Project MRS

Requirements

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Contents

1 Organisation

1.1 Group roles

Role	Name	Shortcut
Project Leader	Mändlen, David	DM
Development Manager	Muschewski, Eugen	EM
Design Manager	Ribul Moro, Alessandro	AR
Quality Manager	Sahin, Fatih	FS

1.1.1 Role Definitions

The above-mentioned roles are tasked with the following duties:

- Project Leader
    - Setting schedules
    - Coordination of efforts
    - Supervising the team

- Development Manager
    - Developing SQL
    - Realization of Designs

- Design Manager
    - Designing Data Models
    - Designing Report Generation
    - Designing Views

- Quality Manager
    - Creation of Unit-Tests
    - Testing robustness of Database
    - Ensuring adherence to the principles of clean code

2 Analysis

2.1 Mission Statement

MRS is aimed at supporting university administrators in managing personnel, building capacities and time-budgets. This is achieved by structuring stored data to reduce possible inconsistencies regarding lecturers, times and rooms.

2.2 Mission Objectives

2.2.1 Structuring

Data will be stored in a manner that reduces the possibility of inconsistencies. The stored data will contain information about lecturers, lectures, rooms and times. Possible restrictions will be honored.
Example: If a restriction requires a specific room but the room is non-existent, this will result in an error.

2.2.2 Querying / Reporting

The database can be queried for different kinds of information and is able to generate the reports specified by the client.
Example: The administrator can search for faculty, lecturers, rooms, times, departments and more.

2.2.3 Update

The database will accept updates if they are correct and do not violate any process rules. Otherwise the database will not accept the data.
Example: If a restriction puts a lecture at midnight, the restriction would violate the working hours of the university and therefore will result in an error.

2.2.4 Documentation

A report of work planned for specific lecturers over a given time frame can be generated.
Example: The administrator wants to know what Prof X did in summer 2010.

2.3 System Boundaries

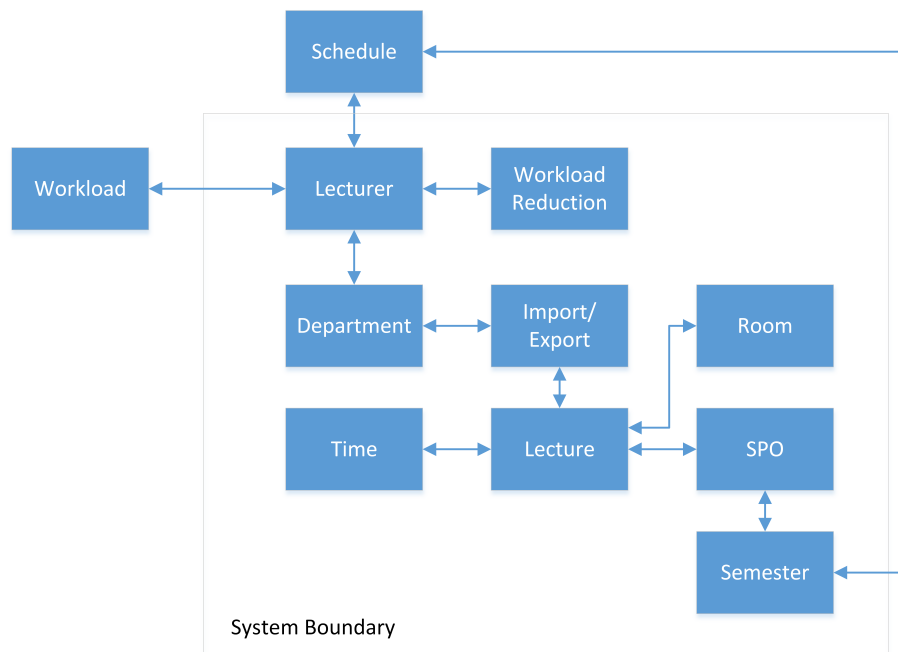The system boundaries of MRS are documented in figure 2.1.

Figure 2.1: System Boundaries of MRS

2.4 User Views

The user views for the MRS database are given in table 2.1.

Data	Access Type	Schedule	Workload	Time Recording	Course	Service
Department	Maintain	–	–	–	–	–
	Query	X	–	–	–	–
	Report	X	–	–	–	–
Professors	Maintain	–	X	–	–	–
	Query	X	X	–	–	–
	Report	X	X	–	–	–
Lecturers	Maintain	–	–	–	–	–
	Query	X	–	–	–	–
	Report	X	–	–	–	–
Lecture	Maintain	–	–	–	X	–
	Query	X	–	–	X	X
	Report	X	–	–	X	X
Event	Maintain	X	–	–	–	–
	Query	X	–	X	X	X
	Report	X	–	X	X	X

Table 2.1: User Views

3 Changelog

Date	Time	Reason	Author (short)
2015-10-01	12:04	Creation	DM
2015-10-01	12:50	Added Mission Statement and Objectives	DM
2015-10-07	09:02	Changed Mission Statement and Objectives	DM
2015-10-13	14:53	Added User View & System Boundaries	DM
2015-11-11	08:27	Changed User Views	DM
2015-11-11	10:50	Changed User Views	DM