# Someren Assignment 2: Students, Lecturers, Rooms

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

The key focus in this assignment is on writing SQL queries combined with C# programming structures.

The application will shut down immediately if an Exception occurs and the error will be displayed in Visual Studio. This is a very developer-friendly, rather than user-friendly, feature. Try to catch Exceptions as much as possible (exception handling – try/catch) and to replace them with a user-friendly message.

### **General section (whole group)**

- 1. Go to Blackboard and download the Someren.sln Solution file.
- 2. Divide variants A, B, C, D between the members of your group:

Groups of two people create variants A and B. Groups of three people create variants A through C. Groups of four people create variants A through D.

#### Variant A: Students

Make sure that the Students menu button (currently a static list) works correctly.

In other words, it must retrieve a list of students and display that list in a ListView on the screen. The code for Students has already been provided partially.

Before you are able to fill the ListViews, you will have to connect them to the Database first. You should implement the connection data in the AppConfig (Connection String), which is available for your group on the File Exchange.

# Variant B: Lecturers

Make sure that the Lecturers menu button (not yet implemented) works correctly.

In other words, it must retrieve a list of lecturers and display that list in a ListView on the screen. Taking a look at the code for the Students menu button might provide some inspiration.

Before you are able to fill the ListViews, you will have to connect them to the Database first. You should implement the connection data in the AppConfig (Connection String), which is available for your group on the File Exchange.

### Variant C: Rooms

Make sure that the Rooms menu button (already hidden in the menu of the current application), the Rooms component and the Room Allocation component work correctly.

The view for 'Rooms' shows a list of rooms (201 to 225, inclusive) with their corresponding room size (number of persons/beds). There are rooms for students and rooms for lecturers. This difference should be evident from the list.

## Variant D: Room allocation

The 'Room allocation' view shows a visual representation of which rooms are available and how they have been allocated. Each student should have a room (eventually).

**Room 201** 

Anna Arend Bob Bij Carla Cavia Dirk Dolfijn **Room 202** 

Evert Egel Ferdinand Fuut Gerard Gecko Harry Hond A possible visual representation could be as follows: