# SOFTWARE REQUIREMENTS SPECIFICATION

for

<Final Project>

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# 1 Introduction

#### 1.1 Purpose

### 1.2 Intended Audience and Reading Suggestions

#### 1.3 Project Scope

The software is targeted at both students and administrative faculty who need to create a quarterly course schedule, either for personal use or to be distributed to students. The software shall allow users to create a schedule, view course prerequisites, and validate a schedule against a separate requirements file.

# 2 Overall Description

#### 2.1 Product Perspective

The software will be a new, self-contained product. It is not based on an existing project.

#### 2.2 Product Functions

#### 2.3 User Classes and Characteristics

#### 2.4 Operating Environment

The system shall use the Java SE 6 platform. The system shall use the Swing toolkit for GUI elements.

#### 2.5 Design and Implementation Constraints

Users shall specify which requirements specific courses fulfill.

#### 2.6 Assumptions and Dependencies

Campus departments will provide an XML file detailing the requirements for students following a specific catalog year in that department.

# 3 External Interface Requirements

- 3.1 User Interfaces
- 3.2 Hardware Interfaces
- 3.3 Software Interfaces

## **4 System Features**

#### 4.1 Description and Priority

Users may create a quarterly course schedule by adding course objects to a grid, the columns of which represent quarters. Courses may be deleted and moved between quarters via drag-and-drop. Course data may be edited. Users may specify prerequisite and corequisite courses as well as the number of units the course fulfills.

#### 4.2 Stimulus/Response Sequences

Stimulus: User requests to create a new course in a specific quarter. Response: System provides a form for the user to enter the course data.

Stimulus: User requests to delete a course.

Response: The course is removed from the flowchart. Stimulus: User requests to update data for a course.

Response: The course data is presented in an editable format. When finished,

changes may be saved or discarded.

Stimulus: User requests to move a course to a different quarter.

Response: The course is moved to the column representing the desired quarter in the

flowchar

#### 4.3 Functional Requirements

# **5** Other Nonfunctional Requirements

- **5.1 Performance Requirements**
- 5.2 Safety Requirements
- 5.3 Security Requirements