

"Chart My Course" Group Project

Iteration 1

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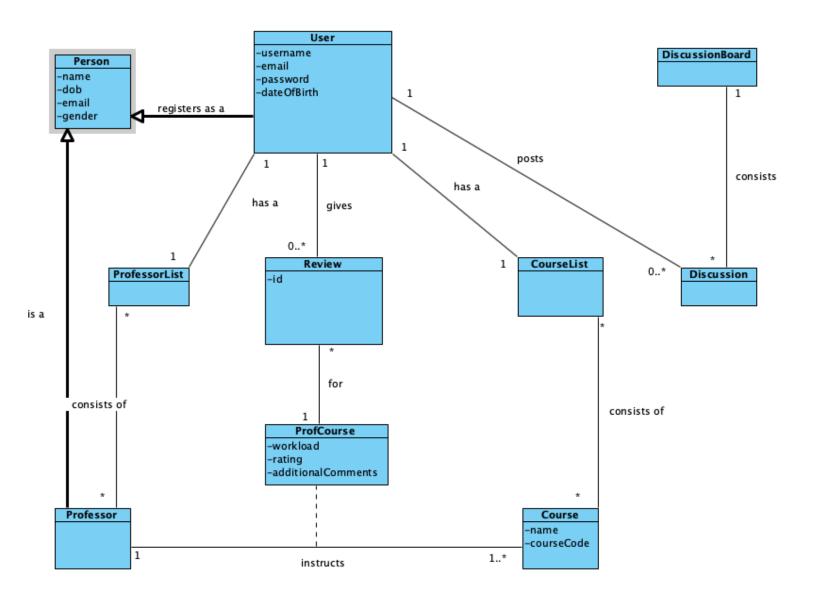


1. Project Vision

Navigating college is hard. Navigating the choices of classes is even harder. Chart My Course seeks to simplify a Baylor Computer Science student's choices of courses to take, as well as professors that teach them.

We intend to create a utility similar to the now defunct BUBooks that aggregates reviews of not just the course offerings, but also professor/course pairings. This utility is intended to give potential students a realistic look at what sort of coursework or workload they can expect in a class.

2. Domain Model





3. Requirements

a. Functional

- The user can create a new account
- The user can log in and out of their account
- The user can find recommended courses and professors
- The user can add a review of a professor
- The user can search reviews of professors/courses
- The user can filter search results
- The user can request a review to be removed
- The user can have a list of saved professors
- The user can have a list of saved courses
- The system saves or deletes changes upon logout
- The user can post questions and answers in the discussion board
- The user can reply to discussions
- The user can upvote questions in the discussion board

b. Non-functional

- The system shall not share the personal information of the author of posts to other users, only information the operators of the system receive is the author's name
- All posts and user activity will be user friendly and comply to online community and safety guidelines

- The courses and professors in the system will be limited to Baylor's Computer
 Science department
- The system will adhere to all Baylor guidelines and policies
- The system will return search results within 30 seconds



4. Use Cases

ID: UC Create Account Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with degree plan info and professor reviews info

Preconditions:

The user is not logged in

Flow of events:

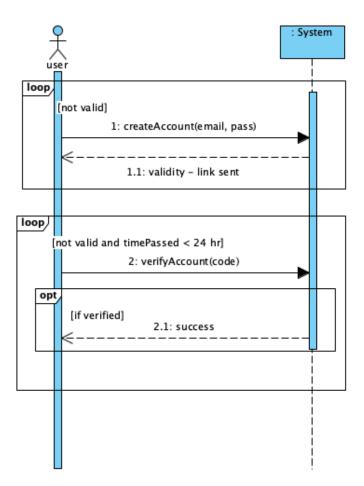
- 1. A new user wants to create an account
- 2. User clicks on Create Account
- 3. The system asks for Baylor email
- 4. The user enters their Baylor email
- 5. The system sends a verification email
- 6. The user clicks the link and is brought back to the screen
- 7. The system asks to enter the password and other information
- 8. The user enters the information and click submit

Extensions:

- 4a. The user does not enter Baylor Email
 - System will display "Please enter Baylor Email"
 - 2. System will return to the start of step three
- 7a. The entered password does not meet the requirements
 - 1. System will display "Please enter a new password"

Postconditions/Success:

Account is created successfully





+createAccount(email, pass) +verifyAccount(code)

ID: UC Login

Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with correct login information

Preconditions:

The user has an account created

Flow of events:

- 1. The user clicks on login
- 2. The system asks for Baylor email and password
- 3. If the login credentials exist, the user is directed to the home page

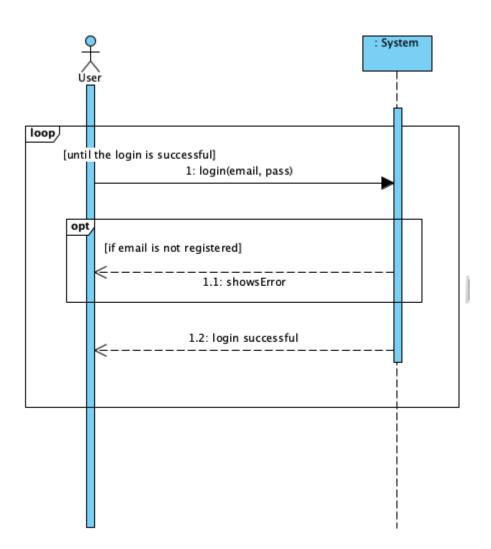
Extensions:

- 2a. The user enters an email which does not exist
 - 1. System will display "Please enter Baylor Email"
 - 2. System will return to the start of step two
- 2b. The entered password does not match
 - 1. System will display "Please re-enter"
 - 2. If the user has had 3 tries, the system redirects to reset password

Postconditions/Success:

User is logged in





System +login(email, pass)



ID: UC Logout

Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with correct login information

Preconditions:

The user is logged in

Flow of events:

- 1. The user clicks on logout
- 2. The system confirms from the user about logging out and tells the user to save any changes
- 3. The user confirms
- 4. The system directs to the home page

Extensions:

a* Anytime the system does not respond

1. User will restart the application

Postconditions/Success:

User is logged out

ID: UC Login

Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with correct login information

Preconditions:

The user has an account created

Flow of events:

- 1. The user clicks on login
- 2. The system asks for Baylor email and password
- 3. If the login credentials exist, the user is directed to the home page

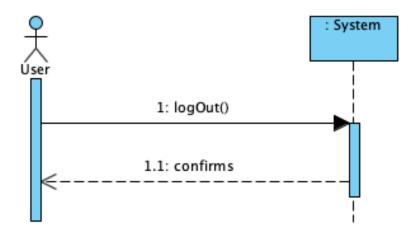
Extensions:

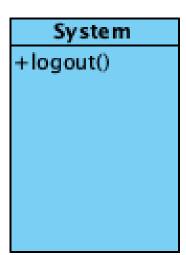
- 2a. The user enters an email which does not exist
 - 1. System will display "Please enter Baylor Email"
 - 2. System will return to the start of step two
- 2b. The entered password does not match
 - 1. System will display "Please re-enter"
 - 2. If the user has had 3 tries, the system redirects to reset password

Postconditions/Success:

User is logged in









ID: UC Reset Password

Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with correct login information

Preconditions:

The user has an account created and is not logged in

Flow of events:

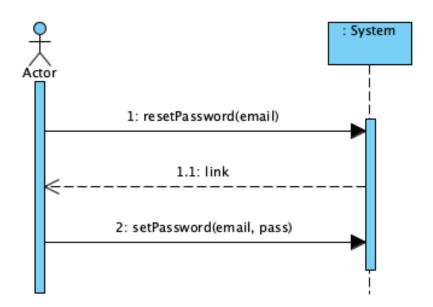
- 1. The user clicks on "Reset Password"
- 2. The system asks for Baylor email
- 3. The system link to their email
- 4. The user clicks the link and is brought back to reset password page
- 5. The system asks the user to enter the email and new password
- 6. The user enters and clicks on submit
- 7. The system updates the information in the database

Extensions:

- 2a. The user enters an email which does not exist
 - 1. System will display "Please enter Baylor Email"
 - 2. System will return to the start of step two
- 4a. The user does not respond to the link in 24 hours
 - 1. The link expires.
- 5a. The password does not meet the requirements
 - 1. The system asks the user to enter a new password

Postconditions/Success:

The password is reset.





+resetPassword(email) +setPassword(email, pass)

ID: UC Recommendations

Scope: Course/Professor Planning

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with degree plan info and professor reviews info

Preconditions:

The user is on the planning page of the site

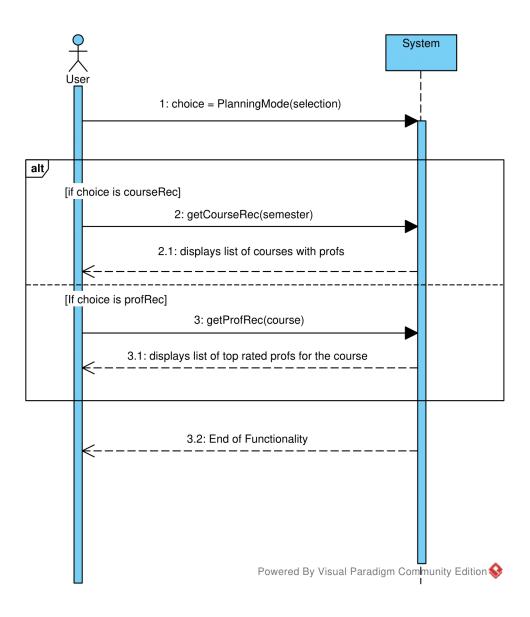
Flow of events:

- 1. User selects type of recommendation
- 2. System records the type of rec selected
- 3. If user choses course rec
 - 1. User enters the semester they are in
 - 2. Displays list of courses with professors
- 4. If user chooses prof rec
 - 1. User enters the course they are in
 - 2. Displays list of top rated profs for the selected course

Postconditions/Success:

Site displays recommended courses along with the associated professors





System +PlanningMode(selection) +getCourseRec(semester) +getProfRec(course) Powered By∷Visual Paradigm Community Edition ❖



ID: UC Filter Results

Scope: Professor Reviews

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with reviews

Preconditions:

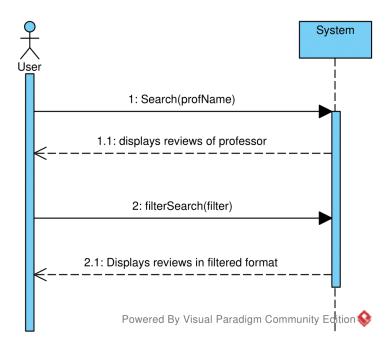
The user is on the search professor page of the site

Flow of events:

- 1. User selects a professor's name from dropdown menu to search for reviews
- 2. Site displays the reviews of the given professor
- 3. If user wants to filter results the user can select a filter from the dropdown menu
- 4. The system filters the results, and the site displays filtered info

Postconditions/Success:

Site displays the reviews with the given input from the user





+search(profName)

+filterSearch(filter)

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ID: UC Professor Lookup

Scope: Professor Lookup & Rating System

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with professor info

Preconditions:

User must be logged into the website

Flow of events:

- 1. User opens the site main page
- User enters search terms into the search box, and chooses a search mode (by professor name or by class)
- 3. Site redirects user to a list of all professors matching search terms
- 4. User selects the desired professor
- 5. Site redirects user to selected professor's page

Extensions:

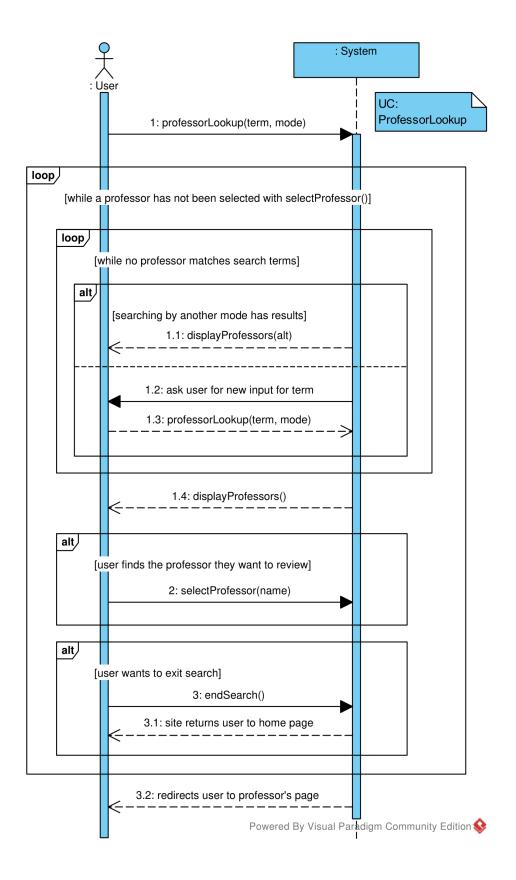
- 3a. User exits search without choosing a professor
- 1. Site redirects user back to main page
- 3b. If no professors match search terms used
- 1. Site switches search mode and displays any matching results
- 2. If there are no results, site asks user for new search terms
- 3. Site continues this until a search provides valid results

Postconditions/Success:

User is directed to professor's page by lookup system

Site displays professor's reviews and ratings to user







- +professorLookup(term, mode)
- +displayProfessors()
- +selectProfessor(name)
- +endSearch()
- +startReview()
- +startWorkloadRate()
- +reviewProfessor(text, rating)
- +rateProfessorWorkload(rating)

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ID: UC Review & Rate Professor

Scope: Professor Lookup & Rating System

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with professor info

Preconditions:

User must be logged into the website

Flow of events:

- 1. User uses professor lookup system to navigate to desired professor's page
- 2. Site displays professor's page
- 3. User selects "Rate and Review Professor"
- 4. Site opens popup with text box and rating selection buttons
- 5. User types review into text box
- 6. User selects review rating with rating selection buttons
- 7. Site saves review and returns user to the professor's page

Extensions:

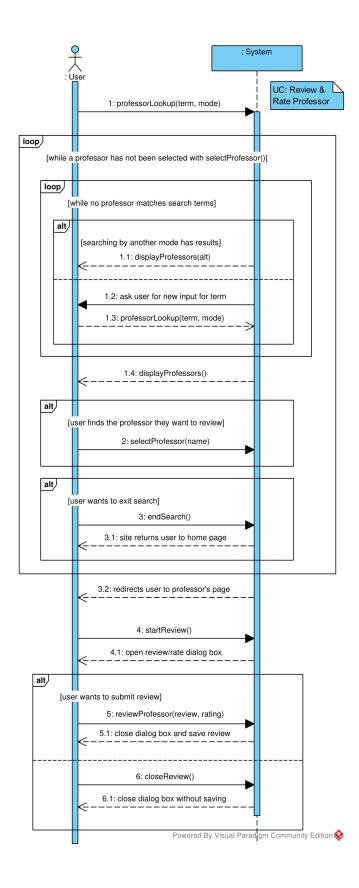
- 5a. User wants to exit review without posting
- 1. User clicks "X" button in review panel
- 2. Site returns user to professor's page and ends review/rating

Postconditions/Success:

User's review and rating are stored in the site's database

User's review and rating are now visible on the professor's page on the site







- +professorLookup(term, mode)
- +displayProfessors()
- +selectProfessor(name)
- +endSearch()
- +startReview()
- +startWorkloadRate()
- +reviewProfessor(text, rating)
- +rateProfessorWorkload(rating)

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ID: UC Rate Professor Workload

Scope: Professor Lookup & Rating System

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with professor info

Preconditions:

User must be logged into the website

Flow of events:

- 1. User uses professor lookup system to navigate to desired professor's page
- 2. Site displays professor's page
- 3. User selects "Rate Professor Workload"
- 4. Site opens popup with rating selection buttons
- User selects rating with rating selection buttons
- 6. Site saves rating and returns user to the professor's page

Extensions:

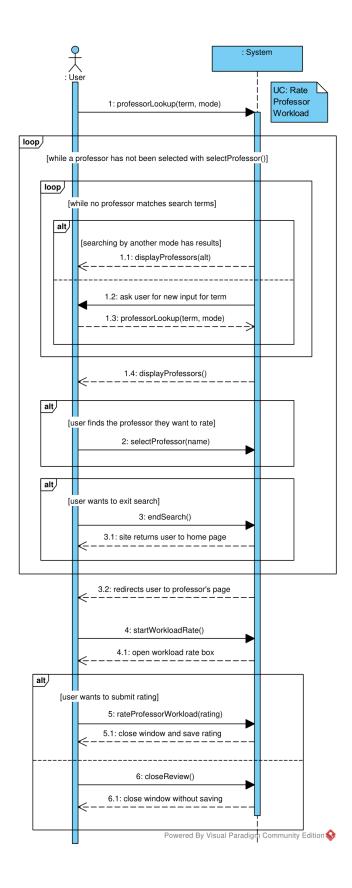
- 5a. User wants to exit rating without posting
- 1. User clicks "X" button in review panel
- 2. Site returns user to professor's page and ends rating

Postconditions/Success:

User's workload rating is stored in the site's database

User's workload rating is now visible on the professor's page on the site







- +professorLookup(term, mode)
- +displayProfessors()
- +selectProfessor(name)
- +endSearch()
- +startReview()
- +startWorkloadRate()
- +reviewProfessor(text, rating)
- +rateProfessorWorkload(rating)

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ID: UC Save Professor

Scope: Professor Lookup and List of saved professors

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User is logged into the website, and has successfully looked up a list of professors

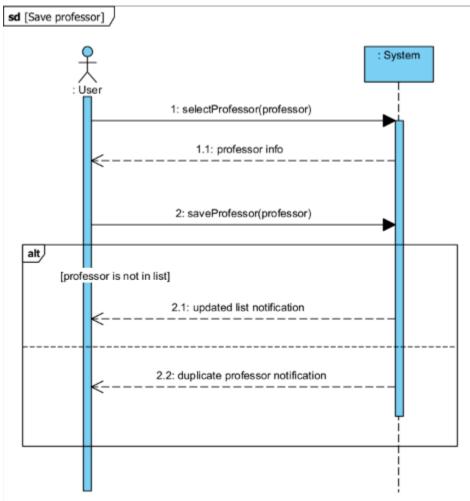
Flow of events:

- The user selects a professor from the search results
 The system displays a page with that professor's info
 The user selects the "Save Professor" icon on the professor's window
- 4. If the professor is not currently stored in the user's "Saved Professors" list, then
 - a. The system displays a notification that the professor has been added to the end of the user's list
- Else.
 - The system displays a notification that the professor has already been saved to the list

Postconditions/Success:

The user's "Saved Professors" list has one more professor at the end of the list, if it is not already in the list





System
+selectProfessor(professor)
+saveProfessor(professor)



ID: UC Remove Professor

Scope: List of saved professors and Professor Lookup

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User must be logged into the website

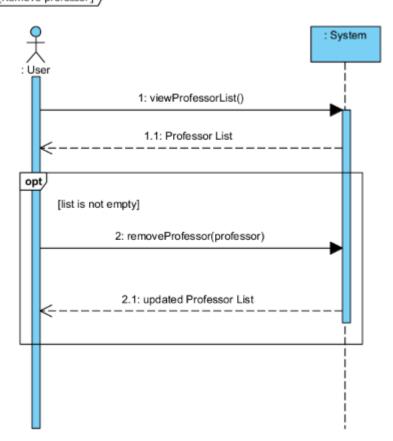
Flow of events:

- 1. The user opens up their "Saved Professors" list
- The system displays the user's list
 If their list is not empty, then
- - a. The user selects the "Remove Professor" icon next to a professor in their list
 - The system removes that professor from the user's list and displays the updated list to the user

Postconditions/Success:

The user's "Saved Professors" list has one less professor, or remains empty if originally empty

sd [Remove professor]





+viewProfessorList() +removeProfessor(professor)

ID: UC Save Changes Exit Message

Scope: User Account Changes

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User must be logged into the website

Flow of events:

- 1. User clicks the "Save Changes?" button
- 2. System checks if any changes made to "Saved Professors" list
 - a. If yes, overwrites the previous "Saved Professors" list and saves for user
- 3. System checks if any changes made to "Saved Courses" list
 - a. If yes, overwrites the previous "Saved Courses" list and saves for user

Postconditions/Success:

User's changes to "Saved Professors" and "Saved Courses" lists are saved by the system System displays a "Save Successful" message

ID: UC Save Course

Scope: Course Lookup and List of saved courses

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User is logged into the website, and has successfully looked up a list of courses

Flow of events:

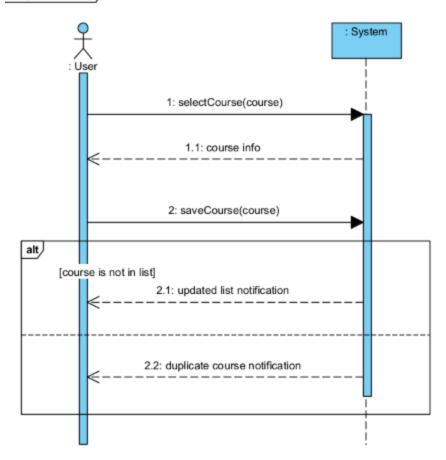
- 1. The user selects a course from the search results
- 2. The system displays a page with that course's info
- 3. The user selects the "Save Course" icon on the course's window
- 4. If the course is not currently in the user's "Saved Courses" list, then
 - a. The system displays a notification that the professor has been added to the end of the user's list
- Else,
 - a. The system displays a notification that the course has already been saved to the list

Postconditions/Success:

The user's "Saved Courses" list has one more course at the end of the list, if it is not already in the list



sd [Save course]



System

+selectCourse(course)

+saveCourse(course)



ID: UC Remove Course

Scope: List of saved courses and Course Lookup

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User must be logged into the website

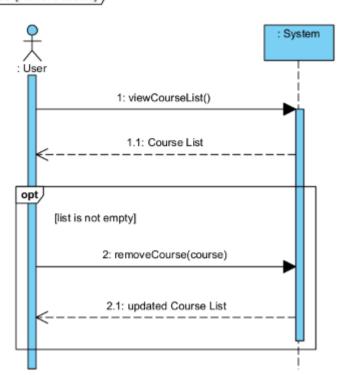
Flow of events:

- The user opens up their "Saved Courses" list
- 2. The system displays the user's list
- 3. If their list is not empty, then
 - a. The user selects the "Remove Course" icon next to a course in their list
 - b. The system removes that course from the user's list and displays the updated list to the user

Postconditions/Success:

The user's "Saved Courses" list has one less course, or remains empty if originally empty

sd [Remove course]



System

+viewCourseList()

+removeCourse(course)



ID: UC Save Changes Exit Message

Scope: User Account Changes

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

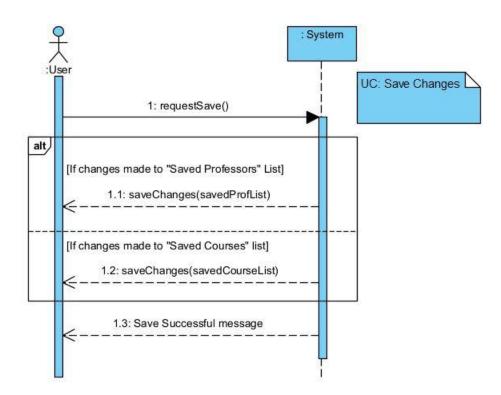
User must be logged into the website

Flow of events:

- 1. User clicks the "Save Changes?" button
- 2. System checks if any changes made to "Saved Professors" list
 - a. If yes, overwrites the previous "Saved Professors" list and saves for user
- 3. System checks if any changes made to "Saved Courses" list
 - a. If yes, overwrites the previous "Saved Courses" list and saves for user

Postconditions/Success:

User's changes to "Saved Professors" and "Saved Courses" lists are saved by the system System displays a "Save Successful" message



System
+requestSave()
+saveChanges(savedProfList)



ID: UC Post to a Discussion Board

Scope: Discussion Board

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

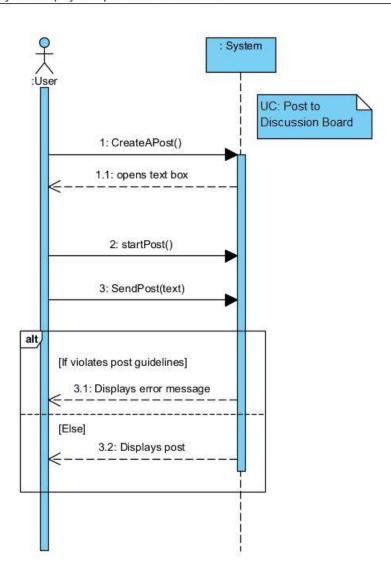
User must be logged into the website User is on the Discussion Board page

Flow of events:

- 1. User clicks the "Create a Post" button
- 2. System opens a text box
- 3. User inputs text in the text box
- 4. User clicks the "Send Post" button
 - a. If a post does not follow post guidelines, system will display an error message
- 5. System displays the post

Postconditions/Success:

System displays the post for all users to see





- +CreateAPost()
- +startPost()
- +sendPost(text)

ID: UC Discussion Reply

Scope: Discussion Board

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

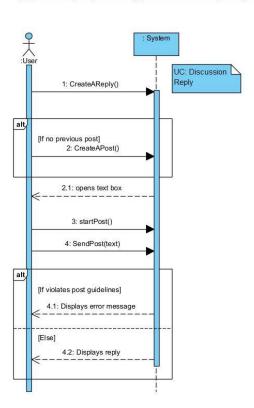
User must be logged into the website

Flow of events:

- 1. User clicks the "Reply" button below a post
 - a. If a previous post does not exist, only button to click will be "Create New Post"
- 2. System opens a text box
- 3. User inputs text in the text box
- 4. User clicks the "Send Reply" button
 - a. If a reply does not follow post guidelines, system will display an error message
- 5. System displays the reply below the original post

Postconditions/Success:

System displays the reply under the original post for all users to see





+CreateAReply()

+CreateAPost()

+startPost()

+SendPost(text)

ID: UC Upvote a Discussion

Scope: Discussion Board

Level: User Goal

Actors:

User - Student interacting with system

Preconditions:

User must be logged into the website

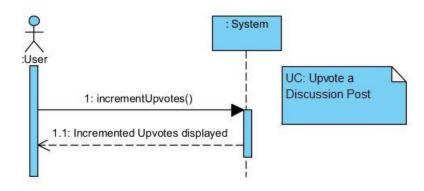
A post must exist

Flow of events:

- 1. User clicks the "Upvote" button under a discussion post
- 2. System increments the amount of Upvotes on the post

Postconditions/Success:

System displays the amount of Upvotes under a discussion post



System

+incrementUpvotes()



ID: UC Flag Review

Scope: Professor reviews

Level: User Goal

Actors:

User - Student interacting with system

Database Service - Site database with reviews

Preconditions:

The user has searched for professor reviews from the search professor page of the site

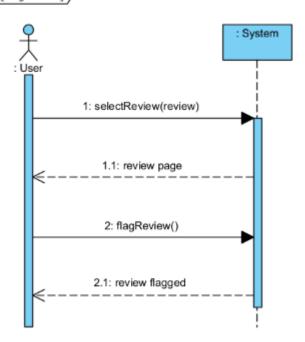
Flow of events:

- 1. The user selects a review from the professor review search results
- The system displays a page with the selected review
 The user selects the "Flag Review" icon on the review page
- 4. The system updates the flag icon to reflect that the review has been reported to admins

Postconditions/Success:

The review is marked as flagged and is reported to the admins

sd [Flag review]



System

+selectReview(review)

+flagReview()



5. Traceability Matrix

Traceability Matrix	The user can	log in an out	The user can find recommended courses and professors	The user can add a review of	The user can search reviews of professors/courses	filter search	The user can request a review to be removed	The user can have a list of saved professors		saves or deletes	The user can post questions and answers in the discussion board	reply to	questions
UC Create Account	×												
UC Log-in		×											
UC Log out		x											
UC Reset Password		x											
UC Reccommendations			x										
UC Filter Results						x							
UC Professor Lookup					x		x						
UC Review Professor				x									
UC Rate Professor Workload				x									
UC Add Professor								х		x			
UC Remove Professor								х		x			
UC Add Course									×	x			
UC Remove Course									x	х			
UC Save Changes								x	×				
UC Post Discussion											х		
UC Reply Discussion												х	
UC Upvote Discussion													х
UC Flag Review							x						



6. Wireframes

Chart My Course	ome I	Reviews	Q&A	Planning	Log in	Sign up
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My Courses	

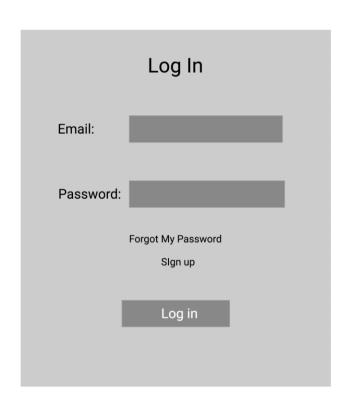
My Professors	



Home Reviews

Q&A Planning

Log in Sign up





Home Reviews Q&A Planning Log in Sign up

	Sign Up	
Name:		_
Username:		
Email:		
Password:		
	Log in	
	Create Account	



Home

Reviews

Planning

Q&A

Log in Sign up

Select Professor	Select Filter



Home Reviews Q&A Planning

Log in Sign up

Search	
	<u> </u>
	



Home

Reviews

Q&A Planning

Log in

Sign up

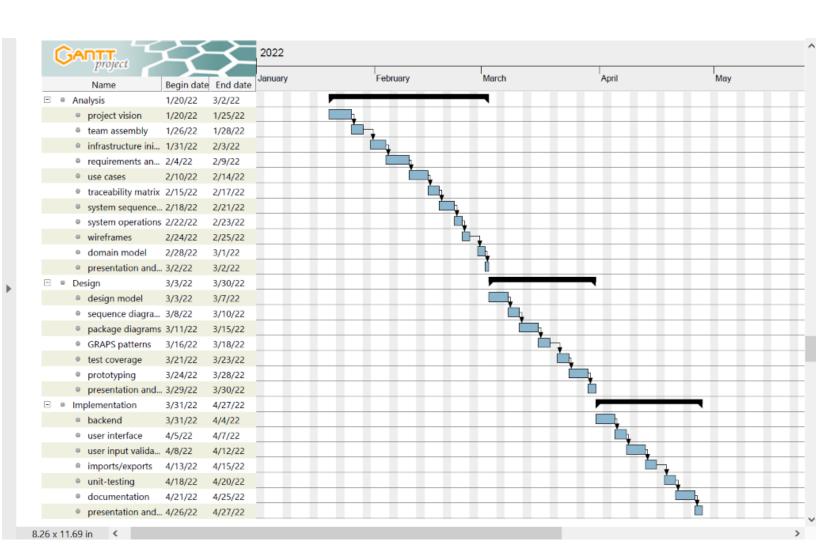
Planning

Recommended Courses

Recommended Professors



7. Gantt Diagram



8. Jira

Our team uses Jira for task and time tracking – it is accessible at https://chartmycourse.atlassian.net.

9. Website

Our team maintains a website for content relevant to the project, found at https://hkaase.github.io/ChartMyCourse/



10. Git Link

Our Git repository can be found at https://github.com/hkaase/ChartMyCourse.