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 and times. Possible restrictions will be honored.
Example:

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, 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.
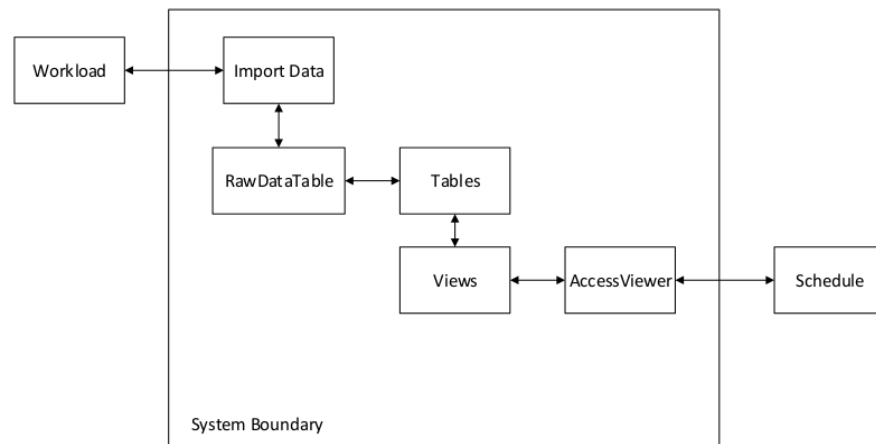
2.2.4 Documentation

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

2.5 User Stories

This section describes the user stories from the university administrator's point of view.

2.5.1 Department

2.5.1.1 Maintenance

In order to manage departmental roles as a university administrator, I want to create, read, update and delete (CRUD) departmental data.

2.5.1.2 Querying

In order to plan departmental workloads as a university administrator, I want to query departmental data.

2.5.1.3 Reporting

In order to publicize workloads, schedules and tasks as a university administrator, I want to create reports on departmental data.

2.5.2 Lecturers

2.5.2.1 Maintenance

In order to schedule and assign tasks as a university administrator, I want to CRUD lecturer data.

2.5.2.2 Querying

In order to plan individual lecturer tasks as a university administrator, I want to query lecturer data.

2.5.2.3 Reporting

In order to inform every lecturer about their tasks for the semester as a university administrator, I want to report on lecturer data.

2.5.3 Workload

2.5.3.1 Maintenance

In order to assign lectures and tasks to lecturers as a university administrator, I want to CRUD workload data.

2.5.3.2 Querying

In order to schedule lectures as a university administrator, I want to query workload data.

2.5.3.3 Reporting

In order to inform staff about their workload as a university administrator, I want to report workload data.

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