Databases and Web Services Project

[CO-560-B]

Prof. Dr. Peter Baumann

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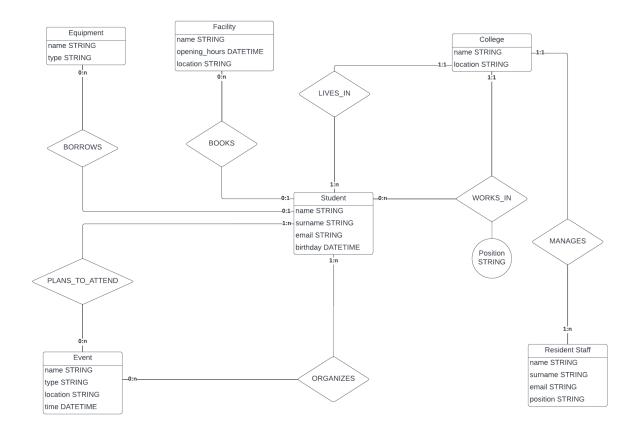
College Management System

Project Specification

This project is intended to serve as a management system for residential buildings on a University's campus. Initial model has been created based on our own (Jacobs University's) Campus. The project will support users that are currently living on Campus and is designed to ensure access to all relevant information that might be of use to our customers.

The platform will provide different functionalities, essentially based on a database modelling entities such as: students, residential staff, residential buildings (colleges), facilities, equipment, and last but not least, Events. The visual representation of our project is presented in the following ER model, although it is important to mention that it is not in its final form and it can later be easily expanded and scaled.

The service will be carefully tailored to our different user targets such as Students and Residential Staff, where they can manipulate and interact with the entities and their attributes. Ultimately the goal of the project is to provide an easier way for students to interact with their College and access all the public information they require. Concurrently, people that are working for the College have an easier system that can be used to digitalise and organise all their data.



Since there are different kinds of users, the options of their actions change depending on their role. Generally one can differentiate between regular Students, Students that work for the colleges and Residential Staff like RAs and RMs.

Interfaces (views) for the different users can be described as follows:

Students can:

- see available Equipment(eg Vacuums, Board Games, Sports equipment etc.)
- see Events
- can sign up for some Events (Movie Nights, Art sessions etc)
- see Rooms (MMR, Lecture Halls, Games Rooms etc.) and whether or when they are available
 - (and of course) book available rooms

Illegal actions for Students could be:

- See equipment from other colleges
- Changing the bookings of other students
- Creating or deleting Events
- Adding/Removing Equipment
- Adding/Removing Facilities

Students who work for the College:

- They have the same options as normal Students.
- Additionally they can:
 - change the status of the Equipment (when they lend it to someone it will not be available any more)
 - can create /delete events (such as CO hours, Game nights etc.)
 - can create/delete new items (Equipment)

Residential Staff:

- Can see where students live
- Can assign students to work in the College
- Can assign students to organise events
- Can create/delete events
- Can create/delete facilities
- Can create/delete equipment