55 C# interview questions to ask your applicants

Questions

- 1. What is the difference between a class and an object in C#?
- 2. Can you explain what inheritance is in C# and why it is useful?
- 3. What are interfaces in C# and when would you use them?
- 4. What is encapsulation in C# and why is it important?
- 5. Can you explain polymorphism in C# with an example?
- 6. What do you understand by the term 'delegate' in C#?
- 7. Could you explain the concept of garbage collection in C#?
- 8. What is exception handling in C# and how do you implement it?
- 9. Can you explain what a constructor is in C# and when it is used?
- 10. What is the difference between 'ref' and 'out' parameters in C#?
- 11. How does the 'using' statement work in C#?
- 12. What is LINQ, and why would you use it in C#?
- 13. Can you explain what a property is in C#?
- 14. What are value types and reference types in C#?
- 15. How do you create an array in C#, and what are its limitations?
- 16. What is the purpose of the 'static' keyword in C#?
- 17. Can you explain the concept of a namespace in C#?
- 18. What is the role of the 'this' keyword in C#?
- 19. How do you handle events in C#?
- 20. What is the difference between an abstract class and an interface?
- 21. Can you describe what a collection is in C# and name a few types?
- 22. What is the purpose of the 'async' and 'await' keywords in C#?
- 23. Can you explain what dependency injection is and how it's used in C#?
- 24. What are the different types of exceptions in C#?
- 25. How do you implement a simple method overloading in C#?
- 26. What is unit testing, and how does it relate to C# development?
- 27. Can you explain what nullable types are in C#?
- 28. What is the purpose of the 'lock' statement in C#?
- 29. Can you explain the difference between method overloading and method overriding in C#2
- 30. What is the difference between 'const' and 'readonly' keywords in C#?
- 31. How does the 'yield' keyword work in C# and when would you use it?
- 32. What are extension methods in C# and how do they work?
- 33. Can you explain what a finalizer is in C# and when you would use one?
- 34. What is the difference between 'is' and 'as' operators in C#?
- 35. How do you implement a custom exception class in C#?
- 36. What are anonymous types in C# and when would you use them?
- 37. Can you explain the concept of covariance and contravariance in C#?
- 38. What is the difference between 'IEnumerable' and 'IQueryable' in C#?
- 39. Can you explain what abstraction is in C# and provide a simple example?
- 40. What is a sealed class in C# and when would you use one?
- 41. How does method overriding work in C#?
- 42. What are virtual methods in C# and how are they different from regular methods?
- 43. Can you describe the purpose of access modifiers in C#?
- 44. What is a nested class in C# and when might you use it?
- 45. How do you implement multiple inheritance in C#?
- 46. What is the difference between a method and a property in C#?
- 47. How does the 'override' keyword work in C#?
- 48. Can you explain the concept of 'early binding' and 'late binding' in C#?
- 49. What is the role of an abstract class in C# and how is it different from an interface?
- 50. Can you give an example of how to use the 'base' keyword in C#?
- 51. Can you explain what a struct is in C# and how it differs from a class?
- 52. What is the difference between 'break' and 'continue' statements in C#?
- 53. Can you explain what a generic type is in C# and provide an example of when you might use one?
- 54. What is the purpose of the 'sealed' keyword in C#?
- 55. Can you explain what an indexer is in C# and when you might use one?