

ASP.Net Interview

Part 2

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Note : at Part 1 , Question 7

LIFO

ال Queue

زي الطابور اللي بييجي الاول بيمشي الاول
FIFO (First in First Out)

ال Stack

زي عليه الاسطوانات كده (CD holder) اللي بييجي الاخر بيطلع الاول
FIFO (First in First Out)

المفروض ان ال Stack ← LIFO “ Last In First Out ”

يبقى ال Queue ← FIFO

وال Stack ← LIFO

Mistyping



1- What is ASP ?

ASP stands for **Active Server Pages**.

It is a framework to develop web pages .

2- What is ASP.NET ?

it is an *open source* web framework, created by **Microsoft**, for building modern web apps and services that run on macOS, Linux, Windows, and Docker.

3- What is the difference between ASP and ASP.NET ?

ASP : **interpreted** language
uses vbscript for its code.

ASP.NET : **compiled** language ,
allows you to use C#, VB.NET and other languages.

gives you **access** to all the **tools** which come with the . NET framework and allows you to write object-oriented code

4- What are the Advantages of ASP.NET?

- **Security**
- for large applications, the number of **lines of code less** when compared to others
- information about the configuration helps in the **easy deployment** of the application

5- What is ASP.NET Core?

It is the modern, **high-performance** web development framework for .NET

6- What is the difference between ASP.Net and ASP.NET Core ?

ASP.NET Core is the **latest** version of ASP.NET
(richer functionality, a more comfortable interface, new libraries)

7- What is the extension for ASP.NET Pages?

ASPX

8- What is the Parent class of Web Server Control?

System.Web.UI.Control – parent class of all the WS Controls.

9- What is the latest version of ASP.NET ?

Latest release: **8.0.0**. Last updated on 2023-11-14

10- What is MVC?

ASP.NET MVC is a web application framework developed by Microsoft that implements the **model–view–controller** pattern

11- How does ASP MVC work?

First, the **browser sends a request** to the Controller.

Then, the **Controller interacts with the Model** to send and receive data

The **Controller then interacts with the View** to render the data. Feb 4, 2021

12- What is the meaning of LINQ?

Language-Integrated Query (LINQ)

- It was first brought out in 2008, and it provides users with a lot of extra features when working with the .Net framework
- one highlight is that allows the users to manipulate data without any dependency to its source

13- What are Some of the common Components of .NET?

- 1- .NET Class Library
- 2- .Net Framework
- 3- Language Runtime
- 4- Application Domain
- 5- Profiling

14- What does JIT Stand for in .NET?

JIT is the abbreviation of Just in Time

15- Why does .NET use JIT ?

The primary purpose of using the JIT compiler is its capability to compile all .NET-supported programming languages. Whether you develop .NET software using C#, Visual Basic, or F#, it can compile them all and run on a specific platform

16- Why JIT is used in C#?

The JIT compiler translates the MSIL code of an assembly to native code and uses the CPU architecture of the target machine to execute a .NET application. It also stores the resulting native code so that it is accessible for subsequent calls

17-What is the meaning of MSIL?

- The Microsoft Intermediate Language (MSIL)
- also goes by the name Common Intermediate Language (CIL)
- . Used to provide the instructions required for operations such as memory handling , exception handling .. etc

18- What is the .NET Framework?

.NET Framework

- One of the platforms provided by Microsoft
- Technology that Supports building and running Windows apps.
- the ability to develop Classes , Libraries , and APIs
- run , debug
- Deploy code into web services and applications form to be the key uses of this framework
- Support a lot of languages and you can work with everything from C# to VB all the way to perl , and more

19- What is .NET Framework used for?

.NET Framework is used to create and run software applications. .NET apps can run on many operating systems, using different implementations of .NET.

20- What does CLR Stand for in .NET?

The **Common Language Runtime** (CLR), the virtual machine component of Microsoft .NET Framework, manages the execution of .NET programs

21-What is the Difference between managed Code and Unmanaged Code ?

Managed Code	Unmanaged Code
Managed by CLR	Not managed by any entity
Garbage collection is used to manage memory	Runtime environment takes care of the management
The .NET framework is necessary for execution	Not dependent on the .NET framework to run

22- How does managed code execute in the .NET framework?

There are **four** main steps

- 1- **Choosing the compiler** that can execute the code written by a user
- 2- **Conversion** of the code into intermediate language (IL) using a compiler
- 3- **IL gets pushed to CLR**, which converts it to native code using JIT
- 4- native code is now **executed** using the .NET runtime

23- What is the difference between Object and Class in .NET?

Object	Class
Instance of a class	Definition of an object
A class becomes an object after instantiation	The basic scaffolding of an object
Used to access properties from a class	The description of methods and properties

24- What is the difference between System.stringbuilder and system.string in .NET?

system.stringbuilder	system.string
Mutable	Immutable
Supports using append	Cannot use the append keyword

25- What is the Meaning of Caching?

a process that stores multiple copies of data or files in a temporary storage location so they can be accessed faster.

26- Types of Caching?

- 1-Data Caching
- 2- Page Caching
- 3- Fragment Caching

27- What is an **Assembly** in .NET?

- Smallest unit of deployment
- Provides all required information to CLR
- **collection** of types and resources that are **built** to work **together** and form a logical unit of functionality

28- There are two **types of assemblies** in .NET?

Private assemblies are used by a **single** application and are stored in the **application's directory** and cannot be shared.

Shared assemblies, on the other hand, can be used by **multiple** applications and are stored in the **Global Assembly Cache (GAC)**.

29- What are some of the **components of an Assembly** in .NET?

Resource : a collection of related files

MSIL : The intermediate language code

Metadata : the binary information of the program

Manifest : it has the information about the assembly

30- What is the use of **Manifest** in the .NET framework?

Used to **store the metadata** of the assembly

31-What is the difference between Function and Stored Procedure?

Function	Stored Procedure
Can only return one value	Can return any number of values
No support for exception handling using try-catch blocks	Supports the usage of try-catch blocks for exception handling
The argument consists of only one input parameter	Both input and output parameters are present
A function can be called from a stored procedure	The stored procedure cannot be called from a function

32- What are the Constructor types present in C# .NET?

- 1- Copy Constructor
- 2- Default Constructor
- 3- Parameterized Constructor
- 4-Private Constructor
- 5- Static Constructor

33- is it possible to manually set a timeout for a session in .NET?

Yes, it's possible to manually set a session's out time

How?

It can easily be done by manipulating the `web.config` file

34- What is the meaning of **Boxing** and **Unboxing** in ,NET?

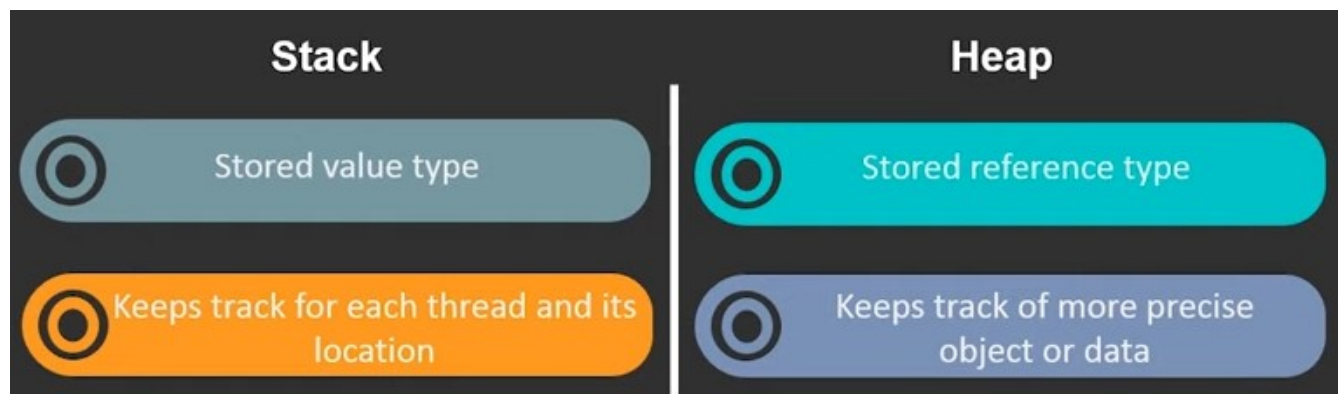
Boxing : Process that is used when a user wishes to convert a **value** type into a **reference** type directly

Unboxing : is the opposite of boxing , where the **reference** type is converted back into a **value** type

35- What are the **types of memories** supported in the .NET framework?

Stack : Used for static memory allocation

Heap : Used for dynamic memory allocation



36- What is the difference between **abstract class** and **interface**?

Abstract Class	Interface
Provides the partial implementation of functionalities that is done by inheriting classes	Used to declare the behavior of an implementing class
Used to declare properties, methods, events, and fields as well	Fields cannot be declared using interfaces

37- Difference between User Control and Custom Control in the .NET framework?

User Control	Custom Control
Static Layout	Dynamic Layout
No support for the toolbox	Supports the usage of the toolbox
Tightly coupled control access	Loosely coupled control access
Branches from UserControl	Branches from the control group

38- What are the types of Cookies available in ASP.NET?

Session cookies : present on the client machine and valid for only single sessions

Persistent cookies : present on the user machine and has a specific period denoting its expiry

39-What are some of the security controls present in ASP.NET?

<asp : PasswordRecovery> : used to send an email to a user upon performing a password reset operating

<asp: Login> : Gives the provisions of login controls with ID and password fields for users to login via credentials

<asp:LoginName> : used to display the name of the user who has logged into the system

<asp : LoginStatus> : use to denote the authentication flag of the user who has logged in

<asp: LoginView> : used to provide a variety of views based on themes upon user Login

40- What is the **order** of the events that take place in a page life cycle?

- 1- Page_PreInit
- 2- Page_Init
- 3- Page_InitComplete
- 4- Page_PreLoad
- 5- Page_Load
- 6- Page_LoadComplete
- 7- Page_PreRender
- 8- Render

41- What **Skills** should a successful .Net developer possess?

هو غالبا بيسألك السؤال دا بيشوف مدى فهمك

- ASP.NET MVC architecture
- Database handling
- Client-Side web development
- .NET Core

42- How do you **prevent** a class from being **inherited**?

In C#, we can use the **Sealed keyword** to prevent a class from being inherited

43- What are **EXE** and **DLL**?

EXE: It is an executable file that runs the application for which it is designed. When we build an application, an exe file is generated. Therefore the assemblies are loaded directly when we run an exe. But an exe file cannot be shared with other applications.

DLL: It stands for dynamic link library that consists of code that needs to be hidden. The code is encapsulated in this library, an application can have many DLLs and can also be shared with other applications.

44- difference between **Constants** and **read-only variables** ?

Constants	Read-only variables
<ul style="list-style-type: none">Evaluated at compile timeSupport only value type variablesUsed when value is not changing at compile timeCannot be initialized in a constructor or in declaration	<ul style="list-style-type: none">Evaluated at run-timeThey can hold reference type variablesUsed when actual value is unknown before run-timeCan be initialized in a constructor or in declaration