

Use Case Scenario

Use Case: RegisterAccount

Precondition: Taylor loads up the website and clicks on the register button.

Main Flow: After the form window is loaded, Taylor enters his First Name as Taylor, Last Name as John, Gender as Male, Date of Birth as April 23 1991, Email as tjohn@gmail.com, and Password as tjohn230491, and he clicks the create button. The system is called RegisterAccount, and RegisterAccount calls ValidateInfo to check if Taylor enters valid information. After successfully checked by ValidateInfo, Taylor got redirected to the home page.

Post Condition: Taylor's account is added to the Database.

Precondition: Taylor loads up the website and clicks on the register button.

Main Flow: After the form window is loaded, Taylor enters his First Name as Taylor, Last Name as John, Gender as Male, Date of Birth as April 23 2021, Email as tjohn@gmail.com, and Password as tj, and he clicks the create button. The system is called RegisterAccount, and RegisterAccount calls ValidateInfo to check if Taylor enters valid information. However, ValidateInfo returns errors stating "password is too weak" and "Invalid Date of Birth". The system clears out the form and lets Taylor re-enter the information.

Post Condition: There is no change in the Database.

Use Case: CreateClassroom

Precondition: Daiki Ken logged in to the system as a teacher.

Main Flow: Daiki clicks on the create new classroom button, and the form dialog appears on the screen. Daiki enters Classname as "Computer Science 101", Description as "Introduction course to computer science and object-oriented programming", Visibility as "Private", and Number of Student as 25. Daiki clicks the create button. Once the system finished checking the validation of information, the classroom is created by the system, and Daiki got redirected to the classroom's homepage.

Post Condition: The new classroom named "Computer Science 101", described as "Introduction course to computer science and object-oriented programming", Visibility "Private", and Number of Student as 25 is added to the database.

Precondition: Daiki Ken logged in to the system as a teacher.

Main Flow: Daiki clicks on the create new classroom button, and the form dialog appears on the screen. Daiki enters Classname as "Algorithm and Datastructure", Description as "IT", Visibility as "Private", and Number of Student as 30. Daiki clicks the create button. After the system checks the validity of information, an alert box appears stating "Description must be longer than 2 letters". The system clears out the information entered by Daiki and lets Daiki re-enter the information again.

Post Condition: There is no change in the database.

Use Case: JoinClassroom

Precondition: Tom Henry logged in to the system as a student.

Main Flow: Tom clicks on the join class button, and the dialog pops up asking Tom for code. Tom enters a secret code "UgH1d" given by his professor. Once the system checks the code to find the classroom, the classroom

returned by the system is "Operating System", and the system enrolls Tom into the classroom. Tom gets redirected to the classroom homepage.

Post Condition: The database adds Tom into the classroom's student list.

Precondition: Tom Henry logged in to the system as a student.

Main Flow: Tom clicks on the search bar and enters "Network".

Tom is shown with a list of classrooms with the word "Network" on the screen by the system. Tom clicks on a classroom named "Network and World Wide Web". Tom gets redirected to the classroom homepage by the system.

Post Condition: The database adds Tom into the classroom's student list.

Use Case: AssignGrade

Precondition: Hero Kong logged in as a professor, and he is in the classroom page.

Main Flow: Hero clicks on the assignment submission tab to view all the submissions from his students. He clicks the first one and starts to grade it. After he is done grading, he selects the grade textbox, enters 90/100, and clicks Done.

Post Condition: The database assigns value of 90 to the assignment's grade property.

Use Case: CreateAssignment

Precondition: Hero Kong logged in as a professor, and he is in the classroom page.

Main Flow: Hero clicks on the assignment submission tab and clicks on create new. Once the dialog box pops up, Hero enters the name of the assignment as "Assignment 1", describes it as "Create a basic calculator with Go lang", sets the due date until

"October 20, 2021", and sets the grade out of "100". Hero clicks on the create button, and the new assignment is created after the system checks validity of the information. The dialog disappears from the screen, and Hero can see the new assignment is added to the list of the assignments.

Post Condition: A new assignment is added to the database by the system.

Use Case: DeleteAccount

Precondition: Peter Cage logged into the system as a teacher.

Main Flow: Peter goes into the setting menu. He is shown his information by the system. Peter scrolls down a little bit until he sees a delete account option. He clicks on it, and he is prompted with a dialog by the system stating "Do you want to delete your account? Please enter your first name [space] last name to confirm". Peter enters "Peter Cage" and clicks on the delete button.

Post Condition: The system searches for an account with the same id as Peter and removes it from the database.

Precondition: Peter Cage's account has been unused for the past two years.

Main Flow: The system checks Peter's account. The system checks the last seen date with the current date. Last seen on Peter's account is "January 1, 2017", and the current is "October 20, 2021". Then the system verifies that Peter's account is unused for more than 600 days and removes the account from the database.

Post Condition: The system removes Peter's account from the database.

Use Case: DropClass

Precondition: Sentinal Uzi is logged in as a student.

Main Flow: Sentinal wants to drop/leave a classroom "ECON 101".

She goes to the setting within the classroom page and scrolls down to see a drop button. She clicks on the drop button, and the system prompts her "Do you want to leave the classroom?". She clicks on yes then she gets redirected to the website homepage.

Post Condition: The system removes Sentinal from the classroom's student list. Sentinal is no longer see the classroom "ECON 101"

Use Case: UploadAssignment

Precondition: Loris Jones logged in as a student.

Main Flow: Loris has completed her assignment. She goes into the classroom "MATH 285" homepage and clicks on the classwork tab. She picks the assignment "Homework #1" and selects the upload button. Then she drags her assignment pdf file and drops it into the box prompted by the system and clicks upload. Once the system is completed loading the file onto the database, the dialog box disappears from the screen, and Loris can see the submitted status appear next to the assignment status box.

Post Condition: The system adds a file to the database and maps it with Loris' id and the assignment "Homework #1" id.