Nick Allegretti

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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:

- o Staff ID   //Required Input
- Set Staff
    - o Staff ID   //Required Input
    - o Staff's new assigned course ID   //Required Input
    - o Staff's new assigned section ID   //Required Input
- View students in course:
    - o Course ID   //Required Input
    - o List of student IDs   //Output/Print
- View students in section:
    - o Course ID   //Required Input
    - o Section ID   //Required Input
    - o List of student IDs   //Output/Print
- View Student:
    - o Student ID   //Required Input
    - o Student Grade   //Output/Print
    - o List of student's assignment submissions   //Output/Print
    - o Student enrolled course ID //Output/Print
    - o Student enrolled section ID //Output/Print
- Add Student:
    - o New student ID   //Required Input
    - o New student's enrolled course ID   //Optional Input
    - o New Students enrolled section ID   //Optional Input
- Drop Student:
    - o Student ID   //Required Input
    - o Course ID   //Required Input
- Change Student Section:
    - o Student ID   //Required Input
    - o Student's new enrolled section
- View assignment:
    - o Course ID   //Required Input
    - o Assignment ID   //Required Input
    - o List of assignment submission entities   //Output/Print
- Create Assignment:
    - o Course ID   //Required Input
    - o New assignment ID //Required Input
    - o Assignment Content   //Required Input
- Remove Assignment:
    - o Course ID   //Required Input
    - o Assignment ID   //Required Input
- View submission details:
    - o Assignment submission entity   //Required Input
    - o Assignment ID   //Output/Print
    - o Submitter's student ID   //Output/Print
    - o Date/Time submitted   //Output/Print

- o Submission's grade   //Output/Print
- Grade submission:
  - o Submission entity   //Required Input
  - o Submission's new grade   //Required Input

Staff/TAs shall be able to:

- View assignment:
  - o Course ID   //Required Input
  - o Assignment ID   //Required Input
  - o List of assignment submission entities   //Output/Print
- View submission details:
  - o Assignment submission entity   //Required Input
  - o Assignment ID   //Output/Print
  - o Submitter's student ID   //Output/Print
  - o Date/Time submitted   //Output/Print
  - o Submission's grade   //Output/Print
- Grade submission:
  - o Submission entity   //Required Input
  - o Submission's new grade   //Required Input
- View students in section:
  - o Course ID   //Required Input
  - o Section ID   //Required Input
  - o List of student IDs in staff's assigned section //Output/Print

Students shall be able to:

- View assignments:
  - o Course ID   //Required Input
  - o List of assignment IDs   //Output/Print
  - o List of assignment content   //Output/Print
- Submit assignment:
  - o Course ID   //Required Input
  - o Assignment ID   //Required Input
  - o New Assignment submission entity //Required Input

View student submission:

- o Course ID   //Required Input
- o Assignment ID   //Required Input
- o Submission entity   //Output/Print

View Grades

- o Course ID //Required Input
- o List submission entity grades //Output/Print

System Requirements and Restraints:

- Database required to store user information and submissions
- 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