## #1 - User Story

## As an administrator, I want to be able to create courses, so I can assign instructors and TAs.

**L:** Needs a database for all courses, create course object, each courses need to have labs, TAs, instructors, needs user input and a user interface, verification no duplicate courses, also the course should be accurately displayed on the schedule of classes.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Create Course" form.

WHEN I select "Create New Course"

AND I enter a unique course number identifier.

AND I enter information for title and other course fields (number of labs, times, semester, modality, etc.)

AND I select "confirm course creation"

THEN a course created is displayed on schedule of classes for all users.

AND instructors and TAs can be assigned to the course.

GIVEN I have entered a course number that already exists into the course ID field.

WHEN I select "confirm course creation."

THEN a message appears on the screen stating it can't create a course that already exists. AND it displays the respective course ID and title.

## #2 - User Story

# As an administrator, I want to create accounts, so I can assign TAs or instructors to courses and maintain records of their assignments.

L: Need to take data about the user (email address, home address, phone number, name), verify the account is unique, create account class object, need a table to save accounts for TAs and instructors.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Account Management" tab.

WHEN I select the "create account" button

AND I select the type of account I am creating: TA or instructor.

AND I enter a unique UWM email address.

AND I enter then accounts holders' information.

AND I select "confirm account creation"

THEN an account is created.

AND send email to the accountholder's UWM email address with a temporary password and login instructions.

GIVEN I am trying to create an account that already exists.

WHEN I select "confirm account creation"

THEN a message displays this account already exists in the schedule of classes

AND I am prompted to re-enter the email address field.

#### #3 - User Story

As an administrator, I want to delete accounts, so specific individuals can't be assigned to courses and can't influence the TA process anymore.

**S**: Need to remove all assignments from/to the account, update the schedule of classes GUI of any changes, may require two database tables: one for active accounts and one for deleted accounts.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Account Management" tab.

WHEN I select the "Find account to delete" button.

AND I search for the account's email in the search bar.

AND I the account exists.

AND I select the "delete selected account" button.

AND I select the confirmation message: I want to delete the account.

THEN the account is no longer active: the person can no longer access the account and they can't be assigned to courses/lab.

AND an email is sent to the user notifying them their account have been removed.

GIVEN I am looking for an account to delete that does not exist.

WHEN I select "Find account to delete".

AND I search for the accounts email in the search bar.

THEN a message displays saying it's unable to find the account to delete.

AND I am prompted to re-enter a valid account ID

#### #4 - User Story

As an administrator, I want to edit accounts, so their roles and contact info reflect up-to date information.

**S**: Need input data from user, database containing account information should be mutable and should allow for changes to be saved, will need to display changes on the user's end.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Account Management" tab.

AND I have navigated to the "Find account to edit" form.

WHEN I search for the account's email in the search bar.

AND the account is found.

AND I select the "edit account" button.

AND I update any of the contact information fields.

AND any changes to phone numbers are still a 10 digit number.

AND I select "save changes"

THEN the account's changed information is saved

AND the changes are reflected in the course of schedule

AND an email is sent out to the modified account that their account has been modified.

GIVEN I have changed the phone number to a non 10-digit number.

WHEN I select "save changes"

THEN a message displays saying that I have violated formatting

AND I am prompted to re-enter the phone number field.

GIVEN I do not want to save changes to the edited account.

WHEN I select "discard changes"

THEN none of the changes made to the account are saved.

AND all the old fields are restored.

GIVEN I am looking for an account to edit that does not exist.

WHEN I select "Find account to edit"

AND I search for the accounts email in the search bar.

THEN a message displays saying it's unable to find the account to edit.

AND I am prompted to re-enter a valid account ID.

## #5 - User Story

As an administrator, I want to send out notifications to users via UWM email, so all users can be informed of any scheduling changes or updates to the curriculum.

L: create email system to send/receive and store emails, need to take user input, also need user interface to provide options to send to individual accounts, TAs, instructors, or "all users".

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "email" tab.

WHEN I select "Compose new email."

THEN an input box appears for me to begin my message.

WHEN I have specified who I want to send the email towards: TAs, instructors, all users, or individual accounts.

AND I modify the email's body.

AND I select "Send email"

THEN the intended recipients will receive the email in their inbox.

AND the email will be sent to my "sent folder".

GIVEN I do not want to send or save the email I am composing.

WHEN I select "Discard Message"

THEN all contents of the email are erased

AND the email is stored in the "Deleted Emails" tab.

AND I am brought back to the "email" form.

GIVEN I do not want to send an email immediately.

WHEN I select "Save Draft"

THEN the email composition is closed

AND email's contents and intended recipients are saved in the "Draft Emails" tab

AND I am brought back to the "email" form.

GIVEN I have not specified the intended recipient when composing an email.

WHEN I select "Send Email"

THEN a message displays saying I need to select an intended recipient

AND I am prompted to enter a UWM address in the intended recipient field.

GIVEN I have not written anything in the body of the email.

WHEN I select "Send Email"

THEN a message notifies me that I'm unable to send a blank email.

AND I am prompted to enter information in the email body.

## #6 – User Story

As an administrator, I want to access all data in the system, so I can locate any information about the courses or staff.

L: consolidate and organize numerous tables (TAs table, instructor table, course table, lab table, inactive accounts) in a user friendly graphical Interface. Data will need to be mutable across through various input forms and will need to be connected with the master database.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Database" tab.

WHEN I select any of Account tables (TAs, instructors, All accounts)

AND I select the search bar.

AND I enter the unique UWM email identifier.

AND the account exists.

AND I select "Begin Search."

THEN all contact information of the account is displayed

AND all the accounts course assignments/lab assignments are displayed.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "Database" tab.

WHEN I select the course table.

AND I select the search bar.

AND I enter the unique course.

AND the course exists.

AND I select "Begin Search"

THEN all descriptions about this course and it's labs are displayed.

AND all current TA assignments to this course's labs are displayed

AND the current instructor assignment to this course is displayed

GIVEN I have entered a non-existent unique identifier (UWM Email/Course ID) in the account or course table's search bar

WHEN I select "Begin Search"

THEN a message displays this account or course does not exist

AND I am prompted to re-enter the unique identifier.

## #7 – User Story

As an administrator, I want to assign instructors to courses, so I can allocate appropriate instructors to match course demand.

**M**: Update database with the new instructor-course assignment, requires a form to enter the admin's input, display the assignment on the schedule of classes GUI (so other users can see it), verify on maximum courses per instructors, verify maximum instructors per course, small code for the assignment, testing.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "assign instructor" form

WHEN I select the dropdown of instructors.

THEN all active instructor's names are presented in the dropdown.

WHEN I select an instructor to assign.

AND they are not already assigned to the maximum number of courses for an instructor

THEN another dropdown opens with all current courses

WHEN I select a course to assign the instructor to

AND the course does not already have an instructor

THEN the instructor is assigned to that course.

AND the schedule of classes will display the change.

AND an email is sent to the instructor notifying them of this change.

GIVEN an instructor has already reached the maximum number of assigned courses for an instructor.

AND I have opened the dropdown of instructors in the "assign instructor" form.

WHEN I select an instructor to assign from the dropdown.

THEN a message is displayed saying the instructor has reached maximum assignments AND the dropdown of courses is locked until another instructor selection is made.

GIVEN the course already has an instructor attached to it.

AND I have selected an instructor that hasn't reached the maximum number of assigned courses for instructors.

WHEN I select a course to assign the instructor to.

THEN a message is displayed saying the course already has an instructor so this assignment cannot be performed

AND the user is prompted to the dropdown of courses for another selection.

#### #8 – User Story

As a supervisor/administrator, I want to assign TAs to a course, so each course has enough TAs and so I can specify their grading status.

**M**: Update database with the new TA-course assignment, requires a form to enter input, display the assignment on the schedule of classes GUI (so other users can see it), verify on maximum courses per TA, verify maximum TA per course, small code for the assignment.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "assign TA to course" form.

WHEN I select the dropdown of TAs to assign

THEN all active TAs names are presented in the dropdown

WHEN I select a TA to assign

AND they are not already assigned to the maximum number of courses for a TA.

AND I have selected the desired grader status.

THEN a dropdown of active courses is opened

WHEN I select a course to assign the TA to

AND the number of TAs already assigned to the course doesn't exceed the max number of TAs per courses.

THEN the TA is assigned to that course.

AND the schedule of classes will display the change.

AND an email is sent to the TA notifying them of this change.

GIVEN a TA has reached the maximum number of assigned courses.

WHEN I select a TA to assign

THEN a message is displayed saying the TA has reached maximum assignments

AND the dropdown of courses is locked until another TA selection is made.

GIVEN the number of TAs already assigned to the course equals the number of lab sections.

WHEN I select a course to assign the TA to

THEN a message is displayed saying the course already has enough TAs so this assignment cannot be performed

## #9 – User Story

As a supervisor/administrator, I want to assign TAs to a lab section, so I can ensure each lab section for all courses has a TA.

**M**: Update database (course table, TA table, and lab table) with the new assignment, requires a form to enter the admin's input, display the assignment on the schedule of classes GUI (so other users can see it), verification on maximum labs per TA, verification on maximum TAs per lab, small code for the lab assignment.

GIVEN I have entered the correct username and password for an administrator on the login page.

AND I have navigated to the "assign TA to Lab" form.

WHEN I select the dropdown of TAs to assign

THEN all active TAs names are presented in the dropdown

WHEN I select a TA to assign

AND the TA is not assigned to "grader status" for the course

AND their number of assigned labs does not exceed the maximum number of TA lab assignments

THEN a dropdown of active lab sections is opened

WHEN I select a lab section to assign the TA to.

AND the lab doesn't already have a TA assignment

THEN the TA is assigned to that lab section

AND the schedule of classes will display the change.

AND an email is sent to the TA notifying them of this change.

GIVEN the TA I'm trying to assign to a lab has been selected for "grader status" for the course WHEN I select a TA to assign to a lab section

THEN a message pops up stating unable to assign TAs with grader status to labs AND the dropdown of lab sections is locked until another TA is selected.

GIVEN a TA has reached the maximum number of assigned lab sections.

WHEN I select an instructor to assign

THEN a message is displayed saying the TA has reached maximum lab assignments AND the dropdown of lab sections is locked until another TA selection is made.

GIVEN the lab section already has a TA assigned to it

WHEN I select a lab section to assign a TA to from the dropdown of active lab sections.

THEN a message is displayed saying this lab section already has a TA

AND the TA assignment can not be saved until another lab section is selected.

## #10 – User Story

As a user of the schedule of classes, I want to be able to edit my own contact information, so that I update any changes to my phone number/address.

**S**: Needs form to take user input, update the account in the database: ensuring the private info is still private and the public info is public, should allow other users to see the change to public info.

GIVEN I have entered the correct username and password for an existing user on the login page.

AND I have navigated to the "my profile" tab.

WHEN I select "edit account"

AND I change any of my contact information fields (personal phone number, office location, work phone number, home address)

AND the replacement has not violated any formatting concerns (phone number must be numbers)

AND I select "save changes."

THEN my contact information will be updated to the new input

AND any changes to my public contact information will be visible to all users.

GIVEN I have changed the phone number to a non 10-digit number in my contact information.

WHEN I select "save changes"

THEN a message displays saying that I have entered an invalid phone number AND I am prompted to re-enter the phone number field.

GIVEN I do not want to save the changes I have made to my contact information.

AND I have made changes to any contact information fields

WHEN I select "Discard Changes"

THEN my contact information reverts back to it's previous state before editing

#### #11 – User Story

As an instructor, I want to view course assignments, so I can ensure I have been assigned to the correct course and have enough TAs.

**S**: Need a course table holding course information (TA assignments, Instructor assignments, unique course ID, times, semester), needs user interface to display course information.

GIVEN I have entered the correct username and password for an instructor on the login page. AND I have navigated to the "courses tab".

WHEN I select "view course assignments"

THEN a popup displays all courses and the users that have been assigned to those courses

GIVEN there are currently no course assignments in the scheduler.

WHEN I select "view course assignments"

THEN a message displays there are no current assignments to any course.

GIVEN I am an instructor logged in on the courses tab.

WHEN I select "view my course assignments"

THEN a popup displays courses that I am assigned to with the associated TAs assigned to that course.

#### #12 – User Story

As an instructor I want to be able to assign TAs to particular lab sections, so I can best allocate which TAs can support each lab in the course I am responsible for.

**M**: Need to update database table with new assignments (courses, labs, TA accounts), display the assignment on the class schedules, Need validation that the instructor isn't assigning more TAs than needed for the lab, need to inform the instructor if a TA is unavailable for assignment, possibly send an email to the admin to notify them of the assignment.

GIVEN I have entered the correct username and password for an instructor on the login page. AND I have navigated to "My Course Labs" tab.

WHEN I select a lab.

AND the lab doesn't have a TA assigned to it

AND I select "assign TA".

THEN a selection appears of all the TAs assigned to my course.

WHEN I select the desired TA

AND the TA is not already reached their maximum assignments for labs.

AND they have not been assigned to grader status.

THEN the TA is assigned to the lab section

AND the schedule of courses displays this change.

AND an email is sent to the administrator and TA notifying them of this assignment

GIVEN the TA I'm trying to assign to a lab has been selected for "grader status" for my course WHEN I select a TA to assign to a lab section

THEN a message pops up stating unable to assign TAs with grader status to labs AND I am prompted to select a different TA assigned to my course.

GIVEN all a lab already has a TA assigned.

AND I am on the "My Course Labs" tab

WHEN I select a lab

THEN a message displays saying this lab has sufficient TA coverage

AND the "assign TA" button is locked until another lab is selected.

GIVEN I am trying to assign a TA to a lab section in my course that has reached their maximum lab section assignments

WHEN I select the desired TA to assign to a lab

THEN a message is displayed saying the TA has reached their maximum lab assignments AND I am prompted to select another TA

#### #13 – User Story

As a user, I want to read public contact information of all users, so I can communicate with whomever I want.

**S**: Need user interface to display the public contact information without displaying private info, the UI must also reflect the most updated account information in the database.

GIVEN I am logged into the schedule of courses as an instructor, TA, or supervisor.

AND I have navigated to "Users" tab.

WHEN I Select "All users"

AND I select on an account.

THEN a popup displays their first and last name, email address, office location, and phone number

#### #14 – User Story

As a TA, I want to view TA assignments for all TAs, so that I can compare assignments with my peers for similar courses and ensure I have been assigned correctly.

**S**: access tables for TAs to display labs/course assignments, design and implement user interface to display TA assignments, validate a TA can't edit another TA's assignment.

GIVEN I have entered the correct username and password for a TA on the login page.

AND I have navigated to the "view TA" tab.

WHEN I select "view current TA assignments."

THEN a popup displays all TAs that are currently assigned to a course

AND it displays all of the lab sections each TA is assigned to in each course.

## #15 – User Story

As a user of the schedule of courses, I want to login, so I know my information and assignments are securely protected.

**M**: Requires user input, need to search all account tables for the login info, need to handle various cases for incorrect login and offer a password reset system.

GIVEN I am on the login screen

WHEN I enter an existing email address for an account in the schedule of courses.

AND I enter the correct password associated with that email address.

THEN I am successfully logged into the system.

GIVEN I have entered an incorrect username: one that doesn't exist in the schedule of classes WHEN I select login

THEN a message displays that the username doesn't exist.

AND the user is prompted to the username field.

GIVEN I don't remember my password on the login screen.

WHEN I select "forgot password" box

AND I enter my email associated with my account to reset my password.

THEN a password reset link is sent to my email.

WHEN I select the password reset link in my email.

AND I enter a password according to the password requirements.

THEN my new password is saved.

AND I am taken to the login page again.

# **APPENDIX**

- This flowchart illustrates which bullet points in the homework description I wrote User Stories for, and which ones I chose to combine to avoid duplication.

