Software Requirements Specification

Group 7, System Black

April 18, 2015

1 Introduction

2 Members

(In Alphabetical Order)

- Qi, ZHU
- Shijia, WEI
- Shiyi, ZHU
- Tao, LIN
- Ye, QI

3 Description

3.1 User Scenarios

Ye

3.2 Data Flow Diagram

Tao

3.3 State Diagrams

Shiyi

3.4 Class Diagrams

Shijia

3.5 CRC Cards

Qi

4 Validation Criteria

4.1 Defintion

- *Class:* A course instructed by a instructor in a semester.

- *Relevant Instructor:* The instructor who instructs the same course.

4.2 Functions for Instructors

4.2.1 Record Scores

1. An instructor could check the information of the classes he/she is currently instructing.

2. An instructor could download a transcript template to be filled from the system.

3. If the format of the transcript meets the criterion, it will be immediately parsed and shown on the screen in tabular form, with class status altered to "UPLOADED"; otherwise, it will be rejected with detailed reason specified.

4. Any new uploading will directly cover previous files.

5. The scores of the class marked as "UPLOADED" could be browsed.

6. The scores of the class marked as "UPLOADED" could be directly modified online.

7. Having committed the scores of one class, an instructor could view the statistical information of it, with the class status altered to "COMMITTED".

8. The scores of the class marked as "COMMITTED" could only be browsed but not be directly modified.

4.2.2 Vote Modification

1. If an instructor wants to modify the scores of a class marked as "COMMITTED", he/she needs to fill an online application form including course name, names of students whose scores need modification, new scores and corresponding reasons. All the relevant instructor will be apprised of this request.

2. The relevant instructors can vote for the request for score modification: they could choose either to approve it or to reject it.

3. If all of the relevant instructors agree with this modification, this request will be adopted and the instructor who starts it will get a notification telling the result.

4.2.3 Query/Analysis Scores

This is valid after one specific class is marked as "SUBMITTED".

1. The instructor could view score distribution in graphic chart from.

2. The instructor could view ranking statistics in list chart from, including student names, raw scores and grade points.

3. The instructor could view average score in eye-catching place.

4.3 Functions for Students

4.3.1 Query/Analysis Scores

1. A student could view score information of all classes that he/she has registered and is marked as "SUBMITTED". The score information includes course names, raw scores and grade points.

2. A student could view his/her GPA, average scores, total credits of the current semester.

3. A student could view his/her GPA, average scores, total credits of the courses he/she major in.