Specification of project in advanced data models and systems 16 april 2002

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2 Project proposal

We shall develop a web based management system for reservation of computer labs, classrooms and seminar rooms. As a first step, the system should support bookings of rooms in "MIT" and "Naturvetarhuset" at Umeå university. The design should be flexible enough to support the whole campus.

This system is intended to be used by students, teachers and house service. A user can look for available rooms and make a reservation, but the reservation may be removed by system administrators. Users should also be able to reserve a room for a certain number of persons at a specified time and date without specifying a specific room. The system should suggest a room in the same house as the users department reside in¹. If no suitable room is available the system should suggest rooms in nearby houses.

The system should have it's own user-management system. The users will be arranged into a tree structure with three levels. On the top level are the system administrators. On level two there is a person responsible for their faculty. On the lowest level we find the teachers that are allowed to do reservations of rooms. Everyone is allowed to look at the bookings even if they are not a user on the system.

This system can present statistics about utilization of rooms. In addition a user can print out a copy of the reservations that he/she has made or all reservations for a room or a course. The administrators of the server should also be able to get information for billing in a suitable format. The level two users can also see the costs for their faculty.

The functionality described above was obtained by a short meeting with house service.

¹Time permitting, we may explore the use of a heuristic function that seeks to place bookings for the same class in the same location.