

.NET Interview Topics

SQL

- 1) Function vs stored procedure
- 2) Query commands
- 3) Index
- 4) How would you write an SQL statement to perform an outer join between two tables?
- 5) Why use an abstract class and not just a regular class?
- 6) What is your experience in coding?
- 7) What are the different types of SQL joins?
- 8) Write an SQL statement to match specific columns of one table to specific columns in another.
- 9) What is a primary key?
- 10) What is a foreign key?
- 11) What is a unique key?
- 12) What is the identity keyword in SQL?
- 13) What are the basic SQL constructs?
- 14) Tell me in an employee database, what will be the basic tables you would have?
- 15) Apart from employee names, what are key information needed to store in an employee database?
- 16) Let says you have two tables: Table 1 has employee roles (i.e., Junior/Senior developer). Table 2 lists salaries by roles. Let say you have to find the basic salary for a junior developer. What kind of relationship would you like to build to get that data?
- 17) Do you know what is a primary index for a table?
- 18) Tell me about primary key.
- 19) Can you have multiple primary keys for a single table?
- 20) Can you have multiple unique keys (for a single table)?
- 21) What is Truncate and Delete commands in SQL?
- 22) Tell me about how you can find all people who are Aged 30 under a table named XYZ?
- 23) Describe composite, foreign, and primary key relations.
- 24) What are some datatypes in SQL?
- 25) Give some examples of query commands.
- 26) What are the SQL commands used to access a table?

.NET Interview Topics

- 27) Have you created a table?
- 28) What do you think the difference between truncate and delete statement?
- 29) What are the different joins you used?
- 30) What do you think the difference between left join and left outer join?
- 31) What is normalization in database?
- 32) What are relational databases?
- 33) What is the difference between char and varchar?
- 34) What is the cross join
- 35) What is the difference between drop and delete?
- 36) What is Trigger in SQL?
- 37) What is index in SQL?
- 38) What are truncate and delete?
- 39) What is a stored procedure?
- 40) What is an SQL command object?
- 41) How do you create a database?
- 42) Give us some examples of query commands?
- 43) If there are two tables to use, how do you reference them?

SQL

ADO.NET/ Entity Framework

- 1) Connection differences between ADO.NET and Entity Framework
- 2) How you modeled a database (or class) using Entity Framework
- 3) Error and exception handling in Entity Framework
- 4) What is ADO
- 5) How to connect with Database. (ADO)
- 6) How would you write SQL queries with entity framework?
- 7) What is Entity Framework?

.NET Interview Topics

- 8) How do you make queries to EF
- 9) Entity Framework
- 10) Code first vs. Database first
- 11) Connecting database to API, how to make changes in the database
- 12) When using ADO.NET, how do you map the response to the model?
- 13) What is the difference between ADO and EF

ADO.NET/ Entity Framework

OOP

- 44) What are the principles of OOP? Describe each of them.
- 45) What is the benefit of inheritance
- 46) What is a class?
- 47) What is an object?
- 48) Immutable objects – how to change immutable objects
- 49) Describe how you would use Polymorphism in one of your projects?
- 50) What is Overloading? What is Overriding? When would you use these and why?
- 51) Encapsulation
- 52) What are abstract methods?
- 53) What is Interface?
- 54) What is inheritance and why use it?
- 55) What is the difference between overload and override?
- 56) Give me an example of how you have used abstraction in one of your projects?
- 57) When is abstraction necessary?
- 58) What is overloading?
- 59) What is overriding?
- 60) Encapsulation

.NET Interview Topics

- 61) Polymorphism
- 62) Run-time Polymorphism and Compile-time Polymorphism
- 63) What are the OOP pillars?
- 64) What is method overloading?
- 65) What's the difference between Abstraction and Polymorphism?
- 66) What are the two ways of inheriting something

OOP

.NET

- 67) What is the Jit compiler?
- 68) What is the CLR?
- 69) Describe to me how you would use references in a project?
- 70) What is a DLL?
- 71) What is Common Type System (CTS) in terms of .NET framework?
- 72) What is an Assembly in .NET?

.NET

C#

- 73) What is a constructor?
- 74) What are Value vs Reference Types in C#?
- 75) What is Exception Handling and how would you use it? Try Catch? Throw?
- 76) What is singleton
- 77) How would you empty variable memory when you no longer need it?
- 78) What are using statements?
- 79) What is the difference between authentication and authorization?

.NET Interview Topics

- 80) What forms of user input data validations have you used?
- 81) What is the difference between error logging and debugging?
- 82) What access modifiers do you know?
- 83) What are SOLID principles?
- 84) How do you handle exception?
- 85) What are abstract classes and interfaces, and how do they differ?
- 86) What are constructors?
- 87) What is Try and Catch?
- 88) How do you handle an exception?
- 89) What are abstract methods?
- 90) What is method overloading and overriding?
- 91) What is value type vs reference type?
- 92) What is boxing and unboxing
- 93) Compare Abstract vs Interface
- 94) What is LINQ?
- 95) What is a lambda expression?
- 96) Describe Int.
- 97) Describe strings.
- 98) What's the difference between int and string?
- 99) Multiple inheritance in C#
- 100) How to achieve multiple inheritance in C#
- 101) Do you have any experience with LINQ to ADO.Net
- 102) How would you use a connection string without hard coding it into your program?
- 103) What are types of constructors?
- 104) How do you handle exceptions
- 105) Can you have multiple catch blocks
- 106) Should you have exception handling(try-catches) on all levels of your code, what might be the issues?
- 107) How many ways can you catch Exceptions?

.NET Interview Topics

- 108) What is one specific way of catching exceptions in C#?
- 109) Have you used Exception in C#? Process of Try Catch?
- 110) Difference between a value and reference type?
- 111) How to connect SQL to C#?
- 112) What is the difference between a string and a String Builder?
- 113) What is the difference between a struct and a class?
- 114) What forms of user input data validations have you used?
- 115) "let's talk about C#, what data types do you know in C#
- 116) What is the class used to execute from the database?
- 117) What is dependency injection?
- 118) What is ADO.NET?
- 119) What are value and reference types?
- 120) What are the types of constructors?
- 121) How would you make sure that a class could not be inherited?
- 122) Global variable vs Static.
- 123) What are dependencies?
- 124) What is error logging?
- 125) What are micro services/systems? What is data abstraction?
- 126) What is dependency injection
- 127) How to connect SQL to C#
- 128) If the memory is too big, how do you clear that exception with using try/catch block?
- 129) Is method overloading being a runtime method or compile time method?
- 130) There are how many types of constructors in C#
- 131) What is IDisposable
- 132) Have you done any Serialization, What kind?
- 133) What is finalize and dispose
- 134) Should you have an IDisposable in all parts of your code.
- 135) How would you create an employee class?
- 136) What is IEnumerable

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137) What are the different types of constructors

C#

ASP.NET

- 138) What is ASP.NET?
- 139) What is ASP.NET MVC?
- 140) What is REST?
- 141) What is the purpose of unit testing?
- 142) What are some of the segments of software testing before it goes to production?
- 143) Http methods (what they do)
- 144) Http request code (200, 500....)
- 145) What is CORS?
- 146) How do you connect API to the database?
- 147) How do you use authentication in ASP.Net?
- 148) How do you connect a REST API to an SQL database?
- 149) How do you set up a REST API?
- 150) How do you connect to the database with an API?
- 151) What's ASP.NET?
- 152) What's ASP.NET MVC?
- 153) How to use Routing in C#?
- 154) Difference between a post and put?
- 155) What are the different types of response codes in API?
- 156) How to create an API?
- 157) There are how many types of Authentications?
- 158) What is the difference between Authentication and Authorization?
- 159) How do you close a connection from a deployed API, if it were attack maliciously?
- 160) What is a reject?

.NET Interview Topics

- 161) What is Razor and a .cshtml file?
- 162) Can you have more than one model in a view?
- 163) What is caching?
- 164) What is state management in dot net?

ASP.NET

GIT

- 165) Proper coding etiquette, when to check in with your code?
- 166) What is a branch?
- 167) code line or stream in regard to source code version control:
- 168) Is it possible to merge two or more branches in your local environment?

GIT

Angular

- 169) What are directives in angular?
- 170) What is routing?
- 171) What is the HTTP response codes?
- 172) What is the difference between let and var?
- 173) How do you style a selector in CSS file?
- 174) How to connect Angular to the API?
- 175) Angular routing
- 176) What is the difference between let and var?
- 177) What is session? How long is a session stored?
- 178) Write out a HTTP request from angular that would connect to your API
- 179) What means to seal a project

.NET Interview Topics

- 180) What ng you use to bind information
- 181) What are some angular directives?
- 182) What is ng Bind?
- 183) How would you bootstrap an Angular project?
- 184) How do you add components in Angular?
- 185) How do you add styling?
- 186) How do you build angular for hosting?
- 187) Have you done Angular unit testing?
- 188) What is lazy loading in Angular?
- 189) How do you deploy a project in angular?
- 190) What is the difference between structural and attribute directives?
- 191) Through Angular, how do you make calls to the backend API?
- 192) Tell me how you would add a new component to an Angular project?
- 193) What is bundling? (In angular)
- 194) What are Decorators and Observables?
- 195) What are directives?
- 196) Describe one of the named directives.
- 197) How do you bootstrap angular project?
- 198) How would you pass components from to another?
- 199) How do you deploy a project in Angular?
- 200) What is routing?
- 201) What is bundling?
- 202) What is minification?
- 203) What is NPM?
- 204) What are decorators and observables?
- 205) How to connect Angular to the API?
- 206) What is the lifecycle hook
- 207) What is the root module of an angular app
- 208) Where is the entry point of an angular app

.NET Interview Topics

- 209) How do you bundle angular
- 210) What is early binding and late binding?

Angular

HTML/CSS/JS/TS

- 211) Tell me about how you can change the color of letters under CSS?
- 212) What is AJAX and have you used it in a project before?
- 213) What is typescript?
- 214) How do you compile typescript into JavaScript?
- 215) JavaScript vs TypeScript
- 216) What is JSON?
- 217) What is the difference between let and var?
- 218) What are promises in JavaScript?
- 219) How do you handle exception in JavaScript(?)
- 220) What message will be shown if you print "var x;" in JavaScript? Console.Log(x);
- 221) What message will be shown if you print "y" that you have not declare that yet?
- 222) What is Closure in JavaScript?

HTML/CSS/JS/TS

Unit Testing

- 223) What is the purpose of Unit Testing?
- 224) What is Mocking?
- 225) How would you write a unit test?
- 226) What is test driven development?

.NET Interview Topics

- 227) What is MOQ?
- 228) How did you implement unit testing?
- 229) What forms of unit testing framework did you use?

Unit Testing

Projects

- 230) Tell me about configuration in your projects?
- 231) Explain the steps you took into creating one of your projects?
- 232) What is your role in the latest project you were doing?
- 233) Being <this role> what were you some challenges you faced and how did you overcome it?
- 234) Tell us about your projects in Revature.
- 235) What's experience do you have in your projects? What were they?
- 236) What is SCRUM?
- 237) What technologies interest you? What is your favorite technology?

Projects

DevOps/Cloud/Docker

- 238) API and web app deployment utilizing Azure
- 239) DevOps experience in GitHub (conflicts and merge errors in particular)
- 240) Setting up SonarCloud
- 241) How do you deploy an angular project?
- 242) Have you used GitHub with Visual Studio (Code) integrated tools?
- 243) Have you used CI/CD pipeline?

DevOps/Cloud/Docker

.NET Interview Topics
