

Project MRS

Requirements



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# 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.

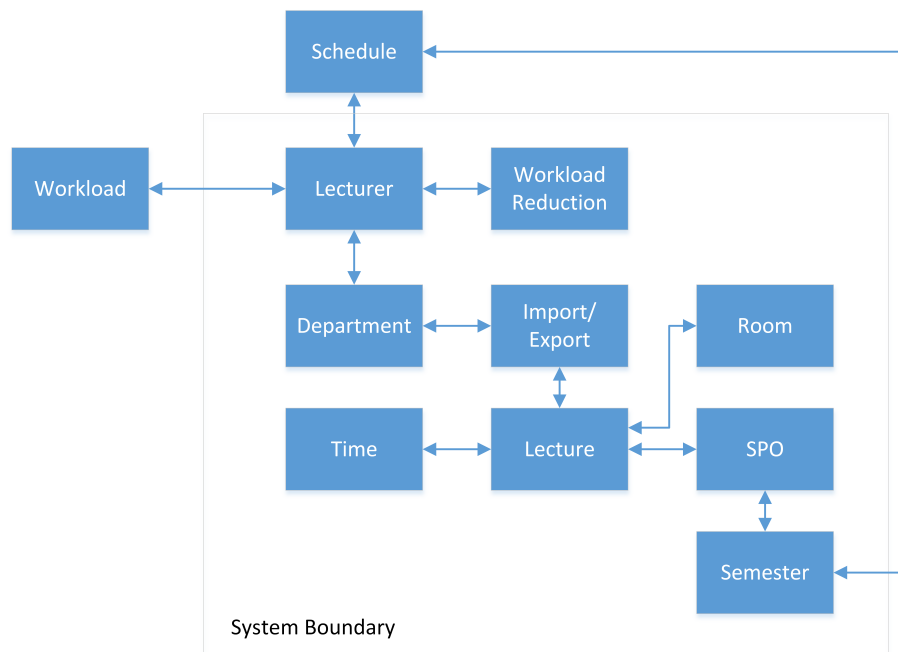
#### 2.2.4 Documentation

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	University Administrator
Department	Maintain	X
	Query	X
	Report	X
Lecturers	Maintain	X
	Query	X
	Report	X
Workload	Maintain	X
	Query	X
	Report	X
Rooms	Maintain	X
	Query	X
	Report	X
Times	Maintain	X
	Query	X
	Report	X
Tasks	Maintain	X
	Query	X
	Report	X
Semesters	Maintain	X
	Query	X
	Report	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