

Case

A company called MY-COMPANY wants to have a small HR application developed by their internal development team. The application will be one among multiple applications already running in the MY-COMPANY environment.

Business Requirements

The new application must be able to create, update and show employees of MY-COMPANY. The functionality needed is:

- Create employee
- Update employee
- Show list of employees with the possibility of searching (e.g. by field)

The Employee entity should consist of the following fields:

Name	Туре
Id	Number
First Name	String
Last Name	String
Email	String
Date of Birth	Date
Currently Employed	Boolean

Technical Requirements

Since this new application must fit into an existing environment, there are some technical requirements.

- The application must be developed in Microsoft .NET (C#)
- The client must be a desktop client
- All data from the application must be stored in an SQL-based database
- Try to write the required SQL instead of using an ORM
- The desktop client must go through a service layer (WCF, Web API, etc.) to communicate with the database (i.e. the desktop client must not connect directly to the database)

Exercise

Develop the new HR functionality while staying inside the technical requirements as much as possible (for areas where you have no previous experience, please find alternative solutions).

Finally, think about how the system would be deployed inside the MY-COMPANY organization.

In the job-interview you will be asked to present the developed prototype, and the following discussion will be based on the proposed solution.