

C#/SQL test task

Project in Git repository is preferred

1. Design database for the model task that contains the next entities:

- 1) **The Company**, that can provide services for the customers.
- 2) **The Service** - some service the company provides to one or several customers.
- 3) **The Customer** - can use the services of the one or several companies.

2. Write SQL statements for the next queries:

- 1) Find all customers of the specified company.
- 2) Find all companies that provide services to the specified customer.
- 3) For the giving customer find all services and companies that provide them.
- 4) Find clients that do not consume any service.
- 5) Find all clients that consume S_1 or S_2 services.
- 6) Find all clients that consume S_1 and S_2 services.
- 7) Find all clients that consume only S_1 and S_2 services.
- 8) Find all clients that do not consume S_1 service.
- 9) Find all clients that consume S_1 service but do not consume S_2 service.
- 10) Find all clients of the specified company who consume the same services of the company (but may use different services of other companies).
- 11) Find all clients who consume services provided only by one arbitrary company.
- 12) Find all clients who consume services provided by only two different companies.

3. C# test task

Design RESTFul Service (ASP.NET) using async patterns with implementation of querying previously designed SQL model. It is not required for all statements but only for two the most interesting on your opinion.