

CSCI 5801 - Assignment 3
System Requirements Specification

Team 17

Mai Nguyen, Tasha Bornemann, Xinyi Yan, Guanpin Zhong

1. System Requirements Specification

Each requirement that the system will follow is detailed in the following pages.

1. The system shall require users to enter credentials before using it.
 - 1.1 The user shall be able to enter an ID and password and will be logged in if and only if the ID and password are valid.
 - 1.1.1 The system shall verify credentials against the database that holds account information.
 - 1.1.1.1 If the credentials entered are valid, the user is logged in and may use the system.
 - 1.1.1.2 If the credentials entered are not valid, the user is not logged in.
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2. The system shall allow prospective TAs to fill out and submit a TA application. Within the TA application, the prospective TA shall be able to:
 - 2.1 Indicate the type of appointment requested.
 - 2.1.1 The application shall contain choices for type of appointment, which are 50% and 25%.
 - 2.2 Provide prior appointment details.
 - 2.2.1 The application shall contain a place to provide the courses and the number of semesters that the student served as a TA.
 - 2.3 List course preferences.
 - 2.3.1 The application shall contain a place for the applicant to list courses and the priority for these choices.
 - 2.4 Enter personal and academic details.
 - 2.4.1 The application shall contain a place for the applicant to provide these details. Examples include the program in which they are enrolled, the department to which they belong, and their transcript. Further details may be added according to the client's needs.
 - 2.5 Enter scores for language and technical qualifications.
 - 2.5.1 The application shall contain a place for the applicant to provide their language score and other necessary qualifications.
 - 2.6 Submit the application to the system.
 - 2.6.1 The system shall accept the application. The information will be stored and viewable by administrative staff.
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3. The system shall allow faculty members to recommend TAs.
 - 3.1 The faculty member shall be able to fill out a TA recommendation form.

- 3.1.1** The system shall provide a recommendation form for the faculty member which includes a place for the name of the TA.
 - 3.2** The faculty member shall be able to submit the completed form to the system.
 - 3.2.1** The system shall accept the recommendation. The information will be stored and viewable by administrative staff.
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- 4.** The system shall allow faculty members to request TAs.
 - 4.1** The faculty member shall be able to fill out a TA request form.
 - 4.1.1** The system shall provide a request form for the faculty member which includes a place for the name of the TA and the course for which they are being requested.
 - 4.2** The faculty member shall be able to submit the completed form to the system.
 - 4.2.1** The system shall accept the request. The information will be stored and viewable by administrative staff.
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- 5.** The system shall allow relevant information to be stored and allow administrative staff to view this information.

- 5.1** The system shall allow the following types of information to be stored:
 - 5.1.1** Budget information, as provided by the Dean. This information includes the allocated budget and the amount that has been spent.
 - 5.1.2** Course and position information, including the list of offered courses and the estimated number of TAs for each course
 - 5.1.3** Summary information, including the TA positions appointed, TA positions left to appoint, classes still in need of TAs, and appointed TAs who have not yet been assigned. Further information may be added according to the client's needs.
 - 5.1.4** Statistics from past semesters, including the proportion of TAs who were in each program. Further statistics may be added according to the client's needs.
 - 5.2** The system shall allow this data to be input manually.
 - 5.3** Once the data has been input, it shall be stored in the system and viewable by administrative staff.
 - 5.3.1** The system shall display the data specified by administrative staff.
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- 6.** The system shall allow administrative staff to assign a TA to a course.
 - 6.1** A priority score is assigned to each TA, as determined by several attributes.
 - 6.1.1** These attributes include the major, program, TA history, faculty requests, and faculty recommendations. Further attributes may be added according to the client's needs.
 - 6.1.2** The system shall have a mechanism to calculate a priority score for each TA based on these attributes.

6.2 Administrative staff shall be able to view the TA applications that have been submitted. Staff shall have the option to view them in the order determined by the priority score.

6.2.1 The system shall be able to display the submitted applications in unsorted order.

6.2.2 The system shall be able to display the submitted applications in order of priority score when specified by the user.

6.3 Administrative staff shall be able to appoint TAs.

6.4 Administrative staff shall be able to assign the chosen TA to a course. A TA shall be allowed to be assigned to at most 2 courses.

6.4.1 The system shall prohibit a TA from being assigned to more than 2 courses.

7. The system shall allow payroll staff to view the list of TA appointments.

7.1 The system shall store the appointments that have been made by administrative staff and display them to payroll staff members.

7.2 An appointment is defined as the TA and the percentage.

8. The system shall allow payroll staff to send appointment offers to appointed TAs.

8.1 Payroll staff shall be able to send appointment offers to the TAs included in the list of appointments.

8.1.1 An appointment offer includes the name of the TA, appointment percentage, and the dates of the appointment.

8.2 The appointed TA shall be notified of the offer.

9. The system shall provide a way to store the appointment status of a TA and allow administrative staff to view and update it.

9.1 Administrative staff shall be able to view the appointment status of a TA.

9.1.1 The system shall display the appointment status of a TA specified by administrative staff.

9.2 Administrative staff shall be able to update the appointment status of a TA.

9.2.1 A notification of the change shall be sent to the TA, the faculty member for the course, and payroll staff.

10. The system shall provide a way for users to receive notifications. Users shall be able to receive notifications that are relevant to them. A notification shall be sent in the following situations:

10.1 An appointed TA responds to an offer.

10.1.1 Appointed TAs shall be able to choose how they respond to the appointment offer. They can either accept or decline the offer.

10.1.2 The response shall be sent to administrative staff.

10.2 An appointed TA resigns from an appointment.

10.2.1 Appointed TAs shall be able to resign from their appointment.

10.2.2 Administrative staff shall receive a notification of the resignation.

10.3 The appointment status of a TA is updated.

10.3.1 A notification of the change shall be sent to the TA, the faculty member for the course, and payroll staff.

10.4 An announcement is sent.

10.4.1 Administrative staff shall be able to send announcements to other users. Staff members shall be able to write the announcement, choose the recipients, and send the announcement.

10.4.2 A notification shall be sent to each recipient of the announcement.