

- Interview tips
  - Communication/Design
    - What of the projects are the most relevant from the experience point of view
    - Describe an architecture of one of the projects (preferably most interesting\challengeable)
    - Describe the biggest story\epic you was working on
  - C#
    - Can you get equivalent behavior as yield return provides with some other than C# language (the one which you are familiar with, or in C# itself with no using of yield return)
    - Call virtual method from the constructor vs different languages\technologies
    - Difference between interface and an abstract class
    - Garbage collector
      - ◆ Key concepts
      - ◆ Finalization queue
      - ◆ Algorithm to find not referenced objects
    - Value vs reference
    - Generics
      - ◆ in\out
      - ◆ Why IEnumerable<T> implements IEnumerable?
    - Events and delegates
      - ◆ Key concepts
      - ◆ Is the delegate a reference type?
      - ◆ += operator on delegate
  - Multithreading
    - Describe the multithreading synchronization primitives
    - Async\await, any opinion on that
  - Task
    - Logic\algorithm
      - ◆ Swap two integers with no using any of additional memory
      - ◆ Create an algorithm to build the convex hull having the set of points
    - Design
      - ◆ Say we need to design map service aka google maps which in particular would be able to present the roads quality
  - Design
    - Say I want to improve design skills, guide me please on what should I do, provide some references
    - Do you see any contradiction between Agile's iterations and the problem to define a strong architecture of the project at the start? How would you solve that?
  - Agile
    - if worked with\hear about, describe pros & cons
  - Miscellaneous
    - Most valuable books to recommend to become a good specialist
  - SQL
    - SQL Database engine, how does it execute the query (or how would you implement the query execution)
    - Can I withdraw \$200 from the account where I have only \$100 using two duplicated credit cards and two ATMs located at different continents
  - Javascript
    - New, this, delete, closure, prototype