# Software Requirements Specification

For

# **RateMyUNM**

Version 1.0

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# **Revision History**

Date	Reason for Change	Version
	Date	Date Reason for Change

#### 1. Introduction

#### 1.1 Purpose

This is the Software Requirements Specification for the RateMyUNM Web Application. This application is designed to allow students to evaluate UNM instructors and promote effective teaching. To accomplish this, the application will offer two main functionalities. One is an evaluation system whereby students can rate various aspects of an instructor's effectiveness by filling out evaluations and viewing aggregated data from other student's evaluations. The second functionality will create a private feedback loop for an instructor and their students. The data generated by this system would be viewable only by the instructor, and not the public. This document will outline the functions, capabilities and requirements for Version 1 of the RateMyUNM application.

#### 1.2 Document Conventions

None specified.

### 1.3 Intended Audience and Reading Suggestions

This document is meant to describe the requirements of RateMyUnm App. While most of the requirements are directly related to the user, this document is not written explicitly for his or her use. The main user of this document will be the development team. The team will use this document in order to design and implement the application. The testing team may also use this document in order to ensure that all of the requirements that the customer needs are being addressed.

### 1.4 Project Scope

The functionality of the application will allow it to:

- Manage User Accounts
- Manage evaluation data
- Include an interface that will allow the customer to browse data
- Allow instructors to create an anonymous feedback loop with their students.

#### 1.5 References

- P. Seldin and P. Hutchings. Changing Practices in Evaluating Teaching: A Practical Guide to Improved Faculty Performance and Promotion/Tenure Decisions, Anker Publishing Co., Bolton, MA, 1999.
- J. A. Centra. Reflective Faculty Evaluation: Enhancing Teaching and Determining Faculty Effectiveness. Jossey-Bass, San Francisco, CA, 1993.

## 2. Overall Description

## 2.1 Product Perspective

The RateMyUNM application will be designed for students and instructors to be able to evaluate instructor effectiveness and improve teaching. The interface for the system should user-friendly and appealing to people of varying demographics. Appendix A shows an automated (cucumber) acceptance test showing typical use by both student and professor type users.

#### 2.2 Product Features

Account Management (High Priority): Allows users to create an account. Student users will be verified by sending a confirmation email to provided UNM email address. Instructor user account will be created by an administrator.

Evaluation System (High Priority) Registered users are able to fill out evaluations for specific instructors and courses.

Search Engine (Medium Priority): Allows the user to search the evaluation by keyword.

Statistical Outputs (High Priority): Organizes evaluation data and displays output in n attractive, readable format.

Small Group Instructor Diagnosis (Medium Priority): Allows instructors to create a customized evaluation their students to complete anonymously. Data will be kept private for the instructor's own use.

#### 2.3 User Classes

System Administrator: This user would be allowed access to all areas of the application. Administrators would primarily be tasked with creating professor accounts and investigating alleged abusive users.

Instructor: Would be allowed to create customized SGID forms.

Student: Allowed to fill out evaluations.

## 2.4 Operating Environments

OE-1: The application operate on any web browser that supports HTML and/or JavaScript.

OE-2: The system shall use an SQL based data base in order to store customer account information and evaluation information.

OE-3: The application must be externally hosted.

## 2.5 Design and Implementation Constraints

CO-1: Written as a Ruby on Rails (RoR) application, the application will operate on any web browser that supports HTML or JavaScript, independent of operating system.

CO-2: An SQL database will be utilized as to seamlessly integrate with an RoR application.

#### 2.6 User Documentation

UD-1: Help will be provided to the customer through the online interfaces.

## 2.7 Assumptions and Dependency

AD-1: Assume a suitable host

#### Appendix A

```
2 Feature: SGID (Verified statistics generated by participating professors and their classes)
 4 Scenario Outline: Professor creates new SGID
 5
    Given I am logged in as a professor
 6
    When I click on
 8 Scenario Outline: Student searches for a professor by department
 9 When I click on "department listings" I should a list of all departments
    When I click on the department "Electrical and Computer Engineering" I should see a list of all professors who
  belong to that department
11 And I should see a button offering statistics on this department
12 When I click on the professor "Heileman" I should see information and stats related to this professor
13
l4 Scenario Outline: Student searches for course statistics
l5 When I click on "course listings" I should see alist of all courses organized by department #or alphabetically?
L6 When I click on the course "ECE101" I should see information and stats related to this course
 2 Feature: User Sign Up
4 Scenario Outline: Student Registers for an account
5 When I click on "Sign Up", I should see an interface asking for a UNM email and password
 6 When the username is already in use, I should be prompted to re-enter #this shouldn't be the case, as all UNM emails
                                                                                    adresses are presumably unique.
    When I don't enter a valid UNM email address, I should be prompted to re-enter
 8
    When I click "Submit" I should be told that I will be sent an email to confirm account
    When I recieve the email, it should have a link to a page confirming my registration
10
ll Scenario Outline: Professor account registration
12 #Only an administrator should be able to create a new professor account
13
14
    Given I am logged in as an administrator
    When I click on "Create New Professor", I should be given a form to enter the professor's information When I click "submit" I should get a confirmation that the prfoessor's account was created
15
16
17
18 Scenario Outline: Administrator account registration
19 When I click on "Create New Administrator", I should be given a form to enter the administrator's information
20 When I click "submit" I should get a confirmation that the administrator's account was created
 2 Feature: Statistical Display
 3 Scenario Outline: Professor Rating statistics
     Given I have evaluations for a professor
     When I click on "Display Professor Statistics", I should see statistics pertaining to only that professor
 7 Scenario Outline: Departmental Rating statistics
 8 Given I have evaluations for courses in a department
    When I click on "Display Departmental Statistics", I should see statistics pertaining to only that department
 Q
10
11 Scenario Outline: Course Rating statistics
12 Given I have evaluations for a course
13 When I click on "Display Course Statistics", I should see statistics pertaining to only that course
1 Feature: Evaluation Creation
 3 Scenario: New Evaluation where professor and course are already in Database
     Given a Professor named John Smith
     And I have a course called ECE101
     When I create a new evaluation
     Then it belongs to ECE101
 9 Scenario: New Evaluation where professor and course are not in Database
10
   When I create a new evaluation
11
     And I specify a course and a professor
12
     And the course is not in the database
13
     And the professor is not in the database
     Then a new course object will be created using the provided information
14
     And a new professor object will be created using the provided information When I click "submit", the evaluation will be stored in the database
15
16
```

## Appendix B: Database Schema

## Entity Relationship Diagram

