Software Requirements Specification

for

Automated Software Engineering Student Subject Evaluations (ASESSE)

Version 1.0

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# Introduction

## Purpose

The purpose of this document is to provide an official detailed description of the requirements for the “Automated Software Engineering Student Subject Evaluation” (ASESSE) software. This document seeks to fully describe the expected behavior of the software including all high level functions, capabilities and constraints. This document will be used as a proposal to the customer and as a reference by the development team.

## Scope of Project

### Main Objective

The “Automated Software Engineering Student Subject Evaluation” (ASESSE) is a web-based application which automates the student peer review system for Software Engineering Students at Midwestern State University located in Wichita Falls, Texas. The main purpose is to allow students to review other students in their course group and to collate that information automatically for the professor.

### Specific Goals

Each student in a group should be able to connect to the website, enter a password specific to their course, and then provide the information requested with regards to their specific group members through a graphical user interface. While the submitting user name and their review of their group members are collected, they will be stored separately and disconnected from one another to maintain anonymity.

The professor, or administrator, should be able to setup new classes with their own specific passwords, change the passwords if needed, delete or clear a class that has been setup, check to see the progress of all students in completing their reviews, request an report for an individual student that aggregates the reviews of that student, and request a course aggregate report which puts all individual student reviews into one printable pdf document.

## Overview of Document

This document is divided into 5 major sections including the introduction to the document, users, system, other required deliverables, and risks. The introduction to the document provides the purpose of this document, the scope of the project and an overview of this document. The user section describes who the users will be, use cases with use case diagrams and various scenarios. The system section provides information regarding the development and target environments as well as the functional and non-functional requirements. The other required deliverables section illuminates any additional requirements of the project and the risk section covers risks related to the development and deployment of the system.

# Users

## Who are Users?

There are two types of users that interact with the system: the professor or administrator of the system, and students. Student users will access the system through a web address that only provides student user functions. Administrators will access the system through a separate password protected web address that will provide access to administrator functions.

## Use Cases and Use Case Diagrams

<Summarize the major features the product contains or the significant functions that it performs or lets the user perform. Details will be provided in Section 3, so only a brief high level summary is needed here. Organize the functions to make them understandable to any reader. A picture of the major groups of related requirements and how they relate, such as a top level data flow diagram or a class diagram, might be included.>

## Scenarios

1. Student submits group evaluation
   1. Student selects course
   2. Student types in course password
   3. Student selects number of group members
   4. Student fills out forms to review other members of their group
   5. Student presses “Next”
   6. Student types in name
   7. Student presses “Submit”
   8. System sends confirmation to screen

Extensions:

2a. Incorrect password

1. System sends error message
2. User returned to initial login screen
3. Administrator creates new course
   1. Administrator types in password
   2. Administrator selects “New Course” option
   3. Administrator inputs course name, password and password confirmation.
   4. System displays success message
   5. Administrator selects “Continue”
   6. Administrator returned to main page
   7. Administrator logs out of system
   8. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen

3a. Course already exists

1. System sends error message
2. Administrator returned to main page

3b. Password fails password requirements

1. System sends error message with password requirements
2. Retry password creation
3. Administrator changes password for a course
   1. Administrator types in password
   2. Administrator selects existing course
   3. Administrator selects “change password” option
   4. Administrator inputs new password and password confirmation
   5. System displays success message
   6. Administrator selects “Continue”
   7. Administrator returned to main page
   8. Administrator logs out of system
   9. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen

4a. Password fails password requirements

1. System sends error message with password requirements
2. Retry password creation
3. Administrator removes a course
   1. Administrator types in password
   2. Administrator selects existing course
   3. Administrator selects “Remove Course” option
   4. System displays “Are you sure?” message
   5. Administrator selects “Yes” option
   6. System displays success message
   7. Administrator selects “Continue”
   8. Administrator returned to main page
   9. Administrator logs out of system
   10. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen

5a. Administrator selects “No” option

1. Administrator returned to main page
2. Administrator checks progress of submitted group reviews
   1. Administrator types in password
   2. Administrator selects existing course
   3. Administrator selects “Check Progress” option
   4. System displays list of names that have submitted reviews
   5. Administrator selects “Return to Home Page”
   6. Administrator returned to main page
   7. Administrator logs out of system
   8. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen
3. Administrator requests individual student aggregate report
   1. Administrator types in password
   2. Administrator selects existing course
   3. Administrator selects “Individual Student Report” option
   4. Administrator selects student name
   5. System displays aggregate of reviews submitted for student
   6. Administrator selects “Return to Home Page”
   7. Administrator returned to main page
   8. Administrator logs out of system
   9. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen
3. Administrator requests printable course aggregated report of all students
   1. Administrator types in password
   2. Administrator selects existing course
   3. Administrator selects “Course Report” option
   4. System displays aggregate of reviews submitted for all students
   5. Administrator selects “Save Report”
   6. System provides download dialog box for pdf version
   7. Administrator saves document using dialog box options
   8. Administrator selects “Return to Home Page”
   9. Administrator returned to main page
   10. Administrator logs out of system
   11. System displays success message

Extensions:

1a. Incorrect password

1. System sends error message
2. Administrator returned to initial login screen

# System

<This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

## Development Environment

## Target Environment

## Functional Requirements

### Issues

### Major Subsystems

### Major Functions

### Major Classes

### Minor System Functions

## User Interface Specifications

## Non-Functional Requirements

### Management

### Technical

### Performance

### Security

## System Evolution and Maintenance

# Other Deliverables Required

# Risks

Appendix A: Glossary

<Define all the terms necessary to properly interpret the Geospatial System Requirement Specification, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each Geospatial System Requirement Specification.>

Appendix B: References