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2/1/2020

CS4320 Software Engineering

**Assignment 3: Requirements Analysis**

**Users:**

CS Department faculty

CS Department staff

CS Department students

**User Requirements:**

Faculty/Instructor shall be able to:

* View course:
  + Course ID //Required Input
  + List of course section IDs //Output/Print
  + List of enrolled student IDs //Output/Print
  + List of assigned staff IDs //Output/Print
* Add course:
  + New course ID //Required Input
  + New course section IDs //Optional Input
  + New course enrolled student IDs //Optional Input
  + New course assigned staff IDs //Optional Input
* Delete Course:
  + Course ID //Required Input
* View course section:
  + Course ID //Required Input
  + Section ID //Required Input
  + List of section staff IDs //Output/Print
  + List of section student IDs //Output/Print
* Add course section:
  + Course ID //Required Input
  + New course section ID //Required Input
  + New course section assigned staff IDs
* Remove course section:
  + Course ID //Required Input
  + Course section ID //Required Input
* View Staff:
  + Staff ID //Required Input
  + Course ID //Output/Print
  + Section ID //Output/Print
* Add Staff
  + New Staff ID //Required Input
  + Course ID //Optional Input
  + Section ID //Optional Input
* Remove Staff:
  + Staff ID //Required Input
* Set Staff
  + Staff ID //Required Input
  + Staff’s new assigned course ID //Required Input
  + Staff’s new assigned section ID //Required Input
* View students in course:
  + Course ID //Required Input
  + List of student IDs //Output/Print
* View students in section:
  + Course ID //Required Input
  + Section ID //Required Input
  + List of student IDs //Output/Print
* View Student:
  + Student ID //Required Input
  + Student Grade //Output/Print
  + List of student’s assignment submissions //Output/Print
  + Student enrolled course ID //Output/Print
  + Student enrolled section ID //Output/Print
* Add Student:
  + New student ID //Required Input
  + New student’s enrolled course ID //Optional Input
  + New Students enrolled section ID //Optional Input
* Drop Student:
  + Student ID //Required Input
  + Course ID //Required Input
* Change Student Section:
  + Student ID //Required Input
  + Student’s new enrolled section
* View assignment:
  + Course ID //Required Input
  + Assignment ID //Required Input
  + List of assignment submission entities //Output/Print
* Create Assignment:
  + Course ID //Required Input
  + New assignment ID //Required Input
  + Assignment Content //Required Input
* Remove Assignment:
  + Course ID //Required Input
  + Assignment ID //Required Input
* View submission details:
  + Assignment submission entity //Required Input
  + Assignment ID //Output/Print
  + Submitter’s student ID //Output/Print
  + Date/Time submitted //Output/Print
  + Submission’s grade //Output/Print
* Grade submission:
  + Submission entity //Required Input
  + Submission’s new grade //Required Input
* Message Student/ Staff:
  + Student ID/ Staff ID //Required Input
  + Message Content //Required Input
* View Messages:
  + List of messages sent to user ID //Output/Print

Staff/TAs shall be able to:

* View assignment:
  + Course ID //Required Input
  + Assignment ID //Required Input
  + List of assignment submission entities //Output/Print
* View submission details:
  + Assignment submission entity //Required Input
  + Assignment ID //Output/Print
  + Submitter’s student ID //Output/Print
  + Date/Time submitted //Output/Print
  + Submission’s grade //Output/Print
* Grade submission:
  + Submission entity //Required Input
  + Submission’s new grade //Required Input
* View students in section:
  + Course ID //Required Input
  + Section ID //Required Input
  + List of student IDs in staff’s assigned section //Output/Print
* Message Student/Other Staff/Professor:
  + Student ID/ Staff ID/ Professor ID //Required Input
  + Message Content //Required Input
* View Messages:
  + List of messages sent to user ID //Output/Print

Students shall be able to:

* View assignments:
  + Course ID //Required Input
  + List of assignment IDs //Output/Print
  + List of assignment content //Output/Print
* Submit assignment:
  + Course ID //Required Input
  + Assignment ID //Required Input
  + New Assignment submission entity //Required Input
* View student submission:
  + Course ID //Required Input
  + Assignment ID //Required Input
  + Submission entity //Output/Print
* View Grades
  + Course ID //Required Input
  + List submission entity grades //Output/Print
* Message Staff:
  + Staff ID //Required Input
  + Message Content //Required Input
* View Messages:

List of messages sent to user ID //Output/Print

**System Requirements and Restraints:**

* Database required to store user information, assignments, submissions and messages.
* System clock to record submission dates and times
* System must only show the correct type of content to the type of user
* Front end service for ease of access to content in database as well as ease of navigating user functions