**Angular:**

1.Interceptor in angular ? What is it and why used… examples

2. Nested component , how child component communicate with parent component, sample code

3. What is Event Emitter ? What is the use?

4. What are the different ways to communicate between Component?

5. How many type of binding in angular?

6. What is Ng-container ?

7. What is Pipes , what is custom pipes , example ? Syntax ?

8. Why Angular is SPA?

9.how to upgrade Existing application to be rebuild in Angular latest?

10. Grid view control development

11.History data implementation

12.Pagination, Sorting , user setting is being maintained

13. Created Grid as a Component ?

14. Kendo grid is customized, Pagination is inbuilt in Kendo grid

**15.** Have not used ngx-Pagination

**16.** How action is designed in the Grid view ?

17.Have you used virtual scrolling ( Pagination, Infinite and virtual scroll ) ? No

18.How you know there is no more row to show ?

19.Have you used Routing in angular ? Navigating to another view , configured in the Module

20.Can activate , what is it ? Guard checking ? For the next action/navigation or default page navigation

21.How many ways pass data from Parent to Child ?

22.What about Params ?

23. Patterns in angular ? Explained Singleton Pattern

24.Challenges faced in angular ?

25.What is Lazy loading ? Virtual scroll is the example

26.What happens using CLI command to create new component , html, css and .ts created

Where its specified ,

27.Component meta data

28.What is there in Service , how to create one first @injectable

29.Call a service from a component , write sample code , Sample code done

30.How error validation to be done

31.How multiple components are wired together … EventEmitter

32.How to pass the user id to other components

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| 33.How will you create a library |
| 34.Why do u want to use library |
| 35.Models how u share across application |
| 36.How will you pass the context across application  37.Difference between service component |

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| 38.How about life of service |
| 39.Service definition and component definition differs |

40.when we create a component what happens and when service created what happens in angular CLI

41.Examples of input - comunication between components

42.Login component - clicks login in another user page this username should be displayed on top right corner of that page

43.login page contains username and pwd and login button

44.which will be parent component- login as landing page-

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| --- |
| 45.if login fails how will u stop - since output should not displayed |
| 46.Any other communication for component to component |
| 47.He said used browser bus - how that bus executes |
| 48.ur components communicating thro bus any other way |
| 49.How will u handle exception |

**.NET Questions:**

1. What is service, how to create a Service instance , how you do dependency injection?
2. Abstract class in C#?
3. Abstract method ?
4. what is extension method ? how to use the extension method ? How to invoke it ?
5. Have you worked collection class ? what is the difference between List and Inumerable?
6. How to merge two list of string into one list

of string , without using any inbuilt functions.

List<String> a = new List<String>(){"a","b","c","d"};

List<String> b = new List<String>(){"1","2","3"};

Expected Output: "a1b2c3d"

1. What is difference in insert and add ? In list operation
2. Have you worked on developing APIs ? Yes, what are the Types ?
3. How to put access control in API ? Authorization and Authentication ?
4. Have you used Entity Frameworks? What kind of object /models are expected, how they are mapped ? DTOs class to entity model ?
5. How to make property Readonly ?
6. Upstream/Downstream communication/API /Data Sources
7. two dictionary object , with source and destination , map destination to source value in third dictionary

* source, target
* Source, value
* Target , value ?

Easier to ensure duplicate key does not exist.

1. Have you worked with API , in dot net ? Azure function, PCF used in last project ..
2. Custom exception ,how to develop Human understandable error message ?
3. How the exceptions are handled , any centralised exception handling ?
4. Any caching is used in current project : Db Caching is used and in memory caching for Azure function apps/micro services
5. Bulk processing : using ADF

19. Control dynamic / Control Name & Control ID - to be saved into a Database. As an MVC. Control button can be a text box or a radio button etc.,

Needs Visual Studio for coding part.

Controller.cs

public viewresult savecontrols(findcontrol.id, findcontrol.name) {

                return findcontrol.id

}

20. Router.config - controller/{savecontrol}/{Label}

21.Any winforms you created? Library - User controls? how you will create a user control? - Extend a property of existing control - a.cs file - drag and drop the control and update the properties.

22.I want to create a DLL and plugin into another windows applicatin.

                Create a project and build a dll. Add this dll as a add library.

                Create a dll with custom control.

23.Task vs Thread - Parallel runs are Thread. Task is the method. Both task can be started in parallel - thread.

24.How to create a task - syntax / code or how to call a method?

static void main {

                Task. = validate1();

                Task.Start();

                Task.validate2();

}

25.Windows controls

26.Write a linq statement using lambda for retrieving first row of a table.

Lis<int> student= new list<int> ();

ienumerable<int>=student.Firstordefault(

27.First vs Firstordefault - First

28.When to use ienumerable - only for collection of data

29.Extension of methods -

30.What is annomous function?

31.Diff between remove vs multiple selects.

32.linq to filter out even numbers from a list.

Lis <int> number = new list<int> (21,2,3,4,5,6);

ienumerable<int>= number.where(x=>x%2==0).select();

33. Why Migration / Advantages of WebServices to WebAPI migration.

WebServices are hosted in Windows platform and accesible thru certain end points (like browsers). If it is WEbAPI - then it is cross platform/cross devices accessible. More robust / standardised to satisfy loosely coupled architecture as well.

34.Other technologies using Webservices / WebAPI. Heard of WCF , but not worked. As the maturity was Webservices to WCF (SOA) to API. how this was matured. Huge cost is the reason for migrating.

35.RESTLESS API vs RESTFULL API. completely based on http protocol / context (like GET / POST etc.).

RESTLESS still follows http standards but not exactly.

36.WebServices - Is it REST or RESTULL - we can call it as RESTLESS service. It can be defined as RESTULL with lot of efforts.

37.Difference between POST (New) & PATCH (bulk approach) & PUT - Update.

38.Are you aware of Microservices / Container based Services? In DOt Net Core it supports containerization. I am not experienced into Microservices areas as my customer portfolio is limited to just WEBAPI and no microservices. I am in learning stage to Microservice.

39.in WebAPI which framework (MVC or ?) you used? Dot Net Core 6 (he understood it is as Version). ASP.Net MVC Architecture as part of Core 3.1. Some third party frameworks also been used here - Ex Dapler? It is an Entity Framework - used only one instance. Any other framework?

40.WebAPI - What are the different ways of authentication. Recent one is SSO, another one is JWT, OPCID concepts (XML based authorization - just aware of this concept). Role based authorization as well. Within JWT - How you generate the token - what mechanism? Within API - we need to configure the audience/issuer etc., Appsetting.json is the palce we need to do this. When client requests, the JWT is generated and given back to Client . Later Client need to send it and it has to be validated.

41.Content Negotiation in Web API. Default Content return can be changed by configuring the return type. It was used in the QR / binary stream was required there and we did this. Server can support some formats, but client can ask for a change in these format or vice versa (by customer)

42.CROSS - Cross Origin Resource Sharing? External Domain - we need to use it. I got it now. Different domain accessing same API faced this issue. But I was not aware of this terminalogy.

43.Now Framework - In Dot Net Design Patterns? Which one is the most / familiar on Design patterns and give an overview? SingleTon is one popular ... <thinking>. Overview of this no more than one instance. How you can achieve that thru coding? we can use dependency injection to achieve this SingleTon. He is confusing? DB Context class to be created as a single instance using Dependency injection. Any other pattern: Command Pattern / Factory method

44.Apart from WebAPI - any other areas: Windows App, ASP.Net Web Application / MVC, WPF also long back. How long you are working in current project. From Sep 21.

45.In profile you have mentioned WCF. it is in the past - onshore before 2021. Act as a typical Webserivces? he confused.

46.Winforms: Alignment of Development machine may differ from Client machine due to resolution changes. How to ensure that this is handled across all kind of resolutions.  There is a property to set this adjusted automatically. This was my old experience. Not current one - as my current one is more of windows to dot net web migration. Property is Anchor / Dockering - Customer answered. But even then the form won't be fitting into the screen due to resolution difference / monitor size difference. I haven't faced this problem. May be it is a pixel configuration that we should do? thinking.... couldn't recollect.

47.Customer wants the app to support Oracle , SQL Server (multiple database) - how this can be solutioned? This is from architect point of view. Can we go thru abstract classes to handle different DB objects. Customer says: How we can achieve thru the entity framework? We have two types in EF. DB First and another approach. I want to understand the rquirement in detail. Client one could be asking for Oracle as backend and Client 2 coul dbe asking for SQL Server. Then it should be a seperate data layer. RSA entity framework should be used accordingly. EF db context can be configured (by client), but candidate says it will be better to have a data layer seperate to handle it. But data layer will be different and has to be recreated right?

48.In winforms we have event for every element. If we have to add my own event like double click? use delegates to acieve this. This is common. But event handlers - are you aware of it. Is it custom event handler - I couldn't recollect it.

49.Dot net CLR , give an overview , what is the benefit

What is compiled code format

50.What is issue faced in migrating from lower version to higher version?

51.Add each digit , from a number : Arvind was trying a different approach , convert to string then convert back int, but will work,

45678 , 4+5+6+7+8

sum = 0;  
while(n != 0) {  
 sum += n % 10;  
 n /= 10;  
}

52.Different way of authentication in webAPI .. Answerd only know Bearer token authentication

53.Worked on Azure, what is services available in Azure , how to host webapi , different ways … wrong answers

54.Reporting Project experience , SSRS used

55.UiPath used for automation workflow , Selenium also used web scarping some data automation ..

56.Restful webAPI migration , refactored the code base ,

57.How entities are managed and splitted during migration process

58.Scope Specifier and Access modifier

59.How dot net framework works and do memory management . Do garbage collection

60.Chaining of Http call , Bhupi used forkJoin

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| 61.How will u handle exception |
| 62.Request is in progress message when we call API - |
| 63.Not every time only when database call is happening or some loading data from table |
| 64.Response of timer call is slow - we should show a message to user-loading data |
| 65.Retrieve mechanism for API calls |
| 66.How do you control authentication in your API |
| 67.How do you handle exceptions in API |
| 68.In exception filter how will you know what kind of exception occurred |
| 69.Is there a way to access the param in exception |

70.Do you have knowledge of WPF

71.High level diagram , for winform application,

72.Swap two integer varriable value without using a third varriable

+ and - operator , xOr operator and bit wise operator int a = 10 int b= 5 , (a,b) = (b,a)

73.In winform, how to load the list of values in Combo box ?

74.What is difference in Abstract class and interface

75.Difference between Encapsulation and Abstract class

76.Finalise and Dispose method ? Difference and what to use when ?

77.Managed and unmanged code , performance impact ? Called GC

78.Purpose of Delegate , reference to a method ? Which scenario we will use delegate ?

79.Cache/Cross Thread issue in winform ?

80.Classes with multiple interfaces ?

81.Why partial classes are used in dot net

82.How to avoid class being inherited , Sealed ..

83.Difference between Throw and throw new

84.Static method and this , difference ?

85.Thread and multi Thread concept … LOCK keyword ? Prevent concurrent thread

86.Asynch vs Synch ? What is use , pro/cons.. ?

87.Have you worked on API ? Why rated 7 on skill rating ..

88.Worked on WebHooks

89.Http post, delete , Put , Patch what is difference , what does , when it used ..

90.What is parameter binding in ASP net web API

91.What is from URI and what is from Body

92.What version of WebAPi being used ?

93.Reflection in C#.. ?

94.Any design pattern used , Single ton and Dependency injection ..

95.Why singleton used ?

96.SOLID principle in Oops …

97.What is Dapper , have you used Dapper… ? Replacement of ADO.Net , to execute Raw sql query

98.What is GraphQL , ?

99.Have you used LINQ ? .skip , . FirstorDefault()

100.Have you created any custom control in winform ?

101.What is the extension method ?

102.What are Generic classes ?

103.What kind of Authentication methods are used for API .. ?

Authorisation ? JWT mechanism , token generate kept in session , token expires ?

104.Micro services ? What is it…

105. Explain the notepad implementation with oops concept.

106. Data Structure used to implement this

Input 1: {}][

Output : Invalid

Input 2:((){})

Output: Valid

107. Example of implementing object in json format.

**SQL Questions:**

1. Pagination, Sorting , user setting is being maintained… in DB
2. SQL Stored procedure, SSRS,SSIS

3.how to delete a duplicate values in a sql table: it could be a stored procedure

create storedprocedure duplicateremovall

as

begin

                delete from employee where employeeid in (

                select employeeid from employee where cont(employeeid)>1

end

4.how we will transpose a table? do not know....

5.if you are not creating index in a table - what will be consequence - searching will take time.

6.select 10th record in a table - we can use rownumber  : select top(10) from student alternatively

create table student (

                studentid integer identity(1,1)

                studentname varchar(100)

)

select studentname from student where studentid=10

7.how you will fetch alternate records from the table?

I think we have rownumber - but not sure about the syntax.

8.What is view - its is a virtual table for selected / specific functionality rows

9.how to fetch first 5 characters from a string?

                select substring("abcdef",1,5)

10.What is scalaup function - we can return the records based on some functionality.

11.What is recursive stored procedure - I haven't used it. i think it is calling / nested stored procedure. inside stored procedure executing another stored procedure.

12.SQL Server - I am good with it. What is the concept for Views? Overview of that? View is selected records from large tables. What is common table experssion - is to create an new type based on an existing type.

How to handle errors in sql scripts? Exception handling is one way in procedures. SQL has 3 or 4 tables joining and taking more time. How we can optimize is? Understand tables & fields & joins. Look at the index usage. Use only selected fields to reduce performance trouble.

Coding now...

String - all possible Substrings:

OPTUM

O OP OPT OPTU OPTUM

P PT PTU PTUM

For Loops / Character Loop / Customer suggested substring..

13.Write SQL Query - To fetch all the employees who belongs to particular department. Summarized it well. but no joins required here in my view. he used inner join clause

14.Second query - In each department how many employees are there. - he used group by clause. he could have used employee id as count - rather he used department id - created confusions.

15.Stored Procedures vs Functions , explain difference

16.Write sample SQL query , using DISTINCT keyword

17.Reporting Project experience , SSRS used

18.Why View?

19.How to improve performance of a SQL Query?

20.SQL Queries – Inner joins, Group by counts, Retrieving first record, Retrieving alternative records, Retrieving 10th record

21.Write sample SQL query , using DISTINCT keyword

22.Reporting Project experience , SSRS used

23.How to pass list data to Sproc input parameter.. Array parameter ?

24.With help of schema , write query ..to create table from schema ..