February, 2025

Project Databases: Assignment 2

This application focuses on the Someren camp that first-year Information Technology students at Inholland Haarlem attend in May. In order to make sure the two-day excursion goes smoothly, the decision has been made to develop an application that allows the full administrative organisation of the students, lecturers, rooms, bar services and activities to be managed. You will have a great deal of freedom regarding how you choose to shape the application.

The key focus in this project is on writing SQL queries combined with C# programming structures in an ASP.NET (MVC) web application. The application should never crash, but rather display informative error messages when something goes wrong.

Common part (whole group): create database + Visual Studio project

1. Connect to your Azure database using SQL Server Management Studio and create the necessary tables, columns and relationships based on your relation model (assignment 1).
2. Create a Someren Visual Studio project (ASP.NET MVC) and set the connection string in file appsettings.json. Use the connection details of your Azure database.
3. Define a layout for all views of the Someren web application. All views should have a top menu for accessing different parts of the application.
4. Divide variants A, B, C, D between the members of your group:

Groups of two people create at least variants A and B.
Groups of three people create at least variants A, B and C.
Groups of four people create at least variants A, B, C and D.

Of course you can work together, but only within your own group. Working together does not mean copying each other's work, but coming to new insights together!

Variant A: View all students

The students in your project group should be added to the database as test data.

Add a (top) menu item "Students" in the layout of the application. When this menu item is clicked all students are retrieved from the database and displayed in a structured way on the screen (with headings: student number, first name, last name, telephone number, class).

Variant B: View all lecturers

The lecturers that are involved in this term should be added to the database as test data.

Add a (top) menu item "Lecturers" in the layout of the application. When this menu item is clicked all lecturers are retrieved from the database and displayed in a structured way on the screen (with headings: first name, last name, telephone number, age).

Variant C: View all rooms

Some rooms (of Building A and B) should be added to the database as test data (like A1-01, A1-02, B1-01, B1-02, B2-01, B2-02).

Add a (top) menu item "Rooms" in the layout of the application. When this button is clicked all rooms are retrieved from the database and displayed in a structured way on the screen (with headings: room number, room size, type of room: student/lecturer).

Variant D: View all activities

The activities (soccer tournament, puzzle quest and obstacle course) should be added to the database as test data.

Add a (top) menu item "Activities" in the layout of the application. When this button is clicked all activities are retrieved from the database and displayed in a structured way on the screen (with headings: name, date/time).