready() and Load event?

ANSWER:

Search from internet

Q 155: What are the event properties? Or write a note on event properties?

ANSWER:

`evt.preventDefault();`

To stop normal behavior

Links, form submit etc

Remove events `$('.tabbutton').unbind('click');`

default event bubbling

`evt.stopPropagation();`

```
\$(document).click(function
```

```
(evt){Var xpos= evt.pageX;
```

```
Var ypos= evt.pageY;
```

Q 156: What are the event properties?

ANSWER:

Event Properties	Description
1. PageX	The distance (in pixels) of the mouse pointer from the left edge of the browser window.
2. PageY	The distance (in pixels) of the mouse pointer from the top edge of the browser window.
3. ScreenX	The distance (in pixels) of the mouse pointer from the left edge of the monitor.
4. ScreenY	The distance (in pixels) of the mouse pointer from the top edge of the monitor.
5. Shiftkey	Is true if the shift key is down when the event occurs.
6. Which	Use with the keypress event to determine the numeric code for the key that was pressed (see tip,next).

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7. Target

The object that was the “target” of the event for example, for a click() event, the element that was clicked.

Q 157: What are JQuery animations?

ANSWER:

Fadein, fadeout, fadetoggle. Slidedown, slideup, slidetoggle.

Q 157: Login slider example.

ANSWER:

```
$(document).ready(function () {
    $('#open').toggle(
    Function() {
    $('#login form').slideDown(300);
    $(this).addClass('close');
    }
    Function() {
    $('#login form').fadeOut(600);
    $(this).removeClass('close');
    }
    }); // end toggle
}); // end ready
```

Q 158: Photo gallery example.

ANSWER:

```
$('#gallery a').click(function(evt) {
    Evt.preventDefault();
    Var imgpath=$(this).attr('href');
    Var oldimage=$('#photo img');
    Var newimage=$( '' );
    Newimage.hide();
    $('#photo').prepend(newimage);
    Newimage.fadein(1000);
    Oldimage.fadeout(1000,function() {
    $(this).remove();
    }); // end fadeout
    }); // end click
$('#gallery a:first').click();
```

Q 159: Forms example.

ANSWER:

```
<input name="quantity" type="text" id="quantity">
```

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```
<input name="total" type="text"
id="total">Var unitcost=9.95;
Var amount=\$('#quantity').val();
Var total= amount* unitcost;
Total= total.toFixed(2);
\$('#total').val(total);
```

Q 160: What are selectors?

ANSWER:

```
public ComplexSelector ConcludeSelector(Selector selector)
{
    if (!IsReady)
    {
        selectors.Add(new CombinatorSelector { selector = selector, transform =
null });
        IsReady = true;
    }
    return this;
}
```

Q 161: Define ajax? What is java script working?

ANSWER:

ajax allows us to talk server with in java script. JavaScript, server-side programming, and web browser, all work together. Web browser: xmlhttprequest object. Makes ajax possible. Talks to web server and get response

Selector	Example	What it does
:input	<code>\$(':input')</code>	Selects all input, textarea, select, and button elements. In other words, it selects all form elements.
:text	<code>\$(':text')</code>	Selects all text fields.
:password	<code>\$(':password')</code>	Selects all password fields.
:radio	<code>\$(':radio')</code>	Selects all radio buttons.
:checkbox	<code>\$(':checkbox')</code>	Selects all checkboxes.
:submit	<code>\$(':submit')</code>	Selects all submit buttons.
:image	<code>\$(':image')</code>	Selects all image buttons.
:reset	<code>\$(':reset')</code>	Selects all reset buttons.
:button	<code>\$(':button')</code>	Selects all fields with type <i>button</i> .
:file	<code>\$(':file')</code>	Selects all file fields (used for uploading a file).
:hidden	<code>\$(':hidden')</code>	Selects all hidden fields.

Steps for using ajax.(ye zaroor yad karo ye handouts men bh he)

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AJAX communicates with the server using **XMLHttpRequest object**. ... User sends a request from the UI and a javascript call goes to **XMLHttpRequest object**. HTTP Request is sent to the **server** by XMLHttpRequest object. **Server interacts** with the database using JSP, PHP, ASP.net etc.

Q 162: Difference between a GET() and POST().

ANSWER:

In GET method, **values are visible in the URL**. In POST method, values are not visible in the URL. GET has a limitation on the length of the values, generally 255 characters. POST has no limitation on the length of the values since they are submitted via the body of HTTP.

Q 163: how can we write formdata in variable? And what is the syntax of Serialize method?

ANSWER:

```
var formdata = $('#login').serialize();  
$.get('login.php',formdata,loginresults);
```

Q 164: How Ajax communicates with the web server?

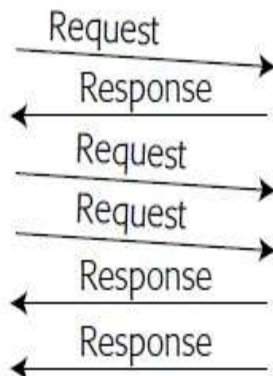
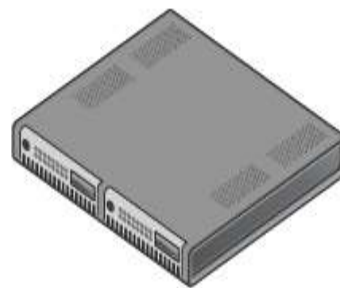
Answer:

Web page request send to the web server then web server give response.
If web page sends two request then web server give two responses.

Ajax Request Model

Web browser

Web server



Q 165: How can we error handle in XML?

ANSWER:

Error handler.

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```
\$.get(url, data, successfunction).error(errorfunction);  
\$.get('rate.php', querystring,  
processresponse).error(errorresponse);Function errorresponse(){  
Var errormsg= "Your vote could not be processed right now.";  
Errormsg+= "Please try again later.";  
\$('#message').html(errormsg);  
}
```

Q 166: What is JSON?

ANSWER:

JS format. Method for exchanging data. JSON is JS so its quick n easy for JS. No XML like parsing. JSON is a JS obj literal.

Server returns a string formatted like a JSON obj literal. JQuery getjson method. Callback will be a JSONObject.

Q 167: What is JSON?

ANSWER:

JSON (JavaScript Object Notation) is independent- language, easy to understand and self-describing. It is used as an alternative to XML. Human-readable and machine also. It is used for data-interchange. The benefit of JSON is that it has a very compact size as compared to XML documents of the same purpose and data.

Q 168: Alloc and dealloc methods.

ANSWER:

dealloc methods.

If you dont own and want to make sure, call retain. No longer need and own than release or autorelease. When 0 count, dealloc called.

- (void)dealloc

```
{  
[possessionname release];  
[serialnumber release];  
[datecreated release];  
[super dealloc];  
}
```

Alloc Method:

```
[System.CLSCompliant(false)]  
public static void* Alloc (UIntPtr elementCount, UIntPtr elementSize);
```