

Prototypes

1-4 Login

This prototype is a simply mock-up of how the SONAR system's login page will appear for all users. Users will simply enter their university email (as that will be the standard username for ALL users) along with the password unique to this system.

The prototype shows a browser window with the following elements:

- Header: "SONAR" with back, forward, and refresh buttons, and the URL "http://SONAR.com".
- Content Area:
 - Logo: "UNIVERSITY OF LOUISVILLE. SCHOOL OF NURSING"
 - Input Fields: "Email Address" and "Password".
 - Links: "Forgot Password?"
 - Buttons: "Submit" and a large empty rectangular area below it.

5) Submit Grades

The Professor will submit the grades of each student in each class they teach in a given semester. After successfully logging on to the system, Professors will be able to select the class from a list of classes assigned to them for the current semester, and then manually go through and select the grade of each student. Once this has been completed for a class, the professor will submit the grades. If the professor needs to clear the data entered for some reason, they will have the option to do so.

SONAR

← → ↕ <http://SONAR.com/ProfEOS>

Select Class ▼

▼ First Name	▼ Last Name	▼ Student Number	▼ Grade
Rebecca	Ludwig	1234	Grade ▼
Tim	Mahan	4321	A
Chris	Meany	2314	B
Ajay	Singh	2134	C
			D
			F

Submit Clear

The user will run many searches (queries) against the database in order to gain information about not just individual students, but groups of students that participate in the programs offered by the School of Nursing. These searches will be used to generate reports about students, and with these reports advisors will be able to reach out to students who may have decided to not enroll in a particular semester without graduating, or reach out to students that may be on academic probation or failed a course. This will also allow Advisors to track the progress of individual students for advising appointments, with an easy-to-view report generated from a simple query.

Mozilla

← → ↕ <http://moqups.com>

Single Student ▼

Student ID First Name Last Name Include Student Progress

Date of Birth Email Address Semester ▼

Submit Clear

Mozilla

← → ↕ <http://moqups.com>

Multi-Student ▼

Program of Study ▼ Expected Grad Date ▼ Academic Standing ▼

Credit Hours: Between And

Submit Clear

8) Document Upload

Students will have the ability to submit documentation for the review of advisors. The system will provide student users with an easy to use page that simply allows them to submit PDFs, PNGs, and JPEGs to the system so that Advisors may review and approve, not edit the documentation. When the Student selects the Document type, it lets the Advisor know what they're looking at for approval. When the Document is selected, students can select Clear to remove it, or Submit to send it to the Advisors.

Submit Student Documents

← → ↕ <http://moqups.com>

Select Document Type ▼

CPR Certification

Scholarship Application

Upper Division Application

Browse

Submit

Clear

This is a wireframe mockup of a web page titled "Submit Student Documents". The page includes standard browser navigation buttons (back, forward, search) and a URL field. A main content area contains a dropdown menu for selecting a document type, with three options listed: "CPR Certification", "Scholarship Application", and "Upper Division Application". To the right of the dropdown is a "Browse" button. At the bottom of the content area are two large buttons: "Submit" and "Clear".

9) Import from CSV

If the need should ever arise a need for data to be imported into the database, the system administrator will have the ability to do so. This allows the system to have more robust functionality, while limiting this privilege to a group that also has the ability to restore the system from a backup should anything go wrong. These excel files (in csv format) can be used to populate the database with information it previously did not contain in a quick, efficient manner. All an Administrator would need to do is Arrange the CSV file columns according to how the Import Student Data link specifies, browse to the file, and hit submit.

Submit Student Documents

← → ⌂ <http://moqups.com>

[Import Student Data](#) [Browse](#)

[Submit](#) [Clear](#)

Mozilla

← → ⌂ <http://moqups.com>

The columns in the file you wish to upload should be arranged as such:

Student ID	First Name	Last Name	Middle Initial	University Email	Address	City	State	Zip	Primary Phone	Secondary Phone	Program of Study	Anticipated Graduation Date	Notes
------------	------------	-----------	----------------	------------------	---------	------	-------	-----	---------------	-----------------	------------------	-----------------------------	-------

[Exit](#)

10-11 Reports

Some users such as Advisors and Committee Members would benefit greatly from having the ability to run reports and export those reports to files that they can manipulate on their computers individually, without making any changes to the data stored on the system. To provide this functionality, we'll have premade reports for advisors and committee members to select from, as well as the division of student should they wish to be so specific. They will then be able to export the data to excel file types or in PDF format to meet their manipulation/viewing needs.

The diagram shows a wireframe of a web application interface. At the top, there is a header bar with the word "SONAR" and three navigation icons: a left arrow, a right arrow, and a circular refresh icon. Below the header is a URL bar containing the text "http://SONAR.com/Reports". The main content area contains four input fields arranged horizontally: "Select Report Type" with a dropdown arrow, "Select Division" with a dropdown arrow, and two buttons: "Submit" and "Export". Below these fields is a large, empty rectangular box, likely a placeholder for a report preview or download link. The entire interface is enclosed in a light gray border.

12) Automatic Reporting

Some reports can be generated and delivered automatically. On this page, users will be able to sign up for weekly, monthly, or semester reports. These will be the built in reports that are available on the reports page for users to export. All an Advisor would need to do is check the box next to the report they wish to receive on regular intervals. Once this is complete, they only need hit Save and the changes will take effect.

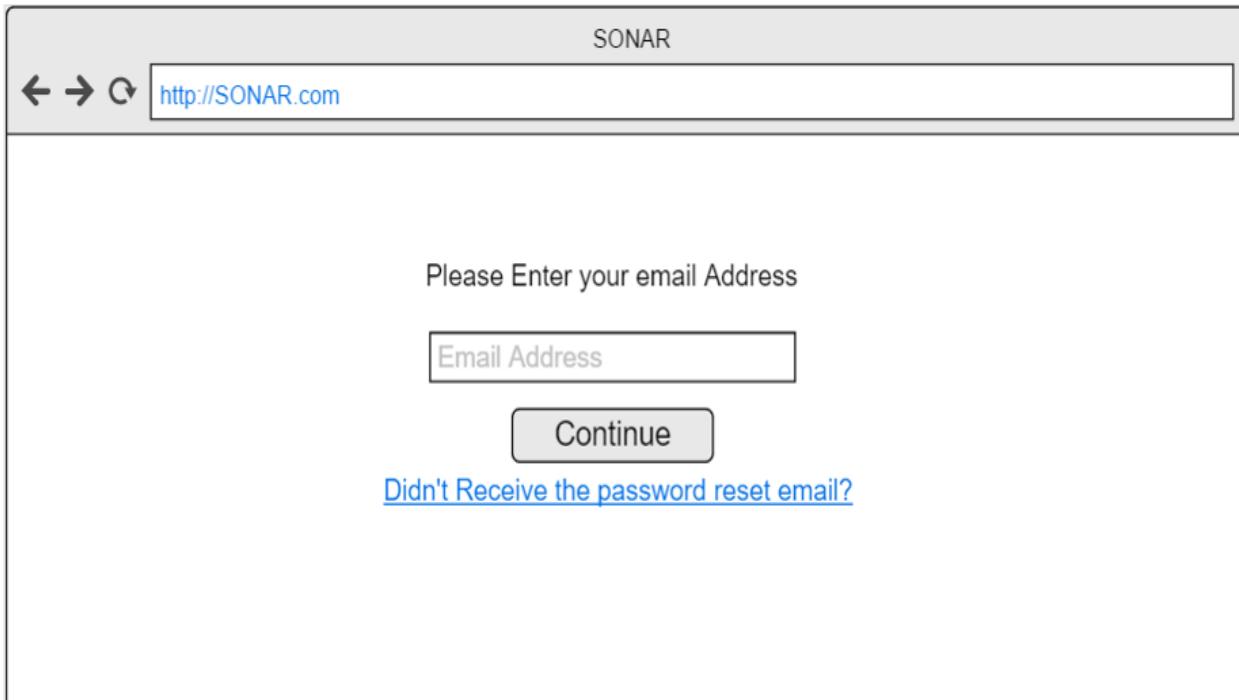
The screenshot shows a web-based application interface titled 'SONAR'. At the top, there is a header bar with navigation icons (back, forward, search) and the URL 'http://SONAR.com/'. Below the header, the main content area is titled 'Sign up for Reports'. It contains a list of five report types, each with a checkbox and a dropdown menu for frequency selection. The checked items are 'Marketing Stats' (Weekly) and 'CPR Cert Out of Compliance' (Weekly). The other three items ('Academic Probation', 'Failed 1 or More Classes', and 'NOT Registered, NOT Graduated') have their frequency set to 'Semester'. A 'Save' button is located at the bottom left of the form.

Report Type	Frequency
Academic Probation	Semester
Failed 1 or More Classes	Semester
NOT Registered, NOT Graduated	Semester
Marketing Stats	Weekly
CPR Cert Out of Compliance	Weekly

Save

13) Reset password via email

This prototype will allow any user to reset their password. They will select reset password button and enter their email address. An email with a link will be sent to them to allow them to enter their old password followed by entering a new password twice to confirm that it's the same and meets the standards for the program.



SONAR

← → ⌂ <http://SONAR.com>

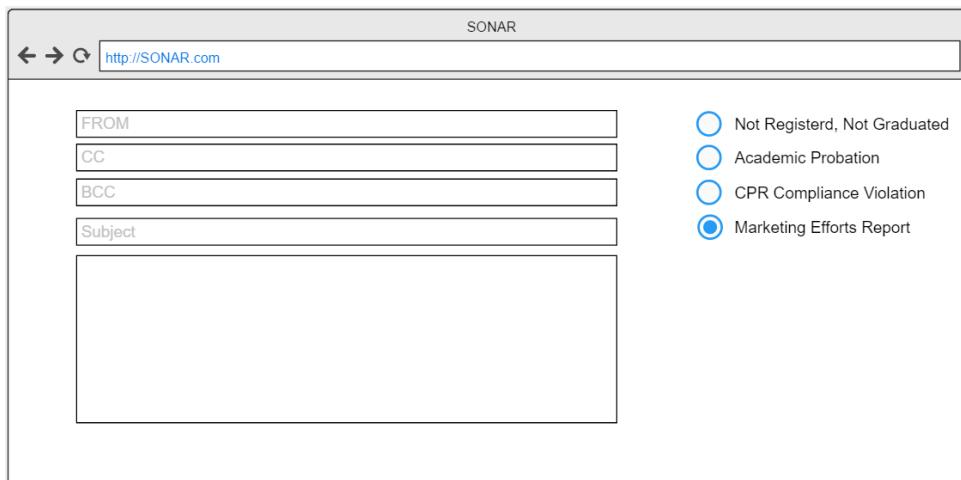
Please Enter your email Address

Email Address

Continue

[Didn't Receive the password reset email?](#)

This will allow professors, advisors and committee members to choose a pre-written template to send as an email to save them time. They will log in with their username and password then select the email tab. They will be brought to a blank email with pre-loaded email templates they can click on to be automatically dropped into a blank email. This will cut down on the time spent to type emails.



15 Track Students progress

This prototype will allow an advisor to track a student's progress through the program by running a simple query or report.

The form includes the following fields and controls:

- A dropdown menu labeled "Single Student" with a downward arrow icon.
- Text input fields for "Student ID", "First Name", and "Last Name".
- A checked checkbox labeled "Include Student Progress" with a blue checkmark icon.
- Text input fields for "Date of Birth", "Email Address", and a dropdown menu labeled "Semester" with a downward arrow icon.
- Two buttons at the bottom: "Submit" and "Clear".

16) Track graduation progress of student

Here, advisors will be able to view a student's completed classes and classes that need to be taken that are required to graduate. They will enter their credentials and select the student tab. From here they will search the student they want and be able to look at what classes they have finished and still need to finish.

Mozilla					
http://moqups.com					
▼ StudentID	▼ First Name	▼ Last Name	▼ Total Credit Hours	▼ GPA	▼ Program of Study
1122334	Tim	Mahan	60	3.0	Upper Division
▼ Classes Passed					
NURS 605	NURS 741	NURS 652	NURS 608	NURS 697	NURS 657
▼ Classes Remaining					
NURS 740	NURS 742	NURS 754	NURS 743	NURS 744	NURS 745
NURS 746	NURS 755	NURS 756	NURS 757	NURS 747	NURS 760
NURS 758	NURS 761	NURS 750	NURS 725	NURS 762	NURS 787
NURS 748	NURS 751	NURS 788	NURS 752	NURS 789	

25. Submission of application to school of nursing.

Mozilla

← → ⌂ <http://moqups.com>

First Name	Ajay
Last Name	Singh
Phone Number	502-533-8076
Email Address	apsing01@louisville.edu
Address	123 W. Main Street
City, State, and Zipcode	Louisville, KY 40202
Student ID number	1234567
Date of Birth	01/11/1994 <input type="button" value="▼"/>
Expected graduation	Fall/2017 <input type="button" value="▼"/>
GPA	3.6
Attach Files:	C:\...\Transcript.pdf

Click the check box if the information above is correct Agree

26. Track Received scholarships

Mozilla

← → ⌂ http://moqups.com

Current Students ▾

Report Type ▾

All

Admissions application

Program application

Scholarship application

Semester ▾

All

Fall

Spring

Summer

Clear

Generate

27. submit scholarships

Mozilla

← → ⌂ <http://moqups.com>

First Name	Ajay
Last Name	Singh
Phone Number	502-533-8076
Email Address	apsing01@louisville.edu
Address	123 W. Main Street
City, State, and Zipcode	Louisville, KY 40202
Student ID number	1234567
Date of Birth	01/11/1994 
Expected graduation	Fall/2017 
GPA	3.6
Attach Files:	C:\...\Transcript.pdf
Click the check box if the information above is correct <input checked="" type="checkbox"/> Agree	
<input type="button" value="Clear"/> <input type="button" value="Edit"/> <input type="button" value="Submit"/>	

Mozilla

← → ↕ <http://moqups.com>

Potential Students ▾

Report Type ▾

Semester ▾

Year ▾

All

Money Spent

Student Contact

Applications Received

Fall

Spring

Summer

All

2015

2016

2017

Clear

Generate

30. View reports for admissions decisions

Mozilla

http://moqups.com

Current Students ▾

Report Type ▾

All

Admissions application

Program application

Scholarship application

Semester ▾

All

Fall

Spring

Summer

Clear

Generate

31. Submission of application for program of study

Mozilla

← → ⌂ <http://moqups.com>

First Name	Ajay
Last Name	Singh
Phone Number	502-533-8076
Email Address	apsing01@louisville.edu
Address	123 W. Main Street
City, State, and Zipcode	Louisville, KY 40202
Student ID number	1234567
Date of Birth	01/11/1994 <input type="button" value="▼"/>
Expected graduation	Fall/2017 <input type="button" value="▼"/>
GPA	3.6
Attach Files:	C:\...\Transcript.pdf

Click the check box if the information above is correct Agree

32. Add to database storage

System admin would physically add storage to system server

Mozilla

← → ⌂ <http://moqups.com>

Current Storage Size	569.23GB
Expand to	Please enter the new size for database

Please check the box to certify new data base size is entered correctly.

33. Add Graduated students to alumni list

Mozilla

← → ⌂ <http://mockups.com>

▼ Last Name	▼ First Name	
Singh	Ajay	<input type="checkbox"/>
Reid	Harry	<input checked="" type="checkbox"/>
Doe	John	<input type="checkbox"/>
Clinton	Hillary	<input type="checkbox"/>

34. Generate email list

Moqzilla

← → ⌂ <http://moqups.com>

▼ Last Name	▼ First Name	
Singh	Ajay	<input type="checkbox"/>
Reid	Harry	<input checked="" type="checkbox"/>
Doe	John	<input type="checkbox"/>
Clinton	Hillary	<input type="checkbox"/>

[Clear](#) [Add to List](#)

35. Edit contact information for alumni

Mozilla

← → ⌂ <http://moqups.com>

First Name	Ajay
Last Name	Singh
Phone Number	502-533-8076
Email Address	apsing01@louisville.edu
Address	123 W. Main Street
City, State, and Zipcode	Louisville, KY 40202
Student ID number	1234567
Date of Birth	01/11/1994 <input type="button" value="▼"/>

36. Generate email list to ask alumni for donations

Mozilla

← → ↻ <http://mockups.com>

▼ Last Name	▼ First Name	
Singh	Ajay	<input type="checkbox"/>
Reid	Harry	<input checked="" type="checkbox"/>
Doe	John	<input type="checkbox"/>
Clinton	Hillary	<input type="checkbox"/>

[Clear](#) [Add to List](#)

Edit Upper Division Student: 38

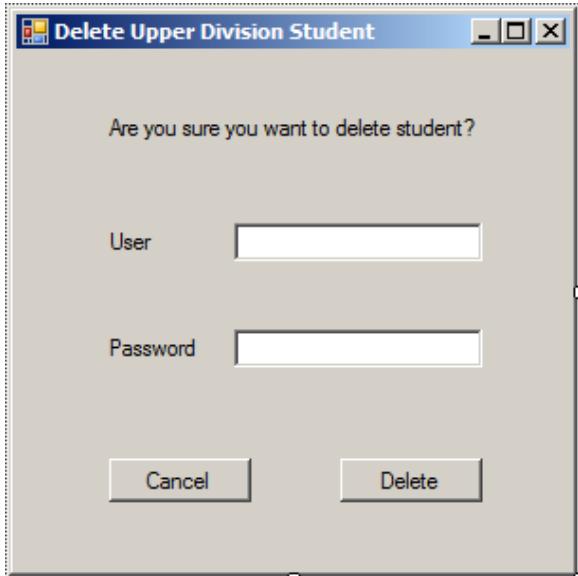
Advisor will input/edit following information to update student in the database.

Edit Upper Division Student

Student ID	<input type="text"/>	<input type="checkbox"/> FAFSA
University E-mail	<input type="text"/>	<input type="checkbox"/> SAR
First Name	<input type="text"/>	<input type="checkbox"/> NSF Application
MI	<input type="text"/>	<input type="checkbox"/> CPR Certification
Last Name	<input type="text"/>	<input type="checkbox"/> HIPAA Training Courses
Address	<input type="text"/>	<input type="checkbox"/> Bloodborne Pathogen Compliance
	<input type="text"/>	<input type="checkbox"/> Professional Liability Insurance
City	<input type="text"/>	<input type="checkbox"/> Immunization Compliance
State	<input type="text"/>	<input type="checkbox"/> Drug Screening
Zip Code	<input type="text"/>	<input type="radio"/> MEPN (MSN) <input type="radio"/> DNP <input checked="" type="radio"/> PhD
Primary Phone Number	<input type="text"/>	Anticipated Graduation Date <input type="text"/>
Secondary Phone Number	<input type="text"/>	Notes <input type="text"/>
<input type="button" value="Save"/> <input type="button" value="Delete"/>		

Delete Upper Division Student: 39

Advisor will input their user name and password to delete student from database.



Create Lower Division Student: 40

Advisor will input following information to create student in the database.

Add Lower Division Student

Student ID	<input type="text"/>	<input type="checkbox"/> FAFSA
University E-mail	<input type="text"/>	<input type="checkbox"/> SAR
First Name	<input type="text"/>	<input type="checkbox"/> NSF Application
MI	<input type="text"/>	<input type="checkbox"/> CPR Certification
Last Name	<input type="text"/>	<input type="checkbox"/> HIPAA Training Courses
Address	<input type="text"/>	<input type="checkbox"/> Bloodborne Pathogen Compliance
City	<input type="text"/>	<input type="checkbox"/> Professional Liability Insurance
State	<input type="text"/>	<input type="checkbox"/> Immunization Compliance
Zip Code	<input type="text"/>	<input type="checkbox"/> Drug Screening
Primary Phone Number	<input type="text"/>	<input type="radio"/> Traditional BSN <input type="radio"/> RN BSN
Secondary Phone Number	<input type="text"/>	<input type="radio"/> Full-Time Enrollment <input type="radio"/> Part-Time Enrollment
Anticipated Graduation Date <input type="text"/>		
Notes <input type="text"/>		
<input type="button" value="Reset"/> <input type="button" value="Create"/>		

Edit Lower Division Student: 41

Advisor will input/edit following information to update student in the database.

Edit Lower Division Student

Student ID	<input type="text"/>	<input type="checkbox"/> FAFSA
University E-mail	<input type="text"/>	<input type="checkbox"/> SAR
First Name	<input type="text"/>	<input type="checkbox"/> NSF Application
MI	<input type="text"/>	<input type="checkbox"/> CPR Certification
Last Name	<input type="text"/>	<input type="checkbox"/> HIPAA Training Courses
Address	<input type="text"/>	<input type="checkbox"/> Bloodborne Pathogen Compliance
City	<input type="text"/>	<input type="checkbox"/> Professional Liability Insurance
State	<input type="text"/>	<input type="checkbox"/> Immunization Compliance
Zip Code	<input type="text"/>	<input type="checkbox"/> Drug Screening
Primary Phone Number	<input type="text"/>	<input type="radio"/> Traditional BSN <input type="radio"/> RN BSN
Secondary Phone Number	<input type="text"/>	<input type="radio"/> Full-Time Enrollment <input type="radio"/> Part-Time Enrollment
Anticipated Graduation Date <input type="text"/>		
Notes <input type="text"/>		
<input type="button" value="Save"/> <input type="button" value="Delete"/>		

Delete Lower Division Student: 42

Advisor will input their user name and password to delete student from database.



Create Perspective Student: 43

Advisor will input following information to create student in the database.

Add Perspective Student

First Name	<input type="text"/>	Already completed...
MI	<input type="text"/>	<input type="checkbox"/> FAFSA
Last Name	<input type="text"/>	<input type="checkbox"/> SAR
Address	<input type="text"/>	<input type="checkbox"/> NSF Application
City	<input type="text"/>	<input type="checkbox"/> CPR Certification
State	<input type="text"/>	<input type="checkbox"/> HIPAA Training Courses
Zip Code	<input type="text"/>	<input type="checkbox"/> Bloodborne Pathogen Compliance
Primary Phone Number	<input type="text"/>	<input type="checkbox"/> Professional Liability Insurance
Secondary Phone Number	<input type="text"/>	<input type="checkbox"/> Immunization Compliance
E-mail	<input type="text"/>	<input type="checkbox"/> Drug Screening
Student ID	<input type="text"/>	Interested in...
Heard about program from...	<input type="checkbox"/> Billboard	<input type="checkbox"/> Traditional BSN
	<input type="checkbox"/> Website	<input type="checkbox"/> RN BSN
	<input type="checkbox"/> High School	<input type="checkbox"/> MEPN (MSN)
Other	<input type="text"/>	<input type="checkbox"/> DNP
		<input type="checkbox"/> PhD
		<input type="radio"/> Full-Time Enrollment <input type="radio"/> Part-Time Enrollment
		Anticipated Graduation Date <input type="text"/>
		Notes <input type="text"/>
	<input type="button" value="Reset"/>	<input type="button" value="Create"/>

Edit Perspective Student: 44

Advisor will input/edit following information to update student in the database.

Edit Perspective Student

First Name	<input type="text"/>
MI	<input type="text"/>
Last Name	<input type="text"/>
Address	<input type="text"/> <input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Zip Code	<input type="text"/>
Primary Phone Number	<input type="text"/>
Secondary Phone Number	<input type="text"/>
E-mail	<input type="text"/>
Student ID	<input type="text"/>
Heard about program from...	
<input type="checkbox"/> Billboard <input type="checkbox"/> Website <input type="checkbox"/> High School Other <input type="text"/>	
Already completed...	
<input type="checkbox"/> FAFSA <input type="checkbox"/> SAR <input type="checkbox"/> NSF Application <input type="checkbox"/> CPR Certification <input type="checkbox"/> HIPAA Training Courses <input type="checkbox"/> Bloodborne Pathogen Compliance <input type="checkbox"/> Professional Liability Insurance <input type="checkbox"/> Immunization Compliance <input type="checkbox"/> Drug Screening	
Interested in...	
<input type="checkbox"/> Traditional BSN <input type="checkbox"/> RN BSN <input type="checkbox"/> MEPN (MSN) <input type="checkbox"/> DNP <input type="checkbox"/> PhD <input type="radio"/> Full-Time Enrollment <input type="radio"/> Part-Time Enrollment Anticipated Graduation Date <input type="text"/>	
Notes	
<input type="button" value="Save"/> <input type="button" value="Delete"/>	

Delete Perspective Student: 45

Advisor will input their user name and password to delete student from database.



Create Graduate: 46

Advisor will input following information to create student in the database.

Add Graduate

First Name	<input type="text"/>	Graduation Details
MI	<input type="text"/>	<input type="checkbox"/> Traditional BSN <input type="checkbox"/> RN BSN
Last Name	<input type="text"/>	<input type="checkbox"/> MEPN (MSN) <input type="checkbox"/> DNP <input type="checkbox"/> PhD
Address	<input type="text"/>	Graduation Date <input type="text"/>
City	<input type="text"/>	Career Details
State	<input type="text"/>	Employer <input type="text"/>
Zip Code	<input type="text"/>	Salary Range <input type="text"/>
Primary Phone Number	<input type="text"/>	Notes <input type="text"/>
Secondary Phone Number	<input type="text"/>	
E-mail	<input type="text"/>	
Student ID	<input type="text"/>	

Reset **Create**

Edit Graduate: 47

Advisor will input/edit following information to update student in the database.

Edit Graduate

First Name	<input type="text"/>	Graduation Details	<input type="checkbox"/> Traditional BSN <input type="checkbox"/> RN BSN <input type="checkbox"/> MEPN (MSN) <input type="checkbox"/> DNP <input type="checkbox"/> PhD Graduation Date <input type="text"/>
MI	<input type="text"/>		
Last Name	<input type="text"/>		
Address	<input type="text"/> <input type="text"/>		
City	<input type="text"/>		
State	<input type="text"/>		
Zip Code	<input type="text"/>		
Primary Phone Number	<input type="text"/>		
Secondary Phone Number	<input type="text"/>		
E-mail	<input type="text"/>		
Student ID	<input type="text"/>		
		Save	Delete
Notes <input type="text"/>			

Delete Graduate: 48

Advisor will input their user name and password to delete student from database.



When the system is designed, there will be an Admin account created for the initial setup purposes. In order to ensure the administrative role can change hands, and to provide support for multiple administrator accounts (should the school ever need it) the SONAR system will need a page for creating admin users. Below is the flow describing how to complete this task.

Mozilla
http://moqups.com

Homepage	Import	Manage Users	Backups	Security Settings	Log Out
Username:	Username		Select User		
Password:	Username				
Firstname:	Username				
Lastname:	Username				
Phone Number:	Username				
Secondary Phone number:	Username				
EmployeeID:	Username				
Address:	Username				
City:	Username				
State:	Username				
Zip:	Username				
			Create User	Cancel	

Professor accounts will need to be created in order to allow the professors using the system to upload grades to it.

The screenshot shows a web-based application interface for creating a new user account. The title bar reads "Mozilla" and the address bar shows "http://moqups.com". The main content area is a form titled "Create User". It contains the following fields:

Field	Type	Value
Username	Text input	Username
Password	Text input	Username
Firstname	Text input	Username
Lastname	Text input	Username
Phone Number	Text input	Username
Secondary Phone number	Text input	Username
EmployeeID	Text input	Username
Address	Text input	Username
City	Text input	Username
State	Text input	Username
Zip	Text input	Username

At the bottom of the form are two buttons: "Create User" and "Cancel".

Advisor accounts will need to be created in order to grant SON advisors access to the system and the ability to create, update, and delete students. As well as track student progress and pull reports.

The screenshot shows a web-based application interface for creating a new user account. The title bar reads "Mozilla" and the URL is "http://moqups.com". The top navigation menu includes "Homepage", "Import", "Manage Users", "Backups", "Security Settings", and "Log Out". Below the menu, there is a form with the following fields:

Username:	<input type="text" value="Username"/>	Select User
Password:	<input type="text" value="Username"/>	
Firstname:	<input type="text" value="Username"/>	
Lastname:	<input type="text" value="Username"/>	
Phone Number:	<input type="text" value="Username"/>	
Secondary Phone number:	<input type="text" value="Username"/>	
EmployeeID:	<input type="text" value="Username"/>	
Address:	<input type="text" value="Username"/>	
City:	<input type="text" value="Username"/>	
State:	<input type="text" value="Username"/>	
Zip:	<input type="text" value="Username"/>	

At the bottom of the form are two buttons: "Create User" and "Cancel".

Advisor accounts will need to be created in order to grant SON advisors access to the system and the ability to create, update, and delete students. As well as track student progress and pull reports. The following describes how Advisors are to be created.

Mozilla
http://moqups.com

Homepage Import Manage Users Backups Security Settings Log Out

Username: Select User

Password:

Firstname:

Lastname:

Phone Number:

Secondary Phone number:

EmployeeID:

Address:

City:

State:

Zip:

Create User Cancel

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

The form fields are as follows:

- Username:
- Password:
- Firstname:
- Lastname:
- Phone Number:
- Secondary Phone number:
- EmployeeID:
- Address:
- City:
- State:
- Zip:

Buttons at the bottom:

- Create User
- Cancel

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

The form fields are as follows:

- Username:
- Password:
- Firstname:
- Lastname:
- Phone Number:
- Secondary Phone number:
- EmployeeID:
- Address:
- City:
- State:
- Zip:

Buttons at the bottom:

- Create User
- Cancel

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

The form is a wireframe representation of a user management interface. It includes:

- Navigation: Homepage, Import, Manage Users, Backups, Security Settings, Log Out.
- User Selection: Select User dropdown.
- Input Fields (placeholder: Username):
 - Username
 - Password
 - Firstname
 - Lastname
 - Phone Number
 - Secondary Phone number
 - EmployeeID
 - Address
 - City
 - State
 - Zip
- Action Buttons: Create User, Cancel.

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

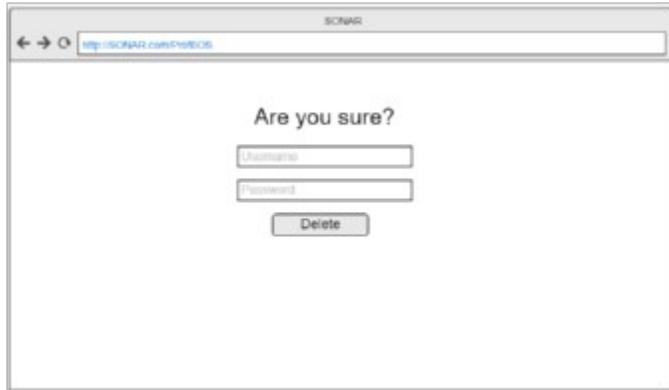
The form fields are as follows:

- Username:
- Password:
- Firstname:
- Lastname:
- Phone Number:
- Secondary Phone number:
- EmployeeID:
- Address:
- City:
- State:
- Zip:

Buttons at the bottom:

- Create User
- Cancel

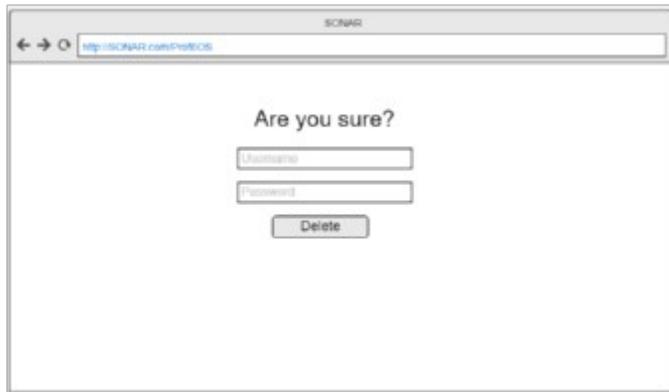
It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will 'delete' the admin from the system. This will effectively turn off the administrator's access, and their login will no longer function.



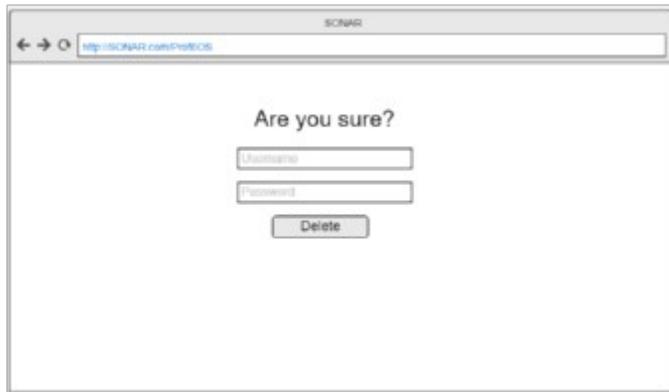
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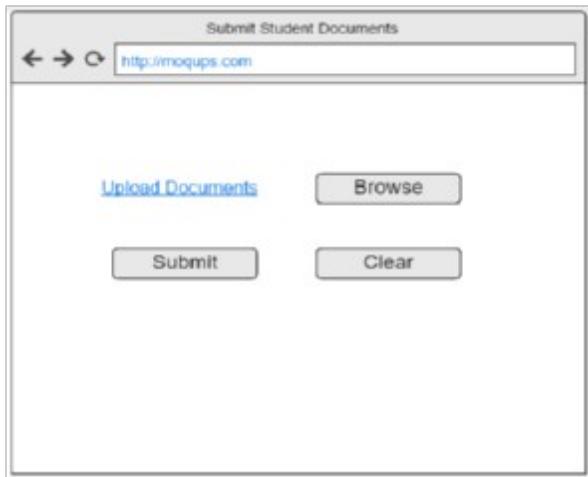
It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will 'delete' the admin from the system. This will effectively turn off the administrator's access, and their login will no longer function.



It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will ‘delete’ the admin from the system. This will effectively turn off the administrator’s access, and their login will no longer function.



Students will periodically need to upload documents to the system for Advisors to review. The flow below describes how students will upload documents for Advisors to review.



Prospective Students interested in enrolling in the school of nursing will need a way to find out more information about the school, and need a way to schedule visits with the school in order to get a feel for the program. This describes how a prospective student would create an account.

The form is titled "Mozilla" at the top right. At the top left are navigation icons: back, forward, and refresh. The URL bar shows "http://moqups.com". The form itself has four input fields labeled "Username", "Password", "Firstname", and "Lastname", each with a placeholder "Username". To the right of the first three fields is a dropdown menu labeled "Select User" with a downward arrow icon. At the bottom are two buttons: "Create" on the left and "Cancel" on the right.

63) Update Prospective Student

Prospective Students who have created accounts may need to change their information after the account has been created.

The screenshot shows a web-based application window titled "Mozilla". The URL bar at the top displays "http://moqups.com". Below the title bar is a navigation menu with links: "Homepage", "Import", "Manage Users", "Backups", "Security Settings", and "Log Out". The main content area contains a form for creating a new user. The form fields are as follows:

Username:	<input type="text" value="Username"/>	Select User <input type="button" value="▼"/>
Password:	<input type="text" value="Username"/>	
Firstname:	<input type="text" value="Username"/>	
Lastname:	<input type="text" value="Username"/>	
Phone Number:	<input type="text" value="Username"/>	
Secondary Phone number:	<input type="text" value="Username"/>	
EmployeeID:	<input type="text" value="Username"/>	
Address:	<input type="text" value="Username"/>	
City:	<input type="text" value="Username"/>	
State:	<input type="text" value="Username"/>	
Zip:	<input type="text" value="Username"/>	

At the bottom of the form are two buttons: "Create User" and "Cancel".

64) Delete Prospective Student

To keep Prospective Student accounts from taking up more space than necessary on the SONAR system, advisors will have the ability to delete them from the system after a certain period of inactivity in a mass delete.



65) Sign Up for Visits

66) Create Donor

Donors interested in enrolling in the school of nursing will need a way to find out more information about the school, and need a way to schedule visits with the

school in order to get a feel for the program. This describes how a Donor would create an account.

The image shows a wireframe of a web browser window. The title bar says "Mozilla". The address bar has arrows and the URL "http://moqups.com". The main content area contains a form with the following fields:

- Username:
- Select User:
- Password:
- Firstname:
- Lastname:

At the bottom are two buttons: "Create" and "Cancel".

67) Update Donor

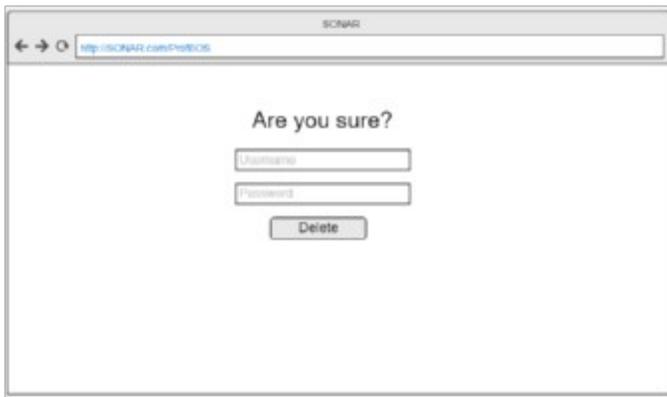
Donors who have created accounts may need to change their information after the account has been created.

The screenshot shows a web-based application window titled "Mozilla". At the top, there are navigation icons (back, forward, search) and a URL bar containing "http://moqups.com". Below the header is a horizontal menu bar with links: "Homepage", "Import", "Manage Users" (which is the active tab), "Backups", "Security Settings", and "Log Out". The main content area contains a form for creating a new user. The form fields are as follows:

Username:	<input type="text" value="Username"/>	Select User <input type="button" value="▼"/>
Password:	<input type="text" value="Username"/>	
Firstname:	<input type="text" value="Username"/>	
Lastname:	<input type="text" value="Username"/>	
Phone Number:	<input type="text" value="Username"/>	
Secondary Phone number:	<input type="text" value="Username"/>	
EmployeeID:	<input type="text" value="Username"/>	
Address:	<input type="text" value="Username"/>	
City:	<input type="text" value="Username"/>	
State:	<input type="text" value="Username"/>	
Zip:	<input type="text" value="Username"/>	

At the bottom of the form are two buttons: "Create User" and "Cancel".

To keep Donor accounts from taking up more space than necessary on the SONAR system, advisors will have the ability to delete them from the system after a certain period of inactivity in a mass delete.



Requirements

1. Login Screen

2. Eligibility management system will allow professors to submit pass/fail status for each student.
3. The database will meet the needs of the advisors for monitoring students.
4. System will let the SON management to run queries on database for decision making.
5. The database will allow advisors to create new queries.
6. System will have the ability to import CSV files from other programs.
7. The system will be able to generate reports for the advisors.
8. System will allow admissions committee to run reports to facilitate decision making.
9. The system will allow for automatic reporting to advisors.
10. The system will have the ability to export data into CSVs .
11. The system will allow advisors to update student records.
12. The system will have the ability for advisors to enter student information manually.
13. The system will allow the system administrator to create new system users.
14. Password reset through email.
15. The system will send automatically generated email alerts to students
16. The system will generate email templates for advisors to send to students.
17. The system will allow advisors to track student progress.
18. The system will allow student for submit their applications to the school of nursing.
19. The system will let inform advisors when students have received scholarships.
20. The system will allow students to submit applications for scholarships.
21. The system will provide advisors the ability to track marketing efforts.
22. The system will allow students to fill out an application to the school of nursing online.
23. The system will expansion capabilities, allowing for system admin to increase database storage.
24. The system will be able to add graduated students to the alumni list.
25. The system will generate emails to send to the alumni for updating contact information for the advisors.
26. The system will allow advisors to manually update alumni contact information from received email.
27. The system will generate an email list of alumni to ask for donations.
28. The Administrators will be able to backup the system database
29. The administrators will be able to restore the system database
30. The system will be secured per University regulations.

Data Dictionaries

Data dictionaries are simply used to list the fields (columns) a table will have as well as the information regarding each field. In the following dictionaries, we include the field name, a brief description of what the field represents, the size of the field (for calculating storage requirements), and finally whether a field is the unique identifier (primary key, or PK) in the table and/or whether the field is a unique identifier (foreign key, or FK) in another table.

Admissions Application

Attribute	Definition	Type of	Size	PK/FK
-----------	------------	---------	------	-------

Type	Attribute		
Application Number	Unique identifier for admissions application submitted	int	4 Pk
StudentID	Identifier to identify individual students saved in the database.	uint	4 FK
First Name	Common Name for the user	varchar	10
MI	Middle initial of user. Can be used to identify users who might have the same first and last name.	varchar	1
Last Name	Surname of the user	varchar	10
Email	Primary email that can be used for sending out notifications	varchar	30
Address	Physical address of the user for mailing purposes.	varchar	30
City	City in which the donor resides.	varchar	20
State	2 letter abbreviation for the state that user resides in.	varchar	2
Zipcode	Zip code for the physical address of the user	uint	4
Phone Number	Primary phone number where student can be reached.	uint	4
GPA	Grade point average for the student that will be used in the decision making process.	decimal	16
ACT Score	ACT score for the student	short	2
SAT Score	SAT score for student	short	2
Notes	Field to enter details on anything else not listed in the preceding attributes.	varchar	500

Scholarship Application

Attribute Type	Definition	Type of Attribute	Size	PK/FK
ScholarshipAp pID	Identifier for each application submitted by the student	int	4	PK
StudentID	Identifier to identify individual students saved in the database.	uint	4	FK
First Name	Common Name for the user	varchar	10	
MI	Middle initial of user. Can be used to identify users who might have the same first and last name.	varchar	1	
Last Name	Surname of the user	varchar	10	
Email	Primary email that can be used for sending out notifications	varchar	30	
Address	Physical address of the user for mailing purposes.	varchar	30	
City	City in which the donor resides.	varchar	20	
State	2 letter abbreviation for the state that	varchar	2	

	user resides in.		
Zipcode	Zip code for the physical address of the user	uint	4
Phone Number	Primary phone number where student can be reached.	uint	4
GPA	Grade point average for the student that will be used in the decision-making process.	decimal	16
Expected Graduation	Expected graduation date for the student	date	4
Notes	Field to enter details on anything else not listed in the preceding attributes.	varchar	500

Marketing
type

Attribute Type	Definition	Type of Attribute	Size	PK/FK
MarketingTypeID	Unique number to identify each marketing type	Short	2	PK
TypeName	Descriptive name of each marketing type.	varchar	15	

Student
Type

Attribute Type	Definition	Type of Attribute	Size	PK/FK
Student Type ID	Unique number to identify each student type	Short	2	PK
Student type name	Name of the student type	varchar	15	
Description	Brief description of the Student type	varchar	100	

Courses

Attribute Type	Definition	Type of Attribute	Size	PK/FK
CourseID	Unique number to identify each course	Short	2	PK
Course Name	Descriptive Name of the course	varchar	15	
Department	Name of the department the course will be listed under	varchar	15	

Email template Type

Attribute Type	Definition	Type of Attribute	Size	PK/FK
EmailTemplateID	Unique number to identify each email template	Short	2	PK
Email Template Namee	Name of the email template	varchar	15	
Description	Brief description of the email template and possible use scenarios.	varchar	100	

Alumni Member

Attribute Type	Definition	Type of Attribute	Size	PK/FK
----------------	------------	-------------------	------	-------

Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
Email Address	Used to contact the Donor in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Lastname	Surname of the user	Varchar	25	
Phone number	Telephone/cellphone contact of the user	Varchar	15	
Street Address	The physical address of the users residence	Varchar	30	
City	City in which the donor	Varchar	15	
	State in which the donor	Char	2	

	currently resides		
State	Zip code where the donor currently resides	Char	5
Zip Code	Helps University keep track of where their student go to work after graduating	Varchar	20
Place of Work	Title of the current position held by the alumni	Varchar	15
Current Position	Identifier to uniquely identify student in the system	Int	4
StudentID			FK

Committee Member

Attribute Type	Definition	Type of Attribute	Size	PK/FK
----------------	------------	-------------------	------	-------

Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
EmployeeID	Identifier for each employee	int	4	
Email Address	Used to contact the Member in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Middle Initial	Middle name initial for the committee member	Char	1	
Lastname	Surname of the user	Varchar	25	
Primary Phone	Telephone/cellphone contact of the user	Varchar	10	

number	Telephone/cellph one contact of the user	varchar	10
Secondary Phone number	The physical address of the users residence	Varchar	30
Street Address	City in which the member	Varchar	15
City	State in which the member currently resides	Char	2
State	Zip code where the member currently resides		
Zip Code	Information about the admin responsible for creating the user	Char	5
CreatedByID		Varchar	15
			FK

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SONAR

Donor Class

Attribute Type	Definition	Type of Attribute	Size	PK/FK
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Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
Email Address	Used to contact the Donor in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Lastname	Surname of the user	Varchar	25	
Phone number	Telephone/cellphone contact of the user	Varchar	15	
Street Address	The physical address of the users residence	Varchar	30	
City	City in which the donor	Varchar	15	
	State in which the donor	Char	2	

currently resides

State

Zip code where
the donor
currently resides Char 5

Zip Code

Professor

Attribute Type	Definition	Type of Attribute	Size	PK/FK
Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
EmployeeID	Identifier for each employee	int	4	
Email Address	Used to contact the professor in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Middle Initial	Middle name initial for the professor	Char	1	
Lastname	Surname of the user	Varchar	25	
	Telephone/cell phone contact of			

	the user	Varchar	10	
Primary Phone number	Telephone/cell phone contact of the user	varchar	10	
Secondary Phone number	The physical address of the users residence	Varchar	30	
Street Address	City in which the professor resides	Varchar	15	
City	State in which the professor currently resides	Char	2	
State	Zip code where the professor currently resides			
Zip Code	Information about the admin responsible for creating the user	Char	5	
		Varchar	15	FK
CreatedByID				

Prospective Students

Attribute Type	Definition	Type of Attribute	Size	PK/FK
Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
Email Address	Used to contact the Student in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Lastname	Surname of the user	Varchar	25	
Phone number	Telephone/cellphone contact of the user	Varchar	15	
Street Address	The physical address of the users residence	Varchar	30	
	City in which the student	Varchar	15	

City	State in which the student currently resides	Char	2	
State	Zip code where the student currently resides	Char	5	
Zip Code	Form of marketing responsible for bringing in prospective student	Varchar	10	FK
MarketingTyp eID				

Semester

Attribute Type	Definition	Type of Attribute	Size	PK/FK
-------------------	------------	----------------------	------	-------

SemesterName	This identifies which semester we're talking about, it will be denoted by a scheme similar to F16 for Fall 2016, or SU17 for Summer 2017	Varchar	4	PK
Year	Year the Semester takes place	Char	4	
Season	Season the semester will take place in.	Varchar	6	

Certs Check List

Attribute Type	Definition	Type of Attribute	Size	PK/FK
CertID	Unique Identifier for specific instances of certifications tracked in the database	Int	4	PK
CertExpiration	Date the Certification Expires	Date/time		
StudentID (username)	Unique identifier for tying students to the certifications they upload			FK
CertTypeID	Unique Identifier that indicates the type of certificate a student has uploaded.			FK

Advisor

Attribute Type	Definition	Type of Attribute	Size	PK/FK
UserName	This is the identifier used to log users in to the system	Varchar	20	PK
Password	Used to authenticate users when they log into the system	Varchar	20	
Firstname	The common name of the user	Varchar	20	
Lastname	Surname of the user	Varchar	20	
EmployeeID	Identifier for each employee	Int	4	
Email	Used to log users in and contact them when necessary	Varchar	30	
MiddleInitial	Middle name intiial for the	Char	1	

advisor

Address	The physical address of the users residence	Varchar	30	
City	City in which the student	Varchar	15	
State	State in which the student currently resides	Char	2	
Zip	Zip code where the student currently resides	Uint	4	
PrimaryPhone	Telephone/cellphone contact of the user	Varchar	15	
SecondaryPhone	Secondary telephone/cellphone contact of the user	Varchar	15	
CreatedByID	Administrator that created the advisor	Varchar	30	FK

FinancialAidCheckList

Attribute Type	Definition	Type of Attribute	Size (Bytes)	PK/F K
AidID	Identifier of the specific type of aid	Char	8	PK
AidName	Descriptive name of financial aid Year that aid is offered	Varchar	36	

SchoolYear	Unique identifier given by university	Char	8	
StudentID		Char	14	FK

Prospective Student Visits

Attribute Type	Definition	Type of Attribute	Size (Bytes)	PK/F K
VisitID	6 digit code of that will uniquely identify date	Char	12	PK
VisitDate	Date that the visit will take place Time that the visit will take place	Date	3	

VisitTime	User name of the prospective student that will be visiting	Time	5	
ProspectiveStudentUse name		Varchar	36	FK

Classes Enrollment

Attribute Type	Definition	Type of Attribute	Size (Bytes)	PK/F K
ClassID	4 character ID that is used on the 'Schedule of Classes' in ULINK	Char	8	PK
CourseID	Code that is used to describe course type, ex: CIS300	Varchar	14	FK

CreditHours	Number of hours that the course is worth Number of the section as used in ULINK and Blackboard	Int	4		
Section	University ID given to student ID assigned to professor	Char	8		
StudentID	Building the class takes place	Char	14	FK	
ProfessorID	Room number where class takes place	Char	14		FK
Buidling	Time class starts	Varchar	45		
RoomNumber	The semester that the class will take place, ex: Fal2017	Varchar	15		
StartTime		Time	8		
SemesterName		Varchar	14		FK

Administrator

Attribute Type	Definition	Type of Attribute	Size (Bytes)	PK/F K
CreatedByID	ID created to uniquely identify each administrator	Char	12	PK
UserName	Unique identifier created so each admin can log in	Varchar	36	
Password	Unique password created so each admin can log in	Varchar	36	

FirstName	Admin's first name	Varchar	36	
MiddleInitial	Admin's middle initial	Char	2	
LastName	Admin's last name	Varchar	36	
EmployeeID	Admin's UofL employee ID	Char	14	
Email	Admin's email address	Varchar	90	FK
Address	Admin's address	Varchar	90	
City	Admin's city	Varchar	45	
State	Admin's state	Varchar	45	
Zip	Admin's zip code	Char	4	
PrimaryPhone	Admin's phone number	Char	10	
SecondaryPhone	Admin's secondary phone number	Char	20	
		Char	20	

CertType

Attribute Type	Definition	Type of Attribute	Size (Bytes)	PK/FK
CertTypeID	Identifies category that certification falls under Name of the type of certification	Char	4	PK
CertTypeName		Varchar	30	

Students

Attribute Type	Definition	Type of Attribute	Size	PK/FK
----------------	------------	-------------------	------	-------

Username	This is the identifier used to log users in to the system	Varchar	20	PK
Password	This is the key used to log users in to the system	Varchar	20	
Email Address	Used to contact the Student in the future	Varchar	30	
Firstname	The common name of the user	Varchar	20	
Lastname	Surname of the user	Varchar	25	
Phone number	Telephone/cellph one contact of the user	Varchar	15	
Street Address	The physical address of the users residence	Varchar	30	
City	City in which the student	Varchar	15	
	State in which the student	Char	2	

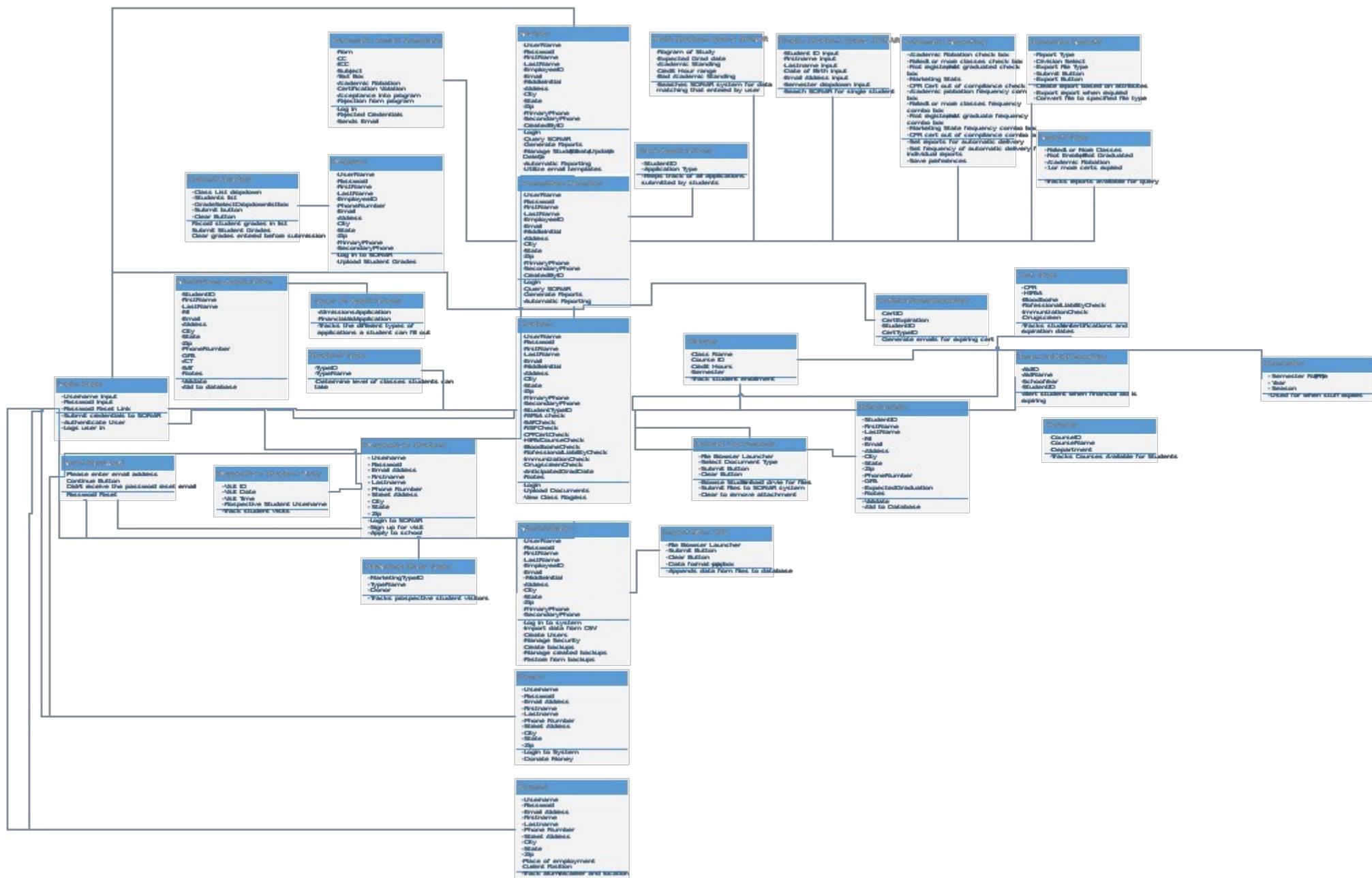
	currently resides		
State	Zip code where the student currently resides	Char	5
Zip Code	Options like Upper division, lower division, etc. that help determine the program of study	Varchar	FK
Student Type	Assigns student to a particular advisor	Varchar	20
Advisor			FK

Class Diagram

This is a visual representation of all the classes our system will include. A class is essentially the blueprint for an object (objects would be things like students, professors, admissions applications and so on). This blueprint lists every attribute an object can have, and is used directly to create objects when the system is running. The classes within a class diagram list the class name at the top, followed by the attributes in the next section, and in the last section each class lists the methods (actions) available to each object of a particular class. The following is the class diagram we have put together for the SONAR system:

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ERD

An Entity Relationship Diagram represent all the tables that will be present within the database of our system. Each table in the diagram contains the table name, as well as the attributes for each class. The difference between an ERD and a Class Diagram is that an ERD does not list the actions an object of a certain class will be able to take, but rather the keys (primary and foreign) within each table of the database. A primary key (denoted with PK) is the unique identifier for a specific table. A foreign key (denoted with FK) is a unique identifier (primary key) in another table. By giving each table a uniquely identifiable attribute, and placing the same attribute in other tables, we create relationships among the tables. The relationships created with these keys can vary. If you look at a table, and follow a line coming out of it (representing the relationship with another table) to the connecting table, you will see one of several things:



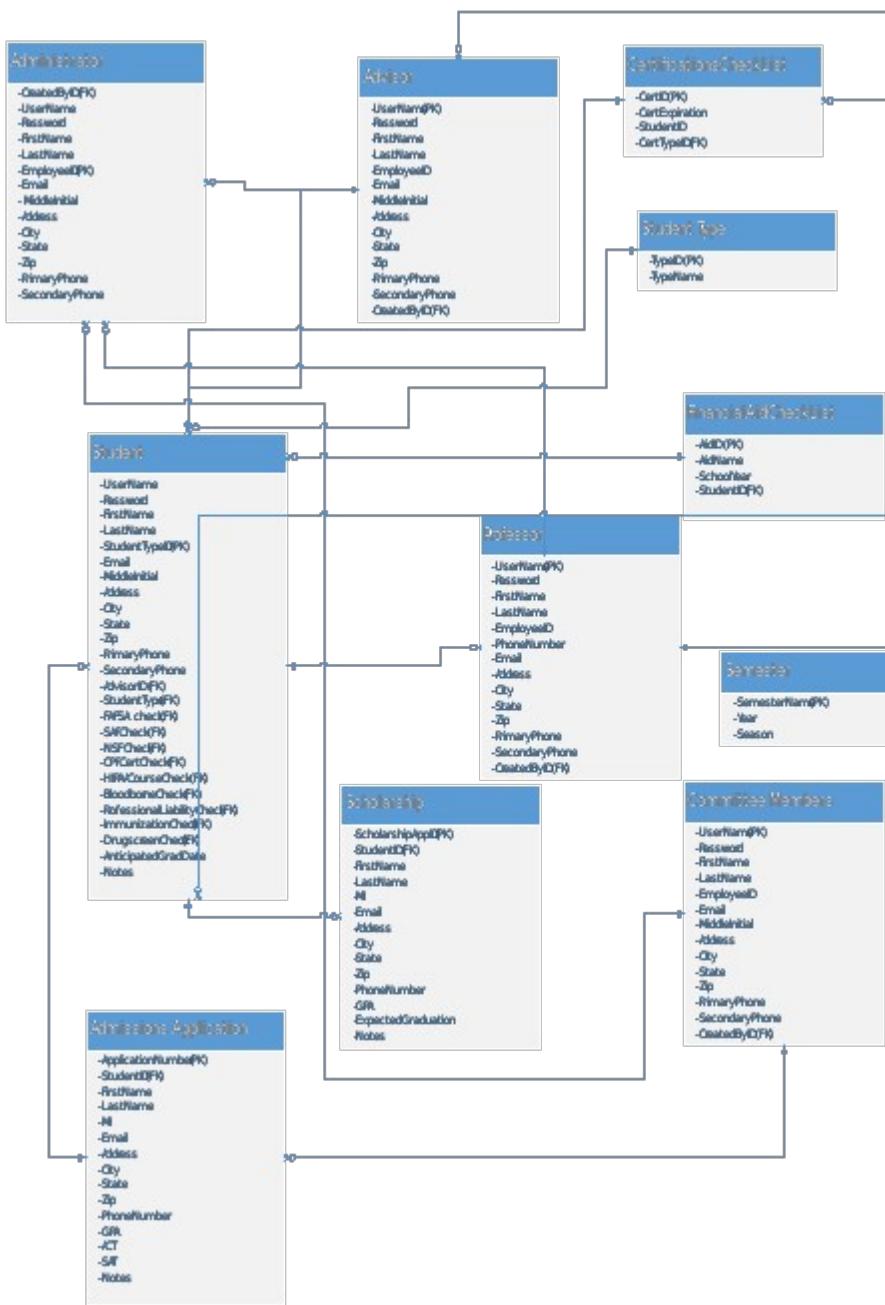
- - This represent a zero to many relationship, think of it this way, a professor may teach zero to many students in a semester depending on what they are doing.



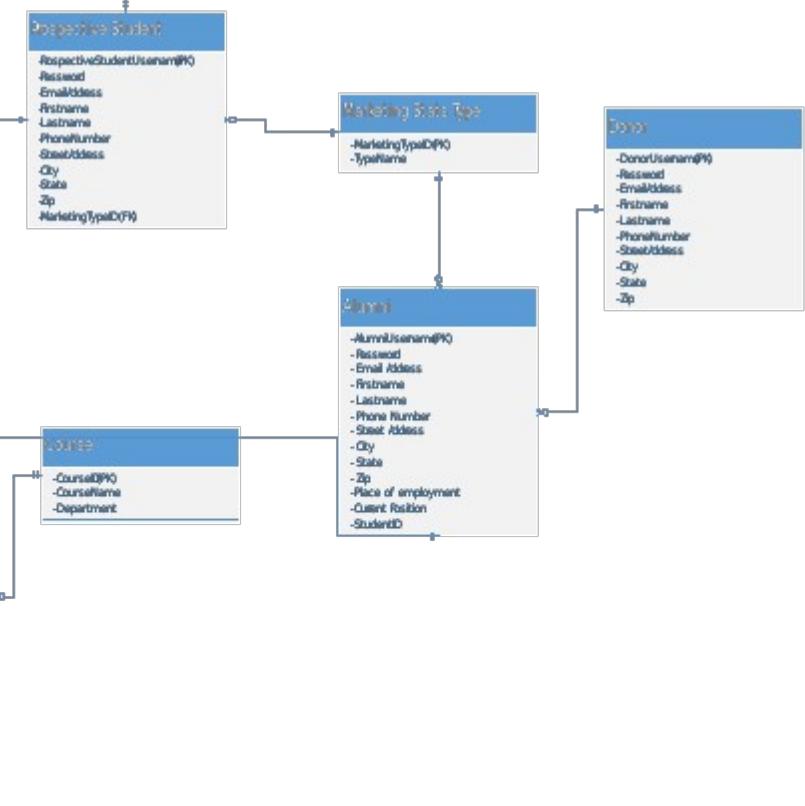
- - This represent a 1 and only 1 relationship, think of it this way, a student can be one, and only one, kind of student (an example would be a lower division student, a student cannot be both an upper division student AND a lower division student at the same time.)

The following is our ERD for the SONAR system.

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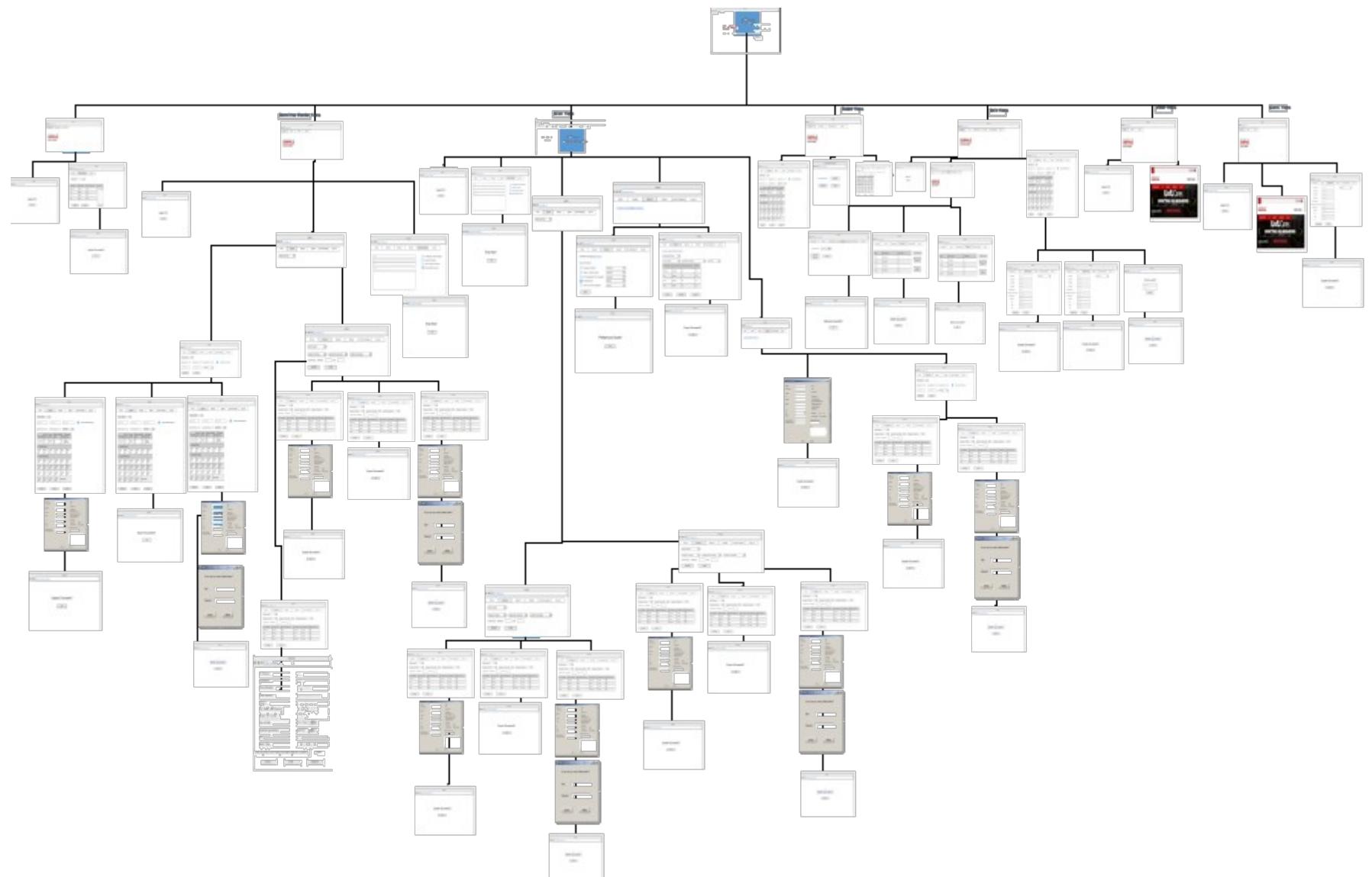


WND

The Window Navigation Diagram is a simple layout of the navigation options possible for a user of the system. Our diagram shows forms, which would be actual web pages (see the prototypes section for examples) that accept input, and the act on it. The outputs are the results of users such as advisors using the forms within the system. The following is a simple Window Navigation Diagram for the different kinds of users of our SONAR system:

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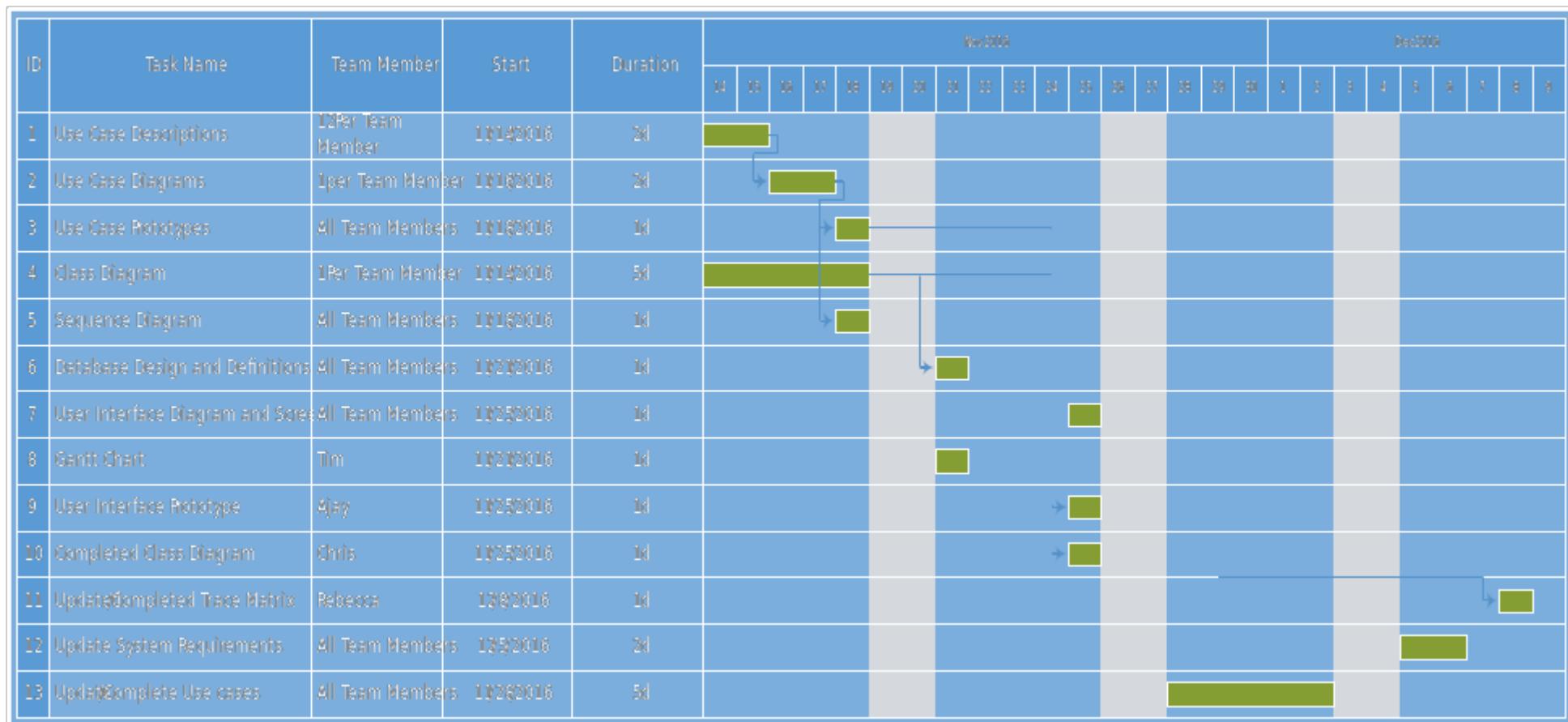


Gantt Chart Schedule

The following is a Gantt chart. It is simply a visual representation of the tasks the team will need to complete in the coming iteration of the project. It provides a name for each task. Each task listed will have a corresponding section in the report we deliver at the end of this iteration. The chart also lists the team member responsible for completing a task, any task marked with "All Members" simply means that the tasks has been divided amongst the group members to complete in parallel to each other. The Gantt chart also lists the anticipated start and end date for each task. Finally, the arrows drawn from one project to another indicate dependencies, these dependencies are what guided our decisions in the order of completion with certain tasks.

RATC Group

SONAR



Tim Mahan

R.A.C.T.

**SONAR
Use Cases for SONAR**

Version <1.0>

R.A.T.C Elaboration Spec

Revision History

Date	Version	Description	Author
16/Oct/16	1.0	First writing of use case.	Tim Mahan

R.A.T.C Elaboration Spec

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Login for Advisors

1. Use Case Name

Login for Advisors

1.1 Brief Description

This use case describes how an Advisor or other staff member will log into our SONAR system. It starts at logging into the school's virtual environment from a remote location, and ends with an advisor successfully logging into the system. It also discusses any alternatives there may be to the ideal system flow. These alternative flows include what happens when the virtual client fails, when users fail to login to the horizon system, and when advisors will login to the system while on campus.

2. Flow of Events

2.1 Basic Flow

- The advisor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the advisor will open the SONAR web link located on their desktop. This will take the advisor to the login page, where they will type in their university email as their username, and the password which was previously generated for the advisor.

R.A.T.C Elaboration Spec

- When the advisor has entered their valid username and password combination, they will be redirected to the appropriate web page for advisors.

2.2 Alternative Flows

2.2.1 *Horizon Client Fails*

The advisor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

If an advisor does not successfully log into the schools virtual environment, they will need to reenter their password and try again. If a login cannot be successfully had, they will need to reach out to University IT for assistance.

2.2.2 *Incorrect Login Credentials*

The advisor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

Next, the advisor will open the SONAR web link located on their desktop. This will take the advisor to the login page, where they will type in their university email as their username, and the password which was previously generated for the advisor.

If the login to SONAR was unsuccessful, the advisor will need to initiate either a password reset, or call the system administrator to unlock their account.

2.2.3 *Remote Login*

The Advisor will already be on campus, and will be able to open the login page to our SONAR system directly from their own laptop. Provided they are connected to the school's network and correctly enter their SONAR credentials, they will be able to login to the system and open the advisors homepage.

3. Special Requirements

3.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

3.2 Server Software

Server must run Windows Server 2012 or newer, as well as run SQL server 2016.

3.3 FERPA

Due to FERPA restrictions, we cannot store student grades to the cloud.

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4. Pre-conditions

4.1 Server On

Server must be turned on.

4.2 SQL Server Running

SQL server software (database) must be running.

4.3 Web Server Running

Web server software (for web pages) must be running.

5. Post-conditions

5.1 Logged In

The system will now be logged into by an advisor, now the system will be ready to update, create, and delete student information

5.2 Ready for Reports

The system will now be ready to generate reports.

6. Extension Points

6.1 Invalid SONAR credentials

If the user types in invalid credentials, the system will not log them on. Users will be asked to provide valid login credentials should the credentials entered fail

6.2 Invalid U of L credentials

If the user does not type in valid credentials, the Horizon software used by the university will ask for valid credentials to log remote users into the schools virtual lab.

6.3 Unstable Network Connections

If the user is logging into the schools virtual environment, they must have a stable internet connection. If this is not possible, the user will not be able to log into the schools virtual environment, and consequently, will not be able to log into the SONAR system.

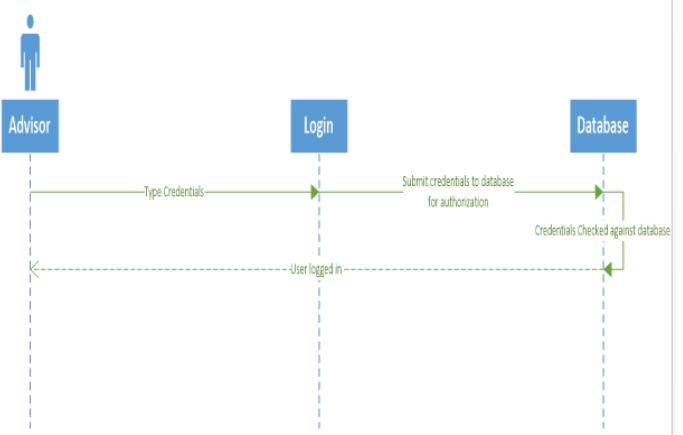
6.4 Server Not Running

If the server that hosts the SONAR system is not turned on, the user will have to contact the SONAR system administrator.

R.A.T.C Elaboration Spec

Advisor Login

- The advisor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the advisor will open the SONAR web link located on their desktop. This will take the advisor to the login page, where they will type in their university email as their username, and the password which was previously generated for the advisor.
- The Advisor will then submit their credentials via the login page.
- When the advisor has entered their valid username and password combination, they will be redirected to the appropriate web page for advisors.



R.A.T.C Elaboration Spec

Login for Administrator

7. Use-Case Name

Login for Administrators

7.1 Brief Description

This use case describes how the Administrator will log into our SONAR system. It starts with the Administrator opening either the school virtual lab, or by opening the program from their laptop when they're at the school and ends with the administrator being logged in, ready to complete the tasks they've been requested to complete. These alternative flows include what happens when the virtual client fails, when users fail to login to the horizon system, and when advisors will login to the system while on campus.

8. Flow of Events

8.1 Basic Flow

- The Administrator will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

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- Next, the Administrator will open the SONAR web link located on their desktop. This will take the Administrator to the login page, where they will type in their university email as their username, and the password which was previously generated for the Administrator.
- When the Administrator has entered their valid username and password combination, they will be redirected to the appropriate web page for the administration of the system.

8.2 Alternative Flows

8.2.1 *Horizon Client Fails*

The Administrator will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the SONAR administrator if the login is successful.

If the Administrator does not successfully log into the schools virtual environment, they will need to reenter their password and try again. If a login cannot be successfully had, they will need to reach out to University IT for assistance.

8.2.2 *Incorrect Login Credentials*

The Administrator will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

Next, the Administrator will open the SONAR web link located on their desktop. This will take the Administrator to the login page, where they will type in their university email as their username, and the password which was previously generated for the advisor.

If the login to SONAR was unsuccessful, the system administrator will need to initiate a password reset via email.

8.2.3 *Remote Login*

The Administrator will already be on campus, and will be able to open the login page to our SONAR system directly from their own laptop. Provided they are connected to the school's network and correctly enter their SONAR credentials, they will be able to login to the system and open the administrator homepage.

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9. Special Requirements

9.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

9.2 Server Software

Server must run Windows Server 2012 or newer, as well as run SQL server 2016.

9.3 FERPA

Due to FERPA restrictions, we cannot store student grades to the cloud.

10. Pre-conditions

10.1 Server On

Server must be turned on.

10.2 SQL Server Running

SQL server software (database) must be running.

10.3 Web Server Running

Web server software (for web pages) must be running.

11. Post-conditions

11.1 Logged In

The system will now be logged into by an advisor, now the system will be ready to update, create, and delete student information

11.2 Ready for Reports

The system will now be ready to generate reports.

12. Extension Points

12.1 Invalid SONAR credentials

If the user types in invalid credentials, the system will not log them on. Users will be asked to provide valid login credentials should the credentials entered fail

12.2 Invalid U of L credentials

If the user does not type in valid credentials, the Horizon software used by the university will ask for valid credentials to log remote users into the schools virtual lab.

12.3 Unstable Network Connections

If the user is logging into the schools virtual environment, they must have a stable internet connection. If this is not possible, the user will not be able to

R.A.T.C Elaboration Spec

log into the schools virtual environment, and consequently, will not be able to log into the SONAR system.

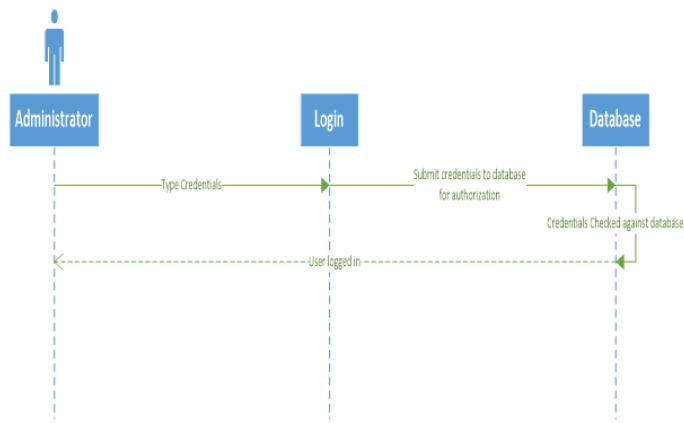
12.4 Server Not Running

If the server that hosts the SONAR system is not turned on, the user will have to contact the SONAR system administrator.

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Admin Login

- The Administrator will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Administrator will open the SONAR web link located on their desktop. This will take the Administrator to the login page, where they will type in their university email as their username, and the password which was previously generated for the Administrator.
- When the Administrator has entered their valid username and password combination, they will be redirected to the appropriate web page for the administration of the system.



Login for Students

R.A.T.C Elaboration Spec

13. Use Case Name

Login for Students

13.1 Brief Description

This use case describes how a Student or other staff member will log into our SONAR system. It starts at logging into the school's virtual environment from a remote location, and ends with a Student successfully logging into the system. It also discusses any alternatives there may be to the ideal system flow. These alternative flows include what happens when the virtual client fails, when users fail to login to the horizon system, and when Students will login to the system while on campus.

14. Flow of Events

14.1 Basic Flow

- The Student will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Student will open the SONAR web link located on their desktop. This will take the Student to the login page, where they will type in their university email as their username, and the password which was previously generated for the Student.
- When the Student has entered their valid username and password combination, they will be redirected to the appropriate web page for Students.

14.2 Alternative Flows

14.2.1 *Horizon Client Fails*

The Student will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

If a Student does not successfully log into the schools virtual environment, they will need to reenter their password and try again. If a login cannot be successfully had, they will need to reach out to University IT for assistance.

14.2.2 *Incorrect Login Credentials*

The Student will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

Next, the Student will open the SONAR web link located on their desktop. This will take the Student to the login page, where they will type in their university email as their username, and the password which was previously generated for the Student.

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If the login to SONAR was unsuccessful, the Student will need to initiate either a password reset, or call the system administrator to unlock their account.

14.2.3 *Remote Login*

The Student will already be on campus, and will be able to open the login page to our SONAR system directly from their own laptop. Provided they are connected to the school's network and correctly enter their SONAR credentials, they will be able to login to the system and open the Students homepage.

15. **Special Requirements**

15.1 **Connectivity**

Must be connected to School of Nursing network or connected through virtual Lab.

15.2 **Server Software**

Server must run Windows Server 2012 or newer, as well as run SQL server 2016.

15.3 **FERPA**

Due to FERPA restrictions, we cannot store student grades to the cloud.

16. **Pre-conditions**

16.1 **Server On**

Server must be turned on.

16.2 **SQL Server Running**

SQL server software (database) must be running.

16.3 **Web Server Running**

Web server software (for web pages) must be running.

17. **Post-conditions**

17.1 **Logged In**

The system will now be logged into by a Student, now the system will be ready to update, create, and delete student information

17.2 **Ready for Reports**

The system will now be ready to generate reports.

18. **Extension Points**

18.1 **Invalid SONAR credentials**

If the user types in invalid credentials, the system will not log them on. Users will be asked to provide valid login credentials should the credentials entered fail

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18.2 Invalid U of L credentials

If the user does not type in valid credentials, the Horizon software used by the university will ask for valid credentials to log remote users into the schools virtual lab.

18.3 Unstable Network Connections

If the user is logging into the schools virtual environment, they must have a stable internet connection. If this is not possible, the user will not be able to log into the schools virtual environment, and consequently, will not be able to log into the SONAR system.

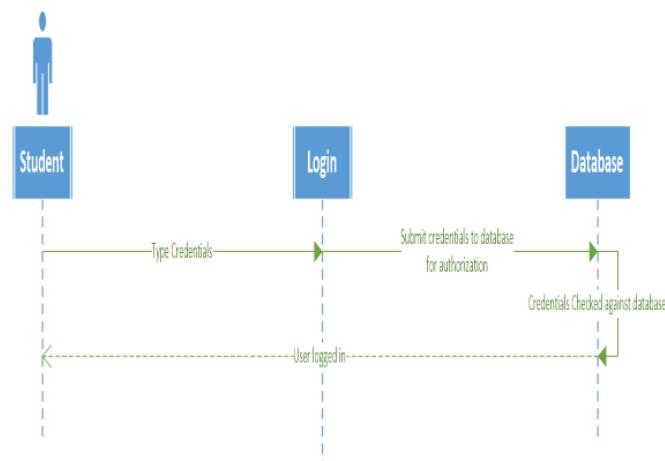
18.4 Server Not Running

If the server that hosts the SONAR system is not turned on, the user will have to contact the SONAR system administrator.

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Student Login

- The Student will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Student will open the SONAR web link located on their desktop. This will take the Student to the login page, where they will type in their university email as their username, and the password which was previously generated for the Student.
- When the Student has entered their valid username and password combination, they will be redirected to the appropriate web page for Students.



R.A.T.C Elaboration Spec

Login for Professor

19. Use-Case Name

Login for Professors

19.1 Brief Description

This use case describes how a Professor or other staff member will log into our SONAR system. It starts at logging into the school's virtual environment from a remote location, and ends with a Professor successfully logging into the system. It also discusses any alternatives there may be to the ideal system flow. These alternative flows include what happens when the virtual client fails, when users fail to login to the horizon system, and when advisors will login to the system while on campus.

20. Flow of Events

20.1 Basic Flow

- The Professor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Professor will open the SONAR web link located on their desktop. This will take the Professor to the login page, where they will type in their university email as their username, and the password which was previously generated for the Professor.
- When the Professor has entered their valid username and password combination, they will be redirected to the Professors homepage, where they will be able to upload student grades.

20.2 Alternative Flows

20.2.1 *Horizon Client Fails*

The Professor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the SONAR Professor if the login is successful.

If the Professor does not successfully log into the schools virtual environment, they will need to reenter their password and try again. If a login cannot be successfully had, they will need to reach out to University IT for assistance.

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20.2.2 *Incorrect Login Credentials*

The Professor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

Next, the Professor will open the SONAR web link located on their desktop. This will take the Professor to the login page, where they will type in their university email as their username, and the password which was previously generated for the Professor.

If the login to SONAR was unsuccessful, the system Professor will need to initiate a password reset via email or contact the system administrator to reset their password.

20.2.3 *Remote Login*

The Professor will already be on campus, and will be able to open the login page to our SONAR system directly from their own laptop. Provided they are connected to the school's network and correctly enter their SONAR credentials, they will be able to login to the system and open the Professor homepage.

21. Special Requirements

21.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

21.2 Server Software

Server must run Windows Server 2012 or newer, as well as run SQL server 2016.

21.3 FERPA

Due to FERPA restrictions, we cannot store student grades to the cloud.

22. Pre-conditions

22.1 Server On

Server must be turned on.

22.2 SQL Server Running

SQL server software (database) must be running.

22.3 Web Server Running

Web server software (for web pages) must be running.

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23. Post-conditions

23.1 Logged In

The system will now be logged into by an advisor, now the system will be ready to update, create, and delete student information

23.2 Ready for Reports

The system will now be ready to generate reports.

24. Extension Points

24.1 Invalid SONAR credentials

If the user types in invalid credentials, the system will not log them on. Users will be asked to provide valid login credentials should the credentials entered fail

24.2 Invalid U of L credentials

If the user does not type in valid credentials, the Horizon software used by the university will ask for valid credentials to log remote users into the schools virtual lab.

24.3 Unstable Network Connections

If the user is logging into the schools virtual environment, they must have a stable internet connection. If this is not possible, the user will not be able to log into the schools virtual environment, and consequently, will not be able to log into the SONAR system.

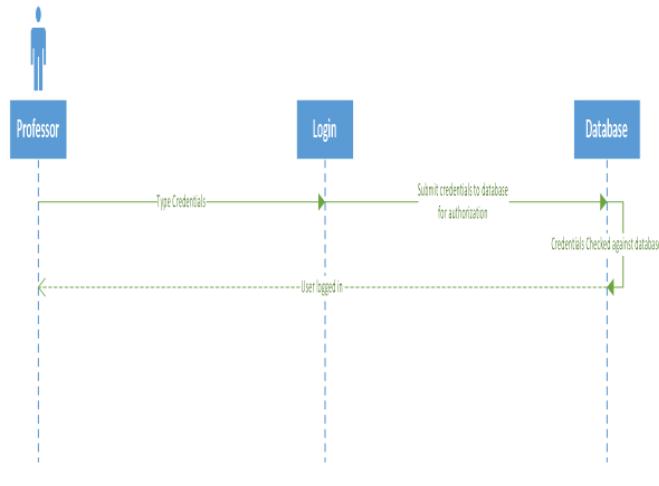
24.4 Server Not Running

If the server that hosts the SONAR system is not turned on, the user will have to contact the SONAR system administrator.

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Professor Login

- The Professor will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Professor will open the SONAR web link located on their desktop. This will take the Professor to the login page, where they will type in their university email as their username, and the password which was previously generated for the Professor.
- When the Professor has entered their valid username and password combination, they will be redirected to the Professors homepage, where they will be able to upload student grades.



R.A.T.C Elaboration Spec

Login for Admission Committee Members

25. Use Case Name

Login for Admission Committee Members

25.1 Brief Description

This use case describes how a Committee Members or other staff member will log into our SONAR system. It starts at logging into the school's virtual environment from a remote location, and ends with a Committee Members successfully logging into the system. It also discusses any alternatives there may be to the ideal system flow. These alternative flows include what happens when the virtual client fails, when users fail to login to the horizon system, and when advisors will login to the system while on campus.

26. Flow of Events

26.1 Basic Flow

- The Committee Members will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Committee Members will open the SONAR web link located on their desktop. This will take the Committee Members to the login page, where they will type in their university email as their username, and the password which was previously generated for the Committee Members.
- When the Committee Members has entered their valid username and password combination, they will be redirected to the appropriate web page for Admission Committee Members.

26.2 Alternative Flows

26.2.1 *Horizon Client Fails*

The Committee Members will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

If a Committee Members does not successfully log into the schools virtual environment, they will need to reenter their password and try again. If a login cannot be successfully had, they will need to reach out to University IT for assistance.

26.2.2 *Incorrect Login Credentials*

The Committee Members will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University

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credentials, and open the virtual environment available to the school of nursing staff if the login is successful.

Next, the Committee Members will open the SONAR web link located on their desktop. This will take the Committee Members to the login page, where they will type in their university email as their username, and the password which was previously generated for the Committee Members.

If the login to SONAR was unsuccessful, the Committee Members will need to initiate either a password reset, or call the system administrator to unlock their account.

26.2.3 *Remote Login*

The Committee Members will already be on campus, and will be able to open the login page to our SONAR system directly from their own laptop. Provided they are connected to the school's network and correctly enter their SONAR credentials, they will be able to login to the system and open the Admission Committee Members homepage.

27. **Special Requirements**

27.1 **Connectivity**

Must be connected to School of Nursing network or connected through virtual Lab.

27.2 **Server Software**

Server must run Windows Server 2012 or newer, as well as run SQL server 2016.

27.3 **FERPA**

Due to FERPA restrictions, we cannot store student grades to the cloud.

28. **Pre-conditions**

28.1 **Server On**

Server must be turned on.

28.2 **SQL Server Running**

SQL server software (database) must be running.

28.3 **Web Server Running**

Web server software (for web pages) must be running.

29. **Post-conditions**

29.1 **Logged In**

The system will now be logged into by an advisor, now the system will be ready to update, create, and delete student information

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29.2 Ready for Reports

The system will now be ready to generate reports.

30. Extension Points

30.1 Invalid SONAR credentials

If the user types in invalid credentials, the system will not log them on. Users will be asked to provided valid login credentials should the credentials entered fail

30.2 Invalid U of L credentials

If the user does not type in valid credentials, the Horizon software used by the university will ask for valid credentials to log remote users into the schools virtual lab.

30.3 Unstable Network Connections

If the user is logging into the schools virtual environment, they must have a stable internet connection. If this is not possible, the user will not be able to log into the schools virtual environment, and consequently, will not be able to log into the SONAR system.

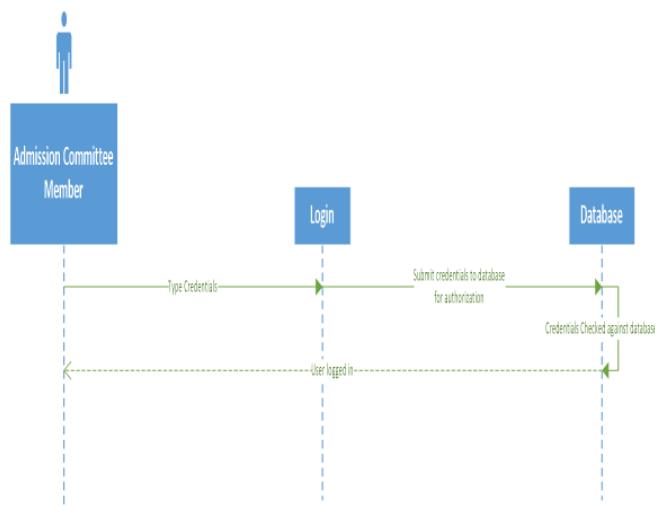
30.4 Server Not Running

If the server that hosts the SONAR system is not turned on, the user will have to contact the SONAR system administrator.

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Committee Member Login

- The Committee Members will open the VMWare Horizon client located on their desktop, attempt to login to the virtual environment with their University credentials, and open the virtual environment available to the school of nursing staff if the login is successful.
- Next, the Committee Members will open the SONAR web link located on their desktop. This will take the Committee Members to the login page, where they will type in their university email as their username, and the password which was previously generated for the Committee Members.
- When the Committee Members has entered their valid username and password combination, they will be redirected to the appropriate web page for Admission Committee Members.



R.A.T.C Elaboration Spec

Submit Grades

31. Use-Case Name

Submit Grades

31.1 Brief Description

The Professor will submit the grades of each student in each class they teach in a given semester. This happens after a successful logon has been completed, and once the professor has finished entering the grades, they will submit the completed form and the grades for each student in the class will be written to the database. This use case includes an alternative flow where the professor may need to clear out all grades previously entered, as well as extension points for the feature this user case will become.

32. Flow of Events

32.1 Basic Flow

- The Professor will first successfully complete a login to the system via the login page. Once this is complete, there will be a drop down arrow that contains a list of each class they've taught during the past semester. The professor will select one class at a time.
- When a class has been selected, a form will appear on the webpage beneath the dropdown box with a list of student names, student ID's, and a dropdown box next to each student. This will allow the Professor to simply click each dropdown box and select the grade earned.
- Beneath the form there will be two buttons. One will clear the form and the other will record all the student's grades to the database. When a Professor submits the grades, they will be recorded, and the Professor will be redirected to the page where they first selected the class they wish to submit grades for.

32.2 Alternative Flows

32.2.1 *Incorrect Grades*

The Professor will have selected a class, but started entering the grades of another class. When this occurs, the Professor will select the "Clear" button located beneath the form to erase any information they'd entered so far.

33. Special Requirements

33.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

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34. Pre-conditions

34.1 Logged In

The Professor will need to have already successfully logged into the SONAR system.

35. Post-conditions

35.1 Successful Submission

The Professor will have submitted the grades for one class for one semester.

36. Extension Points

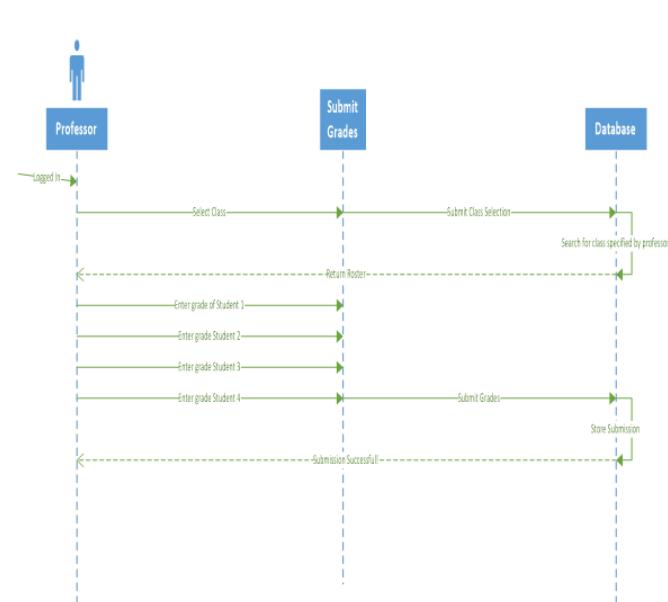
36.1 Incorrect Class

A Professor will have the opportunity to change a student's grades before submitting, after the Submit button has been clicked, a Professor will need to contact the system administrator to edit the student's record.

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Submit Grades

- The Professor will first successfully complete a login to the system via the login page. Once this is complete, there will be a drop down arrow that contains a list of each class they've taught during the past semester. The professor will select one class at a time.
- When a class has been selected, a form will appear on the webpage beneath the dropdown box with a list of student names, student ID's, and a dropdown box next to each student. This will allow the Professor to simply click each dropdown box and select the grade earned.
- Beneath the form there will be two buttons. One will clear the form and the other will record all the student's grades to the database. When a Professor submits the grades, they will be recorded, and the Professor will be redirected to the page where they first selected the class they wish to submit grades for.



R.A.T.C Elaboration Spec

Query for Advising

37. Use-Case Name

Query for Advising

37.1 Brief Description

The Advisor will run many searches (queries) against the database in order to gain information about not just individual students, but groups of students that participate in the programs offered by the School of Nursing. These searches will be used to generate reports about students, and with these reports advisors will be able to reach out to students who may have decided to not enroll in a particular semester without graduating, or reach out to students that may be on academic probation or failed a course. This use case also details an alternative flow where an advisor doesn't complete the report form before trying to generate the report.

38. Flow of Events

38.1 Basic Flow

- The Advisor will have successfully logged into the system by this point, and select the Queries tab visible on their home page.
- Once the Queries tab has been selected, the Advisor will need to select the type of query they wish to run. When they have selected the Multiple Student Query option, the Advisor will be presented with three drop down boxes.
- First, they will see the Student Type dropdown box, where they can select the type of student (lower division, upper division, graduate student, potential student, and Alumni) they wish to search for. The next dropdown box will have the attributes they wish to display (a dropdown box with check boxes next to each attribute the Advisor wishes to display). Finally, they will select the semester they wish to search through.
- Once all of the attributes have been selected, the Advisor will hit the Submit button to run the query. The results will be displayed in the available white space below the selection options.

38.2 Alternative Flows

38.2.1 Incomplete Form

The Advisor will not fill in all three of the required fields and the report will not be generated. Instead of being met with an error, the advisor will be informed what was missing and asked to fill in that part of the form.

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Once the missing piece of the form has been filled out, the advisor will be allowed to generate and export the report if they so choose.

39. Special Requirements

39.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

40. Pre-conditions

40.1 Logged In

The Advisor must be successfully logged into the system.

41. Post-conditions

41.1 Completed Query

The Committee Member will have generated the results of a query they selected. These results will be displayed on the web page for the Committee Member to review.

42. Extension Points

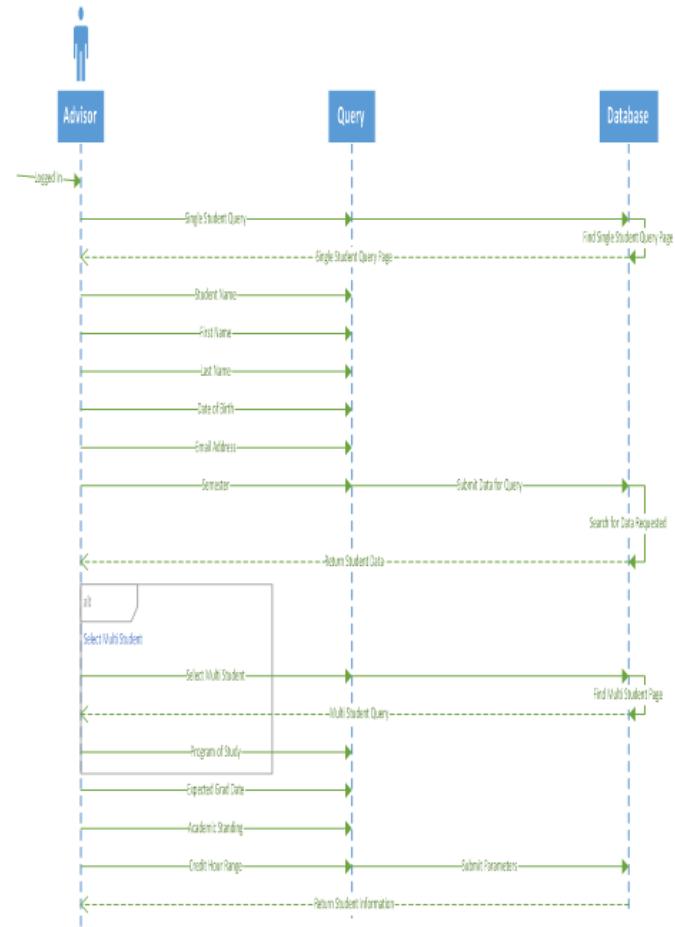
42.1 Missing Input

If a field has not been filled out, an error message will appear asking the Advisor to fill in that particular part of the form. For instance, if the semester option isn't selected, the Advisor will receive a specific error asking them to select a semester.

R.A.T.C Elaboration Spec

Advising Query

- The Advisor will be successfully logged into the system first, from there, the Advisor will select the “Queries” tab from their system home page.
- Once on the Queries page, Advisors will be able to select whether they want to submit a Single or Multi query.
- When Single Student is chosen, the Advisor will then fill out the relevant student information they wish to search. The criteria they will be able to search by includes the Student ID, Student First Name, Student Last Name, Date of Birth, Email Address, and the Semester (if they wish to limit the data returned to a specific time period).
- They will then hit the Submit button to run the query, and the results of the query will be displayed in the space below the menu options.
- If more than one student result is returned, Advisors will select which student's information they wish to view, versus a Multi Student query, where all information is displayed after the search is complete, regardless of how many students are returned.



Query for Admission Committee

43. Use-Case Name

Query for Admission Committee

43.1 Brief Description

The Admission Committee Member will run many searches (queries) against the database in order to gain information about not just individual students, but groups of students that participate in the programs offered by the School of Nursing. These searches will be used to generate reports about students, and with these reports Committee Members will be able to reach out to students who may have decided to not enroll in a particular semester without

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graduating, or reach out to students that may be on academic probation or failed a course. This use case also details an alternative flow where a Committee Member doesn't complete the report form before trying to generate the report.

44. Flow of Events

44.1 Basic Flow

- The Committee Member will be successfully logged into the system first, from there, the Committee Member will select the "Queries" tab from their system home page.
- Once on the Queries page, the Committee Member will be provided with drop down lists to choose the division level they wish to view, as well as the type of information they wish to view, and the semester they wish to view (in case they need to go back and look at historical data). To name a few options, the Committee Member could select the Lower Division Students in the first dropdown box, the students who failed one or more classes, and then the semester in which they wish to run the query.
- They will then hit the Submit button to run the query, and the results of the query will be displayed in the space below the menu options.

44.2 Alternative Flows

44.2.1 *Incomplete Form*

The Committee Member will not fill in all three of the required fields and the report will not be generated. Instead of being met with an error, the Committee Member will be informed what was missing and asked to select that option from the dropdown menus.

Once the missing piece of the form has been filled out, the Committee Member will be allowed to run the query and view the results.

45. Special Requirements

45.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

46. Pre-conditions

46.1 Logged In

The Committee Member must be successfully logged into the system.

47. Post-conditions

47.1 Completed Query

The Committee Member will have generated the results of a query they selected. These results will be displayed on the web page for the Committee Member to review.

R.A.T.C Elaboration Spec

48. Extension Points

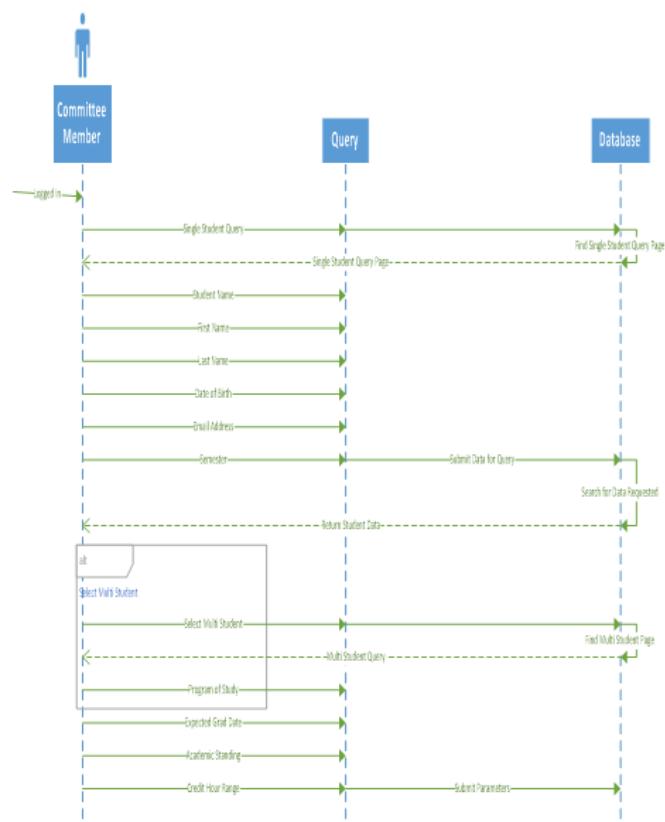
48.1 Invalid Input

If a field has not been filled out, an error message will appear asking the Committee Member to fill in that particular part of the form. For instance, if the semester option isn't selected, the Committee Member will receive a specific error asking them to select a semester.

R.A.T.C Elaboration Spec

Committee Member Query

- The Committee Member will be successfully logged into the system first, from there, the Committee Member will select the "Queries" tab from their system home page.
- Once on the Queries page, Committee Members will be able to select whether they want to submit a Single or Multi query.
- When Single Student is chosen, the Committee Member will then fill out the relevant student information they wish to search. The criteria they will be able to search by includes the Student ID, Student First Name, Student Last Name, Date of Birth, Email Address, and the Semester (if they wish to limit the data returned to a specific time period).
- They will then hit the Submit button to run the query, and the results of the query will be displayed in the space below the menu options.
- If more than one student result is returned, Committee Members will select which student's information they wish to view, versus a Multi Student query, where all information is displayed after the search is complete, regardless of how many students are returned.



R.A.T.C Elaboration Spec

Upload Student Document

49. Use-Case Name

Upload Student Document

49.1 Brief Description

Students will have the ability to submit documentation for the review of advisors. The system will provide student users with an easy to use page that simply allows them to submit PDFs, PNGs, and JPEGs to the system so that Advisors may review and approve, not edit the documentation.

50. Flow of Events

50.1 Basic Flow

- Students will sign on to the system with their username and password, then browse to the Upload Documents page.
- Next, students will select the type of document they wish to submit (simply so Advisors will know what document they're going to review before opening) and then hit the Browse button, which will open a small file browser that will allow students to pick which document they wish to submit.
- Once the document has been selected, students will be able to submit the document, which alerts the student's advisor when the advisor next logs on to the system.

50.2 Alternative Flows

50.2.1 Student Selects Wrong File

Should a student go through the process of browsing through documents and accidentally select a document other than what they need to submit, the clear button will allow the student to remove the attached document and start the browsing process over again.

51. Special Requirements

51.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

52. Pre-conditions

52.1 Logged On

The student MUST be logged on to the system in order to use this feature.

R.A.T.C Elaboration Spec

53. Post-conditions

53.1 Successful Submission

The student's document will have successfully been submitted to the system for review by advisors.

54. Extension Points

54.1 Large File

If a file size is greater than 5 MB will not be accepted by the system. In case of this, students will receive an error asking them to submit a smaller file

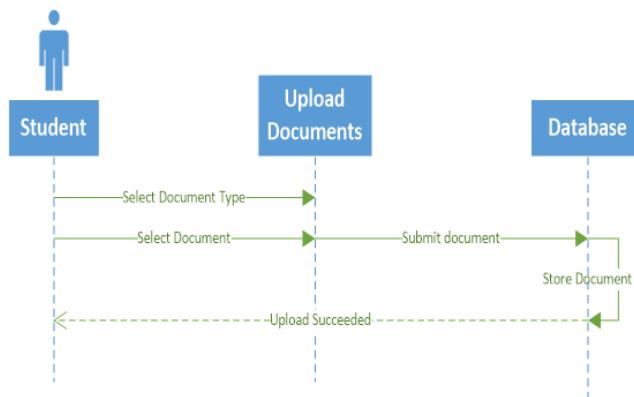
54.2 Wrong File Type

If the student submits anything other than a PDF, JPEG, or PNG, they will receive an error asking them to submit the document as one of the above mentioned file types.

R.A.T.C Elaboration Spec

Upload Student Document

- Students will sign on to the system with their username and password, then browse to the Upload Documents page.
- Next, students will select the type of document they wish to submit (simply so Advisors will know what document they're going to review before opening) and then hit the Browse button, which will open a small file browser that will allow students to pick which document they wish to submit.
- Once the document has been selected, students will be able to submit the document, which alerts the student's advisor when the advisor next logs on to the system.



Import Data from Excel

R.A.T.C Elaboration Spec

55. Use-Case Name

Import Data from Excel

55.1 Brief Description

If the need should ever arise a need for data to be imported into the database, the system administrator will have the ability to do so. This allows the system to have more robust functionality, while limiting this privilege to a group that also has the ability to restore the system from a backup should anything go wrong. These excel files (in csv format) can be used to populate the database with information it previously did not contain in a quick, efficient manner.

56. Flow of Events

56.1 Basic Flow

- The Administrator will be successfully logged into the system at this point, and will have just arrived at their system home page. From here they will select the Database Maintenance tab from the main menu offered to the System Administrator.

- Once the Admin has been redirected to the Database Maintenance page, they will see another menu that will allow them to perform a number of functions, these will include importing a CSV (type of Excel file) to the database, export a backup of the database, and edit the database directly.

- The Admin will select the Import option on the menu of the Database Management page. This will open a dialog with a dropdown box that asks the Admin what type of data (lower division student, upper division student, alumni, etc.) they wish to import. When that selection has been made, an example CSV file will be shown. This will be how the columns in the CSV file must be ordered.

- Once the file that will be uploaded is properly formatted, the Admin will click the Upload button and search for the file they wish to upload. Once it has been selected, they will click the Open button and finish the upload. When the upload is complete, they will be taken back to the Database Management page with a pop-up with the message: "Import Complete".

R.A.T.C Elaboration Spec

56.2 Alternative Flows

56.2.1 Wrong File type

If the Admin selects the wrong file type, which would be an excel file that has not been saved as a CSV, the system will reject it, and ask the Admin to please select a different file with the CSV file type. Another dialog box will open and allow the user to select another file with the correct file type.

57. Special Requirements

57.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

58. Pre-conditions

58.1 User Type

The use of the system must be and Advisor

58.2 File Type

The Admin must upload a CSV file

58.3 File Format

The file to be uploaded must have its columns named and arranged as specified by the dialog box displayed by the system when the data type is selected.

59. Post-conditions

59.1 Successful Database Update

The Admin will have successfully uploaded a CSV file to the system. The new data (whether it be lower division students, upper division students, alumni information, etc.) will now be searchable by the other users for generating reports, or simply looking up a particular individual's information.

60. Extension Points

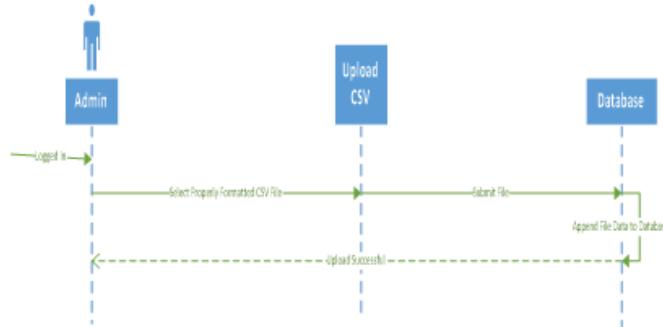
60.1 Invalid Input

Non-CSV file type (such as other Excel file types, word documents, or PowerPoint files) file is uploaded, causing an error message to display that asks for a CSV file type.

R.A.T.C Elaboration Spec

Import Data from Excel Files

- The Administrator will be successfully logged into the system at this point, and will have just arrived at their system home page. From here they will select the Database Maintenance tab from the main menu offered to the System Administrator.
- Once the Admin has been redirected to the Database Maintenance page, they will see another menu that will allow them to perform a number of functions, these will include importing a CSV (type of Excel file) to the database, export a backup of the database, and edit the database directly.
- The Admin will select the Import option on the menu of the Database Management page. This will open a dialog with a dropdown box that asks the Admin what type of data (lower division student, upper division student, alumni, etc.) they wish to import. When that selection has been made, an example CSV file will be shown. This will be how the columns in the CSV file must be ordered.
- Once the file that will be uploaded is properly formatted, the Admin will click the Upload button and search for the file they wish to upload. Once it has been selected, they will click the Open button and finish the upload. When the upload is complete, they will be taken back to the Database Management page with a pop-up with the message: "Import Complete".



R.A.T.C Elaboration Spec

Generate Reports

61. Use-Case Name

Generate Reports

61.1 Brief Description

The Advisor will run many searches (queries) against the database in order to gain information about not just individual students, but groups of students that participate in the programs offered by the School of Nursing. These searches will be used to generate reports about students, and with these reports advisors will be able to reach out to students who may have decided to not enroll in a particular semester without graduating, or reach out to students that may be on academic probation or failed a course.

62. Flow of Events

62.1 Basic Flow

- The Advisor will have successfully logged into the system by this point, and select the reports tab visible on their home page.
- Once the reports tab has been selected, the Advisor will select the report they wish to run, as well as the date range (start and end dates) of the report so that not all data in the system will be returned. Once the report type and date range have been selected, the Advisor will hit the "Submit" button, which will generate the report and display it in the white space below.
- There will also be an option to export the report to an Excel file for further manipulation if the Advisor so desires.

62.2 Alternative Flows

62.2.1 Incomplete Fields

The Advisor will not fill in all three of the required fields and the report will not be generated. Instead of being met with an error, the advisor will be informed what was missing and asked to fill in that part of the form.

Once the missing piece of the form has been filled out, the advisor will be allowed to generate and export the report if they so choose.

62.2.2 Report from Queries

An Advisor may also decide to create a report from the queries they run. In order to do this, the Advisor will start at the homepage and browse to the Queries page, select the kind of students they wish to query, select the attributes they wish to view, and the semester they want search. The Advisor will click the Submit button and run the query.

R.A.T.C Elaboration Spec

When the query has finished running, and Export button will appear next to the Submit button, the export button will create a CSV file and export it from the system, and to the Advisors Downloads folder on their local machine if they're at the school, or their virtual lab Downloads folder if they connect remotely.

63. Special Requirements

63.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

64. Pre-conditions

64.1 Logged in

The Advisor must be logged into SONAR before running or exporting reports.

65. Post-conditions

65.1 Report Generated

The Advisor will have generated a report of their choosing. From here they can simply view the report or export it for further manipulation.

66. Extension Points

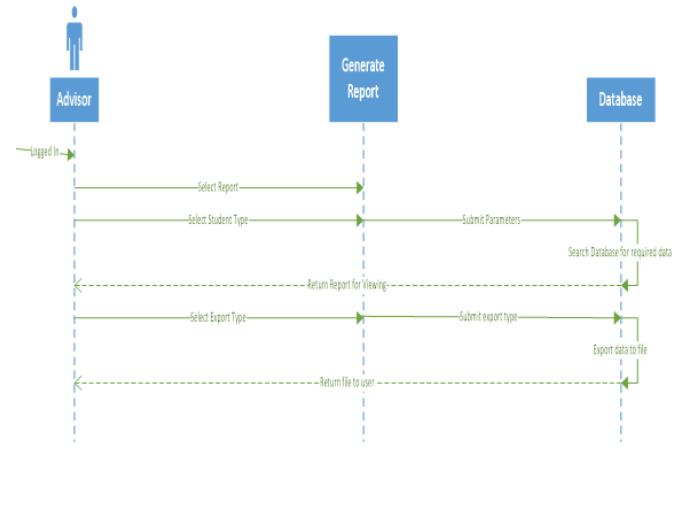
66.1 Invalid Query

If the users query fails, they will not be able to export the results. If a query should fail, the user should follow the error message instructions on how to acquire the results they need.

R.A.T.C Elaboration Spec

Advisor Reports

- The Advisor will have successfully logged into the system by this point, and select the reports tab visible on their home page.
- Once the reports tab has been selected, the Advisor will select the report they wish to run, as well as the date range (start and end dates) of the report so that not all data in the system will be returned. Once the report type and date range have been selected, the Advisor will hit the "Submit" button, which will generate the report and display it in the white space below.
- There will also be an option to export the report to an Excel file for further manipulation if the Advisor so desires.



R.A.T.C Elaboration Spec

Generate Reports for Decision Making

67. Use-Case Name

Generate Reports for Committee Members

67.1 Brief Description

The Committee Member will run many searches (queries) against the database in order to gain information about not just individual students, but groups of students that participate in the programs offered by the School of Nursing. These searches will be used to generate reports about students, and with these reports Committee Members will be able to reach out to students who may have decided to not enroll in a particular semester without graduating, or reach out to students that may be on academic probation or failed a course.

68. Flow of Events

68.1 Basic Flow

- The Committee Member will have successfully logged into the system by this point, and select the reports tab visible on their home page.
- Once the reports tab has been selected, the Committee Member will select the report they wish to run, as well as the date range (start and end dates) of the report so that not all data in the system will be returned. Once the report type and date range have been selected, the Committee Member will hit the “Submit” button, which will generate the report and display it in the white space below.
- There will also be an option to export the report to an Excel file for further manipulation if the Committee Member so desires.

68.2 Alternative Flows

68.2.1 Incomplete Fields

The Committee Member will not fill in all three of the required fields and the report will not be generated. Instead of being met with an error, the Committee Member will be informed what was missing and asked to fill in that part of the form.

Once the missing piece of the form has been filled out, the Committee Member will be allowed to generate and export the report if they so choose.

68.2.2 Report from Queries

A Committee Member may also decide to create a report from the queries they run. In order to do this, the Committee Member will start at the

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homepage and browse to the Queries page, select the kind of students they wish to query, select the attributes they wish to view, and the semester they want search. The Committee Member will click the Submit button and run the query.

When the query has finished running, and Export button will appear next to the Submit button, the export button will create a CSV file and export it from the system, and to the Committee Members Downloads folder on their local machine if they're at the school, or their virtual lab Downloads folder if they connect remotely.

69. Special Requirements

69.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

70. Pre-conditions

70.1 Logged in

The Committee Member must be logged into SONAR before running or exporting reports.

71. Post-conditions

71.1 Report Generated

The Committee Member will have generated a report of their choosing. From here they can simply view the report or export it for further manipulation.

72. Extension Points

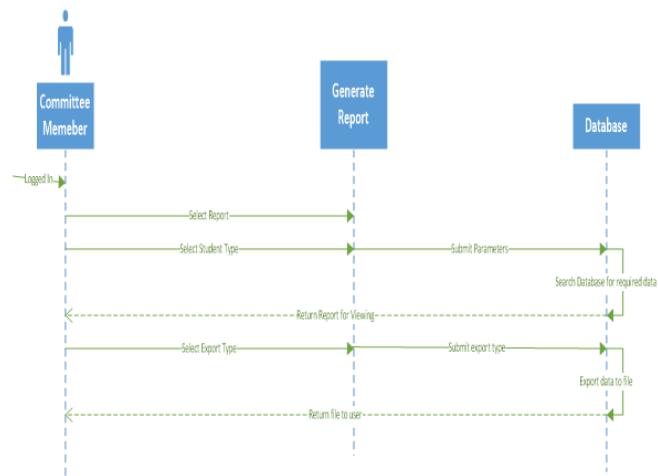
72.1 Invalid Query

If the users query fails, they will not be able to export the results. If a query should fail, the user should follow the error message instructions on how to acquire the results they need.

R.A.T.C Elaboration Spec

Committee Member Reports

- The Committee Member will have successfully logged into the system by this point, and select the reports tab visible on their home page.
- Once the reports tab has been selected, the Committee Member will select the report they wish to run, as well as the date range (start and end dates) of the report so that not all data in the system will be returned. Once the report type and date range have been selected, the Committee Member will hit the “Submit” button, which will generate the report and display it in the white space below.
- There will also be an option to export the report to an Excel file for further manipulation if the Committee Member so desires.



Automatic Reporting

R.A.T.C Elaboration Spec

73. Use-Case Name

Setup Automatic Reporting

73.1 Brief Description

Some reports can be generated and delivered automatically. On this page, users will be able to sign up for weekly, monthly, or semester reports. These will be the built in reports that are available on the reports page for users to export.

74. Flow of Events

74.1 Basic Flow

- The Advisor will log into the SONAR system and start from the homepage. From here, Advisors will browse to the Automatic Reporting page by clicking the Automatic Reporting link listed in the Homepage main menu.
- Once on the Automatic Reporting page, Advisors will have a table which contains all available automatic reports listed. From here, advisors will be able to click a checkbox to the left of each report.
- To the right of each report will be three radio buttons (meaning only one choice can be selected). The first button will fall into a column with the header "Weekly", the next will fall into a column with the header "Monthly", and the last button will fall into a column with the header "Semester".
- When the Weekly box is checked, that report will be emailed weekly on Monday at 8AM, when Monthly is selected, that report will be emailed to the advisor once a month on the first day of the month. When the Semester box is checked, the report will be emailed out on the Monday one week before classes start each semester.
- When the Advisor is finished making changes to the reports they wish to receive, they will have a Save button located above the table on the right side. The Save button will store all changes made, and start the process of emailing reports to the Advisors on the basis in which they specify.

R.A.T.C Elaboration Spec

74.2 Alternative Flows

74.2.1 *Forgotten Save*

If a user forgets to save and makes a move to browse away from the current page, a dialog box will pop up asking if a user wants to continue on to another page. If they click the Yes button, their changes will be lost and the browser will continue on to the next page the user requested. If the Advisor hits No, the browser will remain on the Automatic Reporting page until the user has saved their changes. Once the changes have been saved, the user will be able to navigate away without any further alerts from the system.

75. Special Requirements

75.1 Connectivity

System must be turned on and connected to the school's network

75.2 Login Type

Currently, the user must be an advisor.

76. Pre-conditions

76.1 Logged In

Advisors must be logged into the system to initiate the Automatic reporting process.

77. Post-conditions

77.1 Delivered Report

A report will be emailed out to the advisor however often they specified.

78. Extension Points

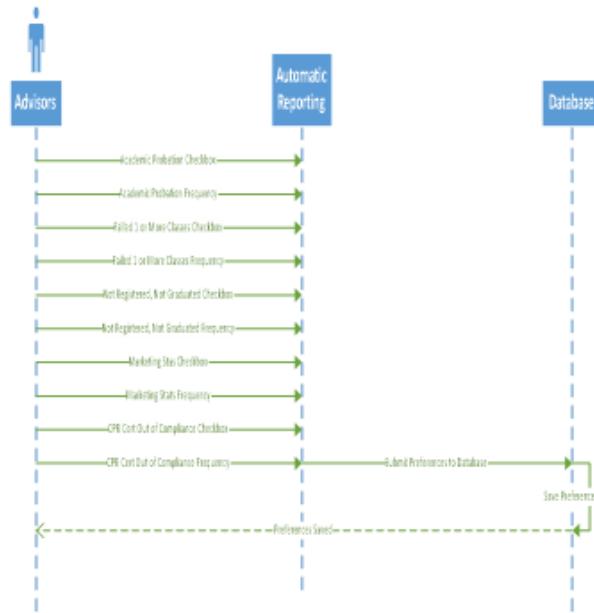
78.1 *Forgotten Save*

If a user does not save changes before navigating away from the page, their progress will be lost and they will have to start the process over if they wish to make changes to how which automatic reports are delivered and when.

R.A.T.C Elaboration Spec

Advisor Automatic Reporting

- The Advisor will log into the SONAR system and start from the homepage. From here, Advisors will browse to the Automatic Reporting page by clicking the Automatic Reporting link listed in the Homepage main menu.
- Once on the Automatic Reporting page, Advisors will have a table which contains all available automatic reports listed. From here, advisors will be able to click a checkbox to the left of each report.
- To the right of each report will be three radio buttons (meaning only one choice can be selected). The first button will fall into a column with the header "Weekly", the next will fall into a column with the header "Monthly", and the last button will fall into a column with the header "Semester".
- When the Weekly box is checked, that report will be emailed weekly on Monday at 8AM, when Monthly is selected, that report will be emailed to the advisor once a month on the first day of the month. When the Semester box is checked, the report will be emailed out on the Monday one week before classes start each semester.
- When the Advisor is finished making changes to the reports they wish to receive, they will have a Save button located above the table on the right side. The Save button will store all changes made, and start the process of emailing reports to the Advisors on the basis in which they specify.



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79. Export to CSV

79.1 Brief Description

The purpose of this is to allow for the advisor to export information from the database into an excel sheet to use as needed.

80. Flow of Events

80.1 Basic Flow

-Main character - Advisor

-Allows advisor to export data from database to an excel sheet

-Allows the advisor the manipulate data in an excel sheet without altering the data in the database

- Allows the advisor to print the students information

80.2 Alternative Flows

Alternative flows are actions that will occur if the information does not export correctly.

80.2.1 Information does not transfer correctly

There is a small chance that if the system is not put together correctly, when an advisor attempts to export the data, the information may be corrupt or not transfer smoothly

81. Special Requirements

Special requirements are requirements that must be met before the advisor is able to export the data.

81.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers
- Access to Microsoft excel

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82. Pre-conditions

Pre conditions are conditions that must be met for the advisor to be able to successfully export the data.

82.1 Administrator access to the database

In order for the advisor to be able to export data, they must first obtain administrator rights to the system that allows for them to have access to the data.

83. Post-conditions

Post conditions are what the final result will be after hitting export

83.1 Exported data

If everything works as it should, after the advisor hits the export data button, the data will automatically open an excel sheet with all of the data properly transferred over.

84. Extension Points

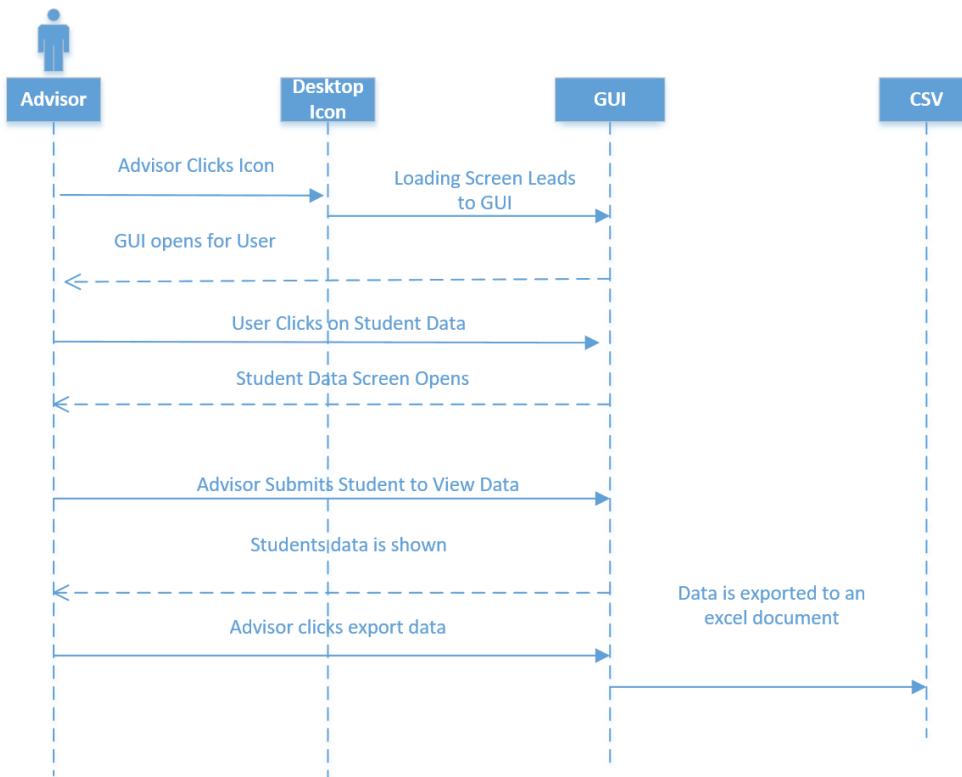
If the system is not set up properly, then there is a chance the data will be corrupt.

84.1 Corrupt Data

The system needs to be double checked prior to implementation to insure that when the advisor tries to export the data, the data will transfer correctly and smoothly.

R.A.T.C Elaboration Spec

Use Case 13
Sequence Diagram
Export info to CSV



R.A.T.C Elaboration Spec

Sonar Update Student Records

Version <1.0> Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Update Student Records	Christopher Meany

R.A.T.C Elaboration Spec

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85. Update Student Records

85.1 Brief Description

Update a student record will allow for the advisor to login with admin rights and be able to update a student's records.

86. Flow of Events

86.1 Basic Flow

- Actor- Advisor
- Advisor will initially log in with username and password
- Upon logging in they will select update a student
- They will then select the student by their name or student id
- They will update the student and hit confirm
- They will be prompted with an are you sure which they must select yes or no
- If they select yes they will have to re-enter their username and credentials to save

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86.2 Alternative Flows

The advisor will be prompted with an incorrect format or error message if information has been put in incorrectly.

86.2.1 Information in incorrect format

The advisor will receive an error message to fix information that is entered incorrectly or left blank.

86.2.2 Cancel

If the advisor no longer wishes to update a student's information they will have the option to cancel the update.

87. Special Requirements

These are requirements that must be met to allow the advisor to update the student.

87.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

88. Pre-conditions

Conditions that must be met to allow the advisor to update records

88.1 Access to the system

The advisor must have administrator rights to be able to login and change student information.

89. Post-conditions

These are the conditions following the updating of the student records

89.1 Student records updated

Once the advisor submits the new information, the student's records will be updated.

90. Extension Points

If any field is incorrectly filled in, they will receive an error message.

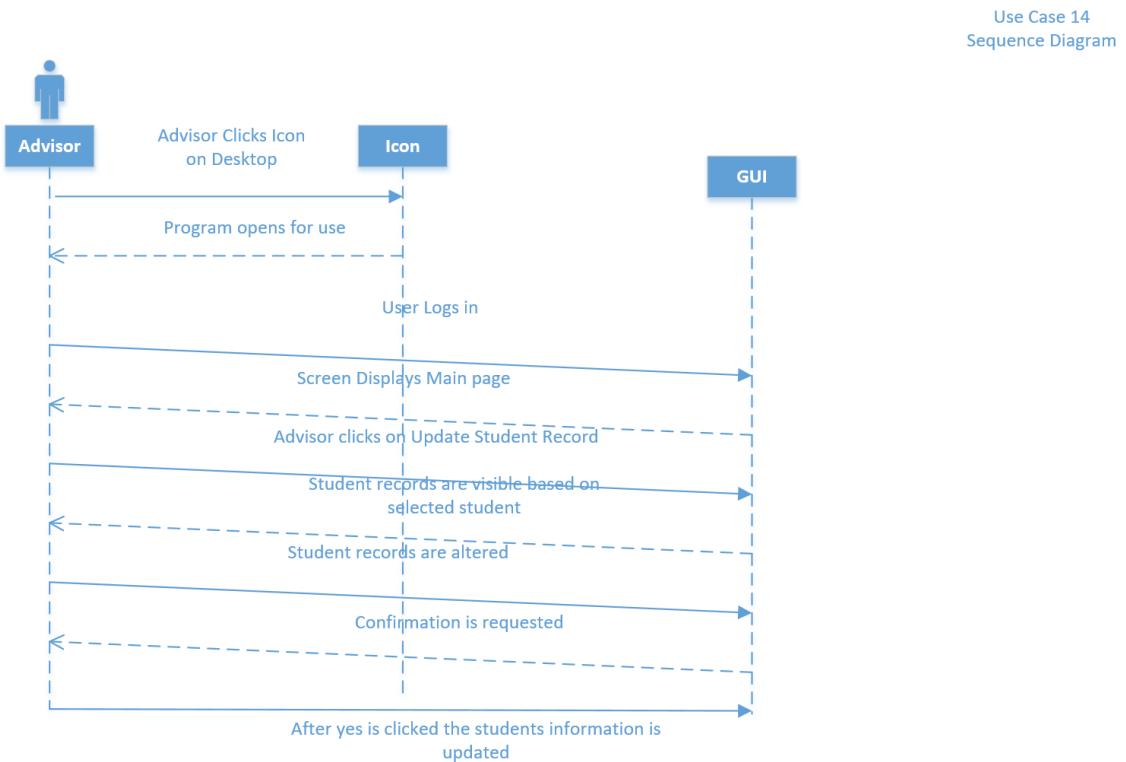
90.1 Invalid Input

-Incorrect format

Tim Mahan, Chris Meany, Ajay Singh, Rebecca Ludwig

R.A.T.C Elaboration Spec

R.A.T.C Elaboration Spec



R.A.T.C Elaboration Spec

Add Students to System Manually

Version <1.0>

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Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case:	Christopher Meany

R.A.T.C Elaboration Spec

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91. Use-Case Name

91.1 Brief Description

Adding a student manually allows the advisor to create a student and manually add their information

92. Flow of Events

92.1 Basic Flow

- Actor- Advisor
- Advisor will log in with username and password
- Advisor will click create student
- Then they will enter the information required about the new student
- After entering the information they will hit submit and be prompted with an are you sure
- They will hit yes to create the student or no to back up and continue editing
- Before the student is fully added, the advisor will have to re-enter their credentials to add the student

R.A.T.C Elaboration Spec

92.2 Alternative Flows

Alternative flows are actions that will occur if the advisor incorrectly enters the information.

92.2.1 Required fields are incomplete

- *If all of the required fields are not correctly put into the web form then they will receive an error message prompting them to complete the form.*

92.2.1.1 Cancel Form

If the advisor decides not to submit the form to add the student manually, they can cancel the form.

93. Special Requirements

These are the requirements that must be met before the advisor can manually update the student.

93.1 System Requirements

- Access to Windows Server 2012
- Access to SQL 2016
- Due to FERPA restrictions we must store student information and grades on the secured University of Louisville servers.

94. Pre-conditions

- *These are conditions that must be met to manually add the student.*

94.1 Access to the system

The advisor must have administrator rights to login and manually add the student to the system.

95. Post-conditions

This is what will happen after the form has been submitted

95.1 Student manually added

Once the form has been manually filled in, the advisor may hit the submit button and the student will have been manually added.

96. Extension Points

If a field is incorrectly filled out or left blank, the advisor will receive an error message.

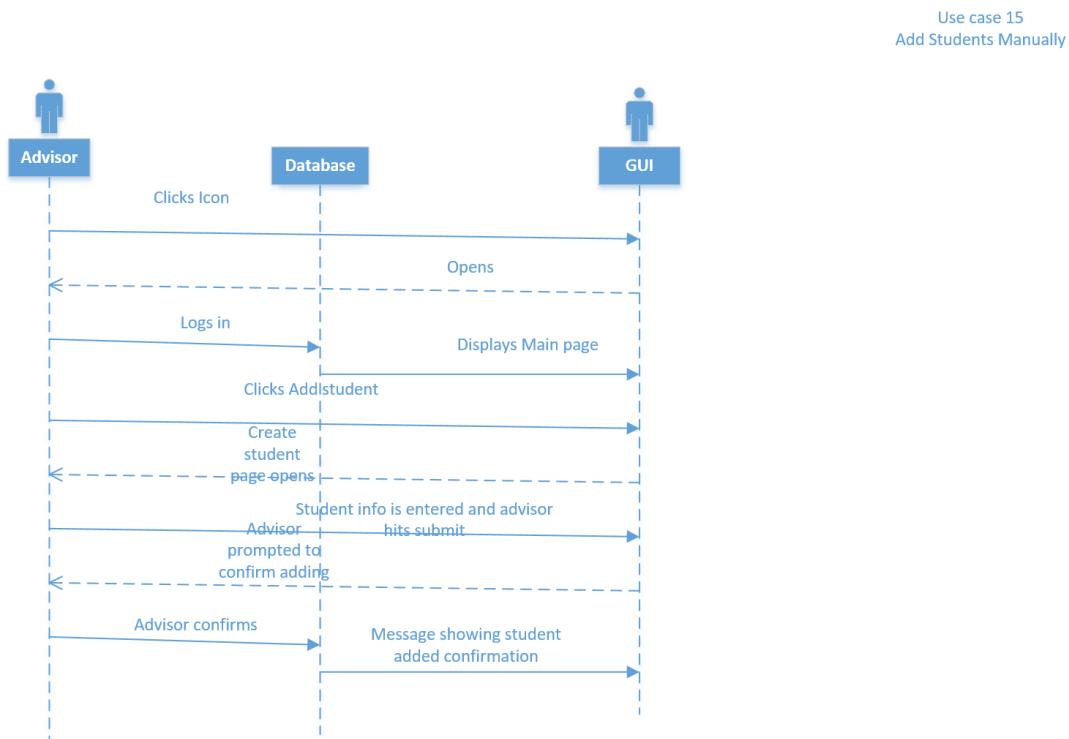
96.1 Invalid Input

- *Incorrect format*
- *Invalid characters*

R.A.T.C Elaboration Spec

- *Incomplete required fields*

R.A.T.C Elaboration Spec



R.A.T.C Elaboration Spec

Sonar Create New System Users

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Create new system users	Christopher Meany

R.A.T.C Elaboration Spec

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4.1	System creator has admin rights	4
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97. Create new system users

97.1 Brief Description

This use case allows for the system creator to create users within the system to use the system

98. Flow of Events

98.1 Basic Flow

- Actor – Database Administrator
- Allows the database administrator to create new users such as advisors or teachers
- The database administrator will be able to assign administrator rights to the advisors and teachers to allow them to update records and update student's information.

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98.2 Alternative Flows

Alternative flows are actions that will occur if the database administrator incorrectly inputs a user.

98.2.1 Required fields are not complete

If the required fields are not complete or entered incorrectly, then the database administrator will receive and error message.

98.2.2 Cancel form

If the database administrator wishes to cancel adding a user, then they can hit a cancel button and delete the user they were creating.

99. Special Requirements

These are the requirements that must be met to allow the creation of a new user

99.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

100. Pre-conditions

These are the conditions that must be met to allow the database administrator to create a new user

100.1 Administrator rights

The database administrator must have rights to the system that allows for them to create other users.

101. Post-conditions

These are the conditions that follow creating a user

101.1 Creating a new user

After the forms have been correctly filled out and submitted, then the new user will have access to the database system.

102. Extension Points

If any field is incorrectly filled out or left blank the database administrator will receive and error message

102.1 Incorrectly filled out

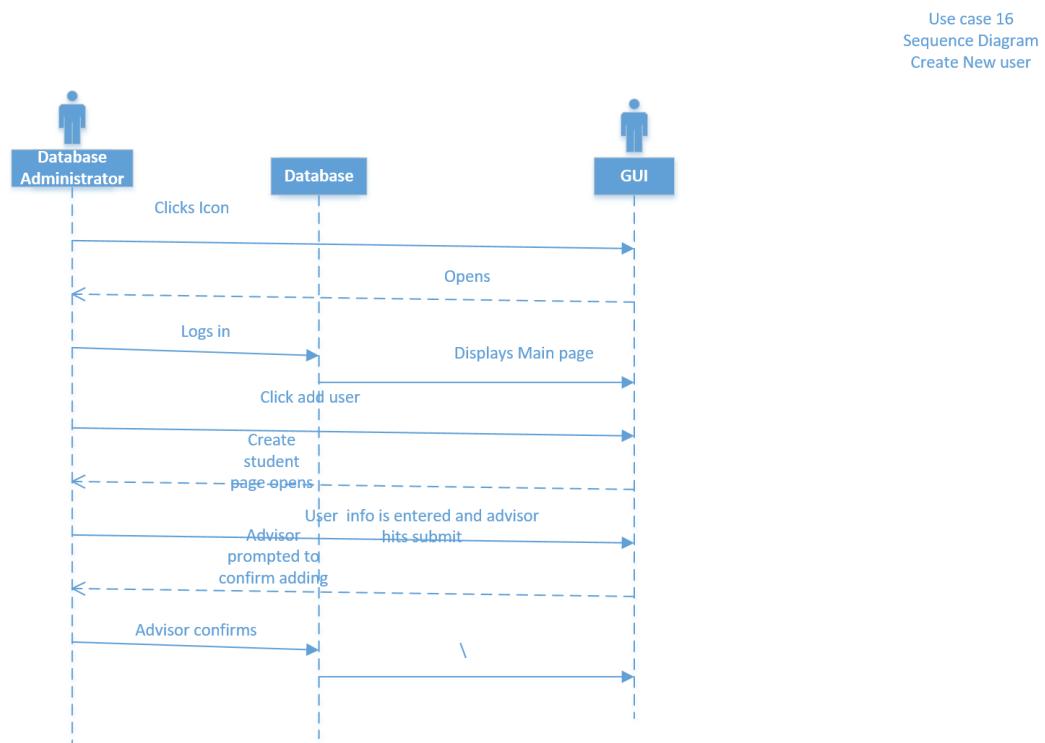
If the web form is not correctly filled out or has incorrect format, the administrator will receive an error message.

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102.2 Required fields left blank

If the administrator leaves any fields blank, they will receive an error message upon hitting the submit button.

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Sonar Reset User Password Via Email

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Reset user password via email	Christopher Meany

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5.	Post-conditions	2
5.1	User password reset successfully	2
6.	Extension Points	2
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103. Reset user password via email

103.1 Brief Description

The actor in this case is the advisor's that need to reset their passwords via email. They will submit a request if they need to change their password and they will receive an email with a link to allow them to properly change their login password.

104. Flow of Events

104.1 Basic Flow

- Actor - Basic user
- User will navigate to log in screen and select change password button
- They will enter their username and then type their old password followed by their new password twice before hitting submit.
- If the new password meets the requirements set for a password, and is entered correctly twice, then the password will be reset successfully.
-

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The actor in this case is the advisor that needs to reset their password through a link they receive through an email. Once their link is completed and they have matched their new password twice, their password will be reset.

104.2 Alternative Flows

Alternative flows are actions that will occur if the advisor fails to reset their password

104.2.1 Password is incorrect format

If the advisor's new password is not compatible with the format required, they will receive an error message.

104.2.2 Passwords do not match

The advisor must enter their new password two times to confirm that they have entered the password correctly. If the two times they enter the passwords do not match, they will receive an error message.

105. Special Requirements

These are requirements that must be met to run the database and allow them to request to reset their password.

105.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

106. Pre-conditions

These are conditions that must be met to allow the user to reset their password.

106.1 Access to the system

- The user must have rights to the system and a created profile to be able to request to reset their password.

107. Post-conditions

The post conditions will be that the user successfully resets their password

107.1 Password reset successfully

Once the email link has been clicked and the password reset information has been successfully filled out, their password will be reset.

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108. Extension Points

If the password reset information is not filled out correctly, then they will receive an error message.

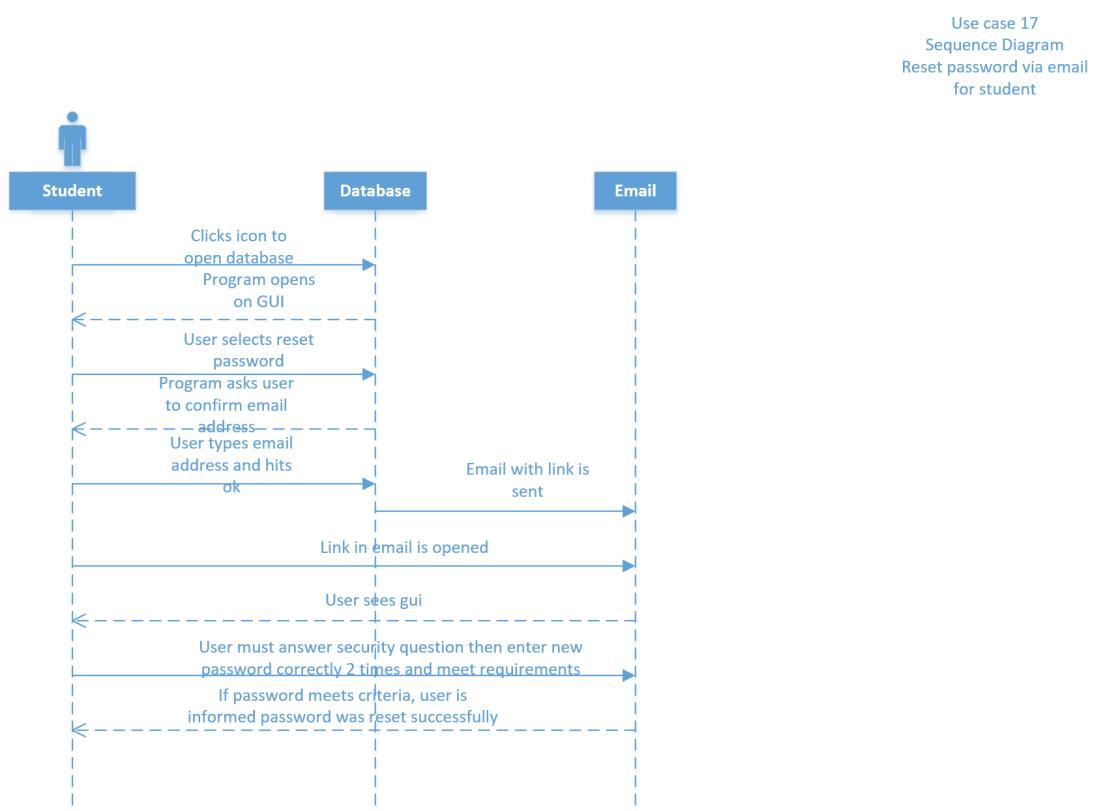
108.1 Passwords do not match

If the new password is not entered the same twice, they will receive an error message.

108.2 Passwords do not meet required format

If the passwords do not meet the systems format, they will receive an error message

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Sonar
Reset System Admin Password Via Email

R.A.T.C Elaboration Spec

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Reset system admin password via email	Christopher Meany

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2.2.2	New passwords do not match	4
3.	Special Requirements	4
3.1	System Requirements	4
4.	Pre-conditions	4
4.1	System admin must have administrator rights	4
5.	Post-conditions	5
5.1	Password is successfully changed	5
6.	Extension Points	5
6.1	Password format is incorrect	5

109. System Administrator changes password via email

109.1 Brief Description

When the system administrator needs to change his or her password, they will submit a request to receive a link that will allow for them to change their password through their registered email.

110. Flow of Events

110.1 Basic Flow

- Actor - Database Administrator
- System Administrator will navigate to log in screen and select forgot password button
- System administrator will then enter their email and hit submit
- The system administrator will then open the link in their email and enter their username and answer security questions.
- Following the security questions they will have to enter a new password that

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- meets the requirements successfully two times and hit submit.
- If the password was accepted, then they will be notified it was successfully changed.
- If the passwords do not match or do not meet the requirements, then they will be notified to retry.

110.2 Alternative Flows

Alternative flows are actions that will occur if the administrator fails to properly change their password.

110.2.1 Password does not meet the required standards

If the password does not meet the standards set for an appropriate password, then the system administrator will receive an error message prompting them to retype a new password.

110.2.2 Passwords do not match

The user will have to type in a new password two times and make sure that they match or they will receive an error message prompting them to retype the new password.

111. Special Requirements

These are requirements that must be filled to allow the system administrator to be able to login and change their password

111.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers
- Must have system administrator rights to the database to authorize them to make this change.

112. Pre-conditions

These are conditions that must be met to allow for the system admin to change their password.

112.1 Access to the system with administrator rights

- System administrator must have administrator rights.
- System administrator must be able to have access to the University of Louisville's new system for the school of nursing.

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113. Post-conditions

Post conditions are what will take place after the user successfully changes their password.

113.1 Password Reset

After the system administrator successfully submits a new password that meets the requirements necessary for this system, they will have a new password.

114. Extension Points

If the system administrator does not properly fill out the new password they will be given an error message to let them know to retry.

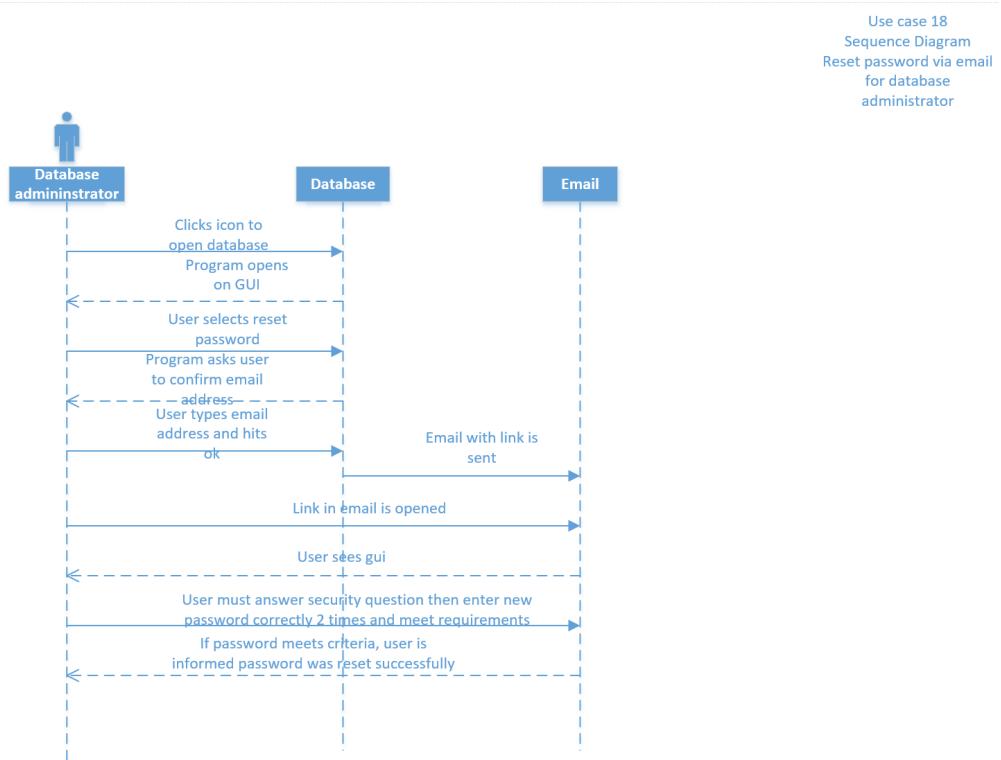
114.1 Passwords do not match

The system administrator will have to fill out a form where they enter a new password twice. If the two passwords do not match, they will receive an error message that will tell them to reenter their new passwords twice.

114.2 Password does not meet required format

If the password does not meet the format required by the software, they will be given an error message to let them know to try a new password.

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Sonar
Reset Professor Password Via Email

Version <1.0>

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Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Reset Professor password via email	Christopher Meany

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2.2.2	New passwords do not match	4
3.	Special Requirements	4
3.1	System Requirements	4
4.	Pre-conditions	4
4.1	Professor must have administrator rights	4
5.	Post-conditions	4
5.1	Password is successfully changed	4
6.	Extension Points	5
6.1	Passwords do not match	5
6.2	Passwords format is incorrect	5

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115. Professor changes password via email

115.1 Brief Description

When the professor needs to change his or her password, they will submit a request to receive a link that will allow for them to change their password through their registered email.

116. Flow of Events

116.1 Basic Flow

- Actor – professor
- Professor will navigate to log in screen and select change password button
- They will enter their username and then type their old password followed by their new password twice before hitting submit.
- If the new password meets the requirements set for a password, and is entered correctly twice, then the password will be reset successfully.

116.2 Alternative Flows

Alternative flows are actions that will occur if the professor fails to properly change their password.

116.2.1 Password does not meet the required standards

If the password does not meet the standards set for an appropriate password, then the professor will receive an error message prompting them to retype a new password.

116.2.2 Passwords do not match

The user will have to type in a new password two times and make sure that they match or they will receive an error message prompting them to retype the new password.

117. Special Requirements

These are requirements that must be filled to allow the professor to be able to login and change their password

117.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

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- Must have administrator rights to the database to authorize them to make this change.

118. Pre-conditions

These are conditions that must be met to allow for the system admin to change their password.

118.1 Access to the system with administrator rights

- Professor must have administrator rights and login credentials.
- Professor must be able to have access to the University of Louisville's new system for the school of nursing.

119. Post-conditions

Post conditions are what will take place after the user successfully changes their password.

119.1 Password Reset

After the professor successfully submits a new password that meets the requirements necessary for this system, they will have a new password.

120. Extension Points

If professor does not properly fill out the new password they will be given an error message to let them know to retry.

120.1 Passwords do not match

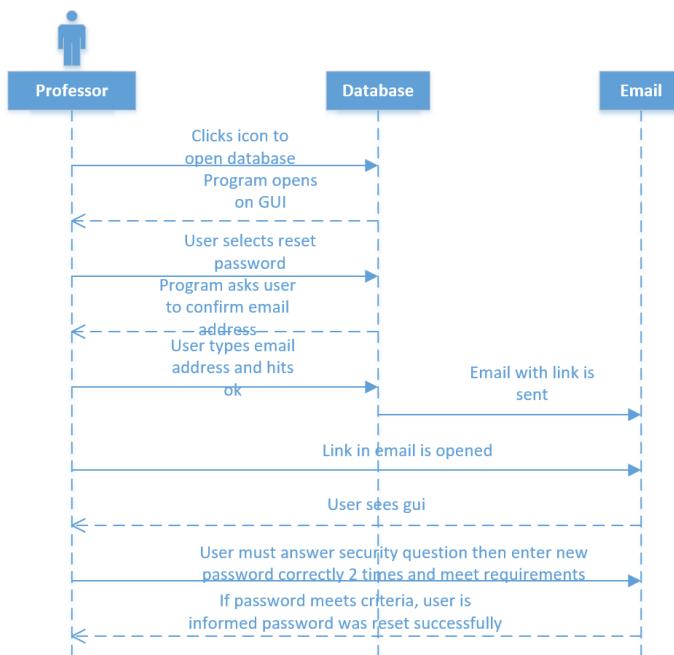
The professor will have to fill out a form where they enter a new password twice. If the two passwords do not match, they will receive an error message that will tell them to reenter their new passwords twice.

120.2 Password does not meet required format

If the password does not meet the format required by the software, they will be given an error message to let them know to try a new password.

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Use case 19
Sequence Diagram
Reset password via email
for Professor



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Sonar Reset Committee Member Password Via Email

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Reset Committee member password via email	Christopher Meany

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3.	Special Requirements	4
3.1	System Requirements	4
4.	Pre-conditions	4
4.1	Committee member must have administrator credentials	4
5.	Post-conditions	4
5.1	Password is successfully changed	4
6.	Extension Points	5
6.1	Passwords do not match	5
6.2	Passwords format is incorrect	5

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121. Committee member changes password via email

121.1 Brief Description

When the committee member needs to change his or her password, they will submit a request to receive a link that will allow for them to change their password through their registered email.

122. Flow of Events

122.1 Basic Flow

- Actor - Committee member
- Committee member will navigate to log in screen and select change password button
- They will enter their username and then type their old password followed by their new password twice before hitting submit.
- If the new password meets the requirements set for a password, and is entered correctly twice, then the password will be reset successfully.
-

122.2 Alternative Flows

Alternative flows are actions that will occur if the committee member fails to properly change their password.

122.2.1 Password does not meet the required standards

If the password does not meet the standards set for an appropriate password, then the committee member will receive an error message prompting them to retype a new password.

122.2.2 Passwords do not match

The user will have to type in a new password two times and make sure that they match or they will receive an error message prompting them to retype the new password.

123. Special Requirements

These are requirements that must be filled to allow the committee member to be able to login and change their password

123.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016

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- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers
- Must have administrator credentials to the database to authorize them to make this change.

124. Pre-conditions

These are conditions that must be met to allow for the committee to change their password.

124.1 Access to the system with administrator rights

- Committee member must have administrator credentials and login credentials.
- Committee Member must be able to have access to the University of Louisville's new system for the school of nursing.

125. Post-conditions

Post conditions are what will take place after the user successfully changes their password.

125.1 Password Reset

After the committee member successfully submits a new password that meets the requirements necessary for this system, they will have a new password.

126. Extension Points

If committee member does not properly fill out the new password they will be given an error message to let them know to retry.

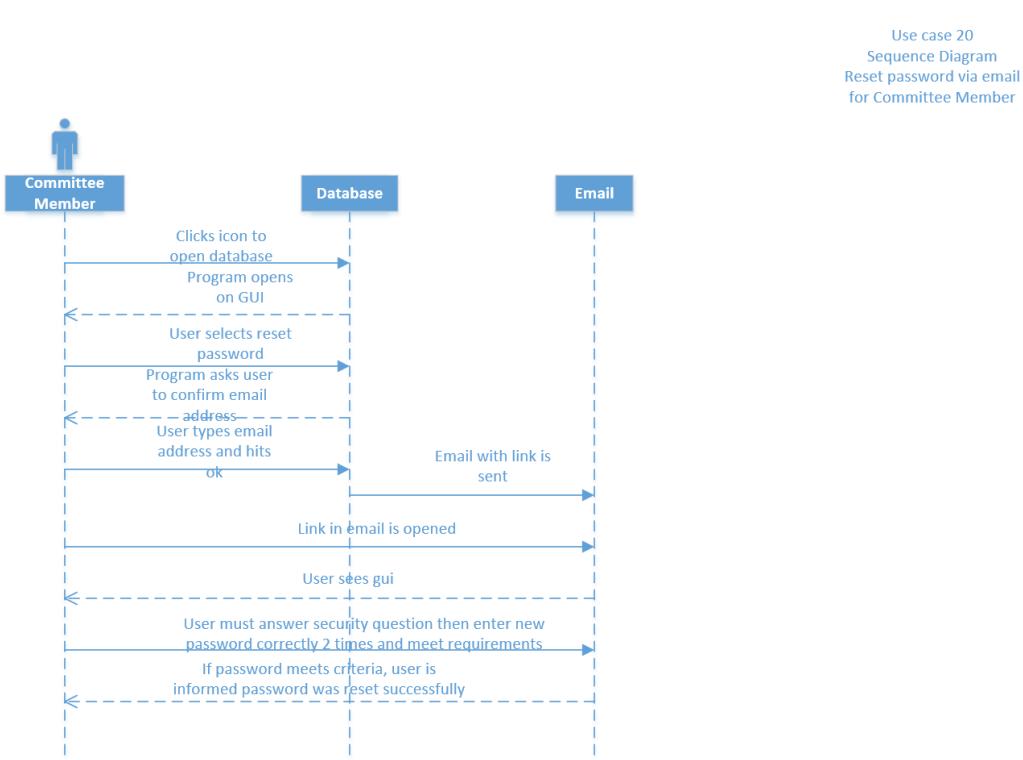
126.1 Passwords do not match

The committee member will have to fill out a form where they enter a new password twice. If the two passwords do not match, they will receive an error message that will tell them to reenter their new passwords twice.

126.2 Password does not meet required format

If the password does not meet the format required by the software, they will be given an error message to let them know to try a new password.

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Sonar Generate Automatic Emails for Student Compliance

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Generate automatic emails for student compliance	Christopher Meany

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3.1	System Requirements	4
4.	Pre-conditions	4
4.1	Student information date	4
5.	Post-conditions	4
5.1	Compliance emails are sent	4
6.	Extension Points	5
6.1	Invalid Input	5

127. Generate Student Compliance Emails

127.1 Brief Description

This will generate automatic emails to be sent to students to alert them to update certificates and licenses in a timely manner

128. Flow of Events

128.1 Basic Flow

- Actor- Student
- The database will automatically track students certifications and licenses
- When a student is within X number of days of a certification or license expiring, they will be sent an automatic email informing them of the certification or license that will expire and when it will expire

128.2 Alternative Flows

Alternative flows are actions that will occur if the system does not do what it is supposed to do

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128.2.1 Emails not sent in a timely manner

This system should generate and send emails as reminders to student's to allow them enough time to get back up to standards. However, this could have a potential issue of not enough notice given to allow the student to get themselves back into accordance.

129. Special Requirements

These are requirements that must be met to allow the system to generate and send emails to students in a timely manner.

129.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers
- System must be set to send emails whenever a student's certifications or licenses are close to expiring automatically.

130. Pre-conditions

These are conditions that must be met to make sure the system is sending emails as it should

130.1 Student expiration dates must be entered correctly

For this system to work, the student's expiration dates must be entered correctly, and the system must know how many days in advance it needs to send the emails to keep the student's in compliance.

131. Post-conditions

These are the outcomes following a working system.

131.1 Emails are automatically generated and sent to the students

If the system is built correctly, the system will send emails to the students to alert them to update whatever certification or license they need to, to keep them in regulations.

132. Extension Points

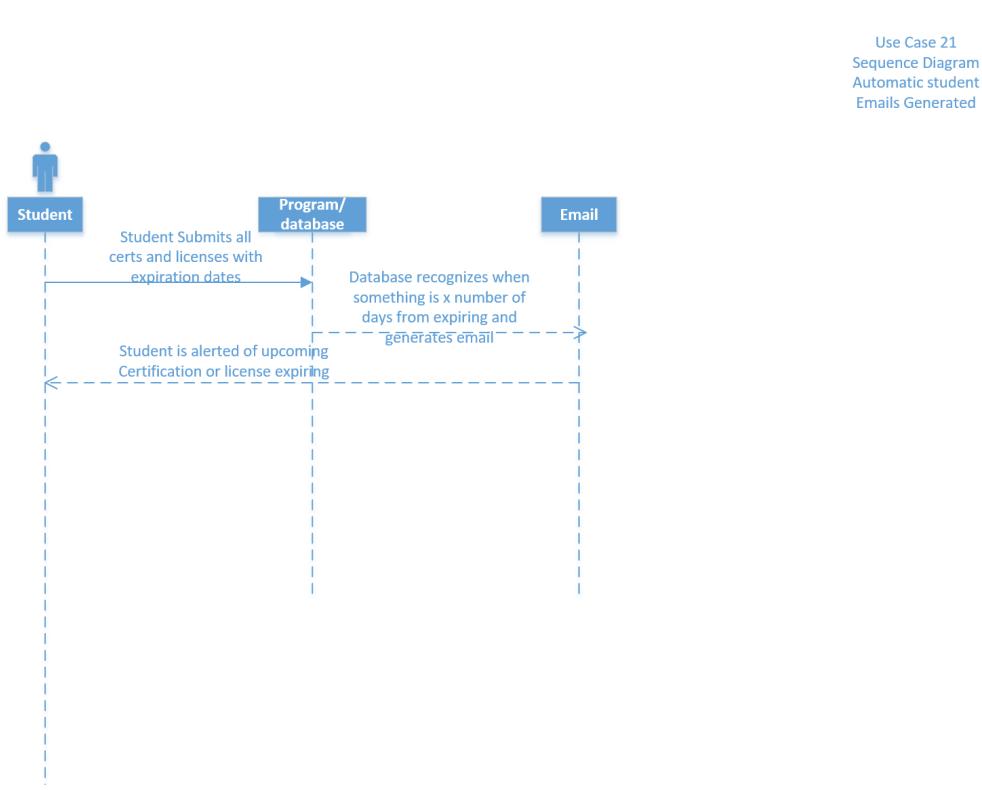
If information is entered incorrectly then they will not receive emails with enough time to stay in regulation.

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132.1 Invalid Input

If the information is entered incorrectly, then the system will not be able to properly keep them informed on when they need to update their certifications.

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Sonar
Generate Email Templates

R.A.T.C Elaboration Spec

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Generate email templates	Christopher Meany

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3.1	System Requirements	4
4.	Pre-conditions	4
4.1	Templates must be pre-made	4
5.	Post-conditions	4
5.1	Email templates are set	4
6.	Extension Points	4
6.1	Templates stored incorrectly	4

133. Generate Email Templates

133.1 Brief Description

This will generate commonly used template emails for advisors to send to students.

134. Basic Flow

- Actor – Advisor
- Advisor will log in on the main page with their administrator username and password
- They will click the generate email button
- After they click the generate email button they will be brought to a screen of pre written templates that they will chose from
- After they select a template it will open it in a blank email document
- They will type in the email address of the student or students they want to send it to and hit send after typing the email

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134.1 Alternative Flows

Alternative flows are actions that will occur if the system does not do what it is supposed to do

134.1.1 Templates do not open in blank email

The system will have a selection of blank templates for the advisors to send quickly to the students. An error that can occur here is that the template when selected does not open in a blank email which would prevent an advisor from being able to quickly click the template and just fill in the email addresses costing them time.

135. Special Requirements

These are requirements that must be met to allow the system to generate and send emails to students in a timely manner.

135.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers
- System must have pre saved templates that when clicked will open in a blank email.

136. Pre-conditions

These are conditions that must be met to make sure the system is sending emails as it should

136.1 Templates must be accessible and open in a blank email

For this system to work, commonly used templates need to be pre-saved in and readily accessible.

137. Post-conditions

These are the outcomes following a working system.

137.1 Templates when clicked, open in a blank email

There will be pre-saved templates that when clicked, will open in a blank email document.

138. Extension Points

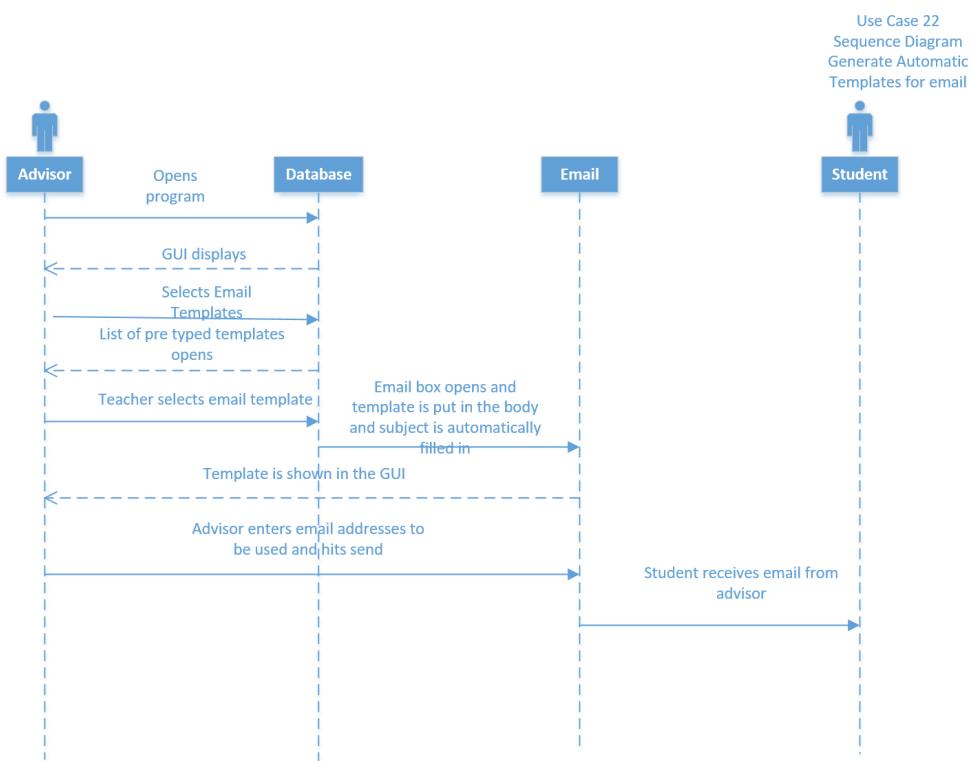
If templates are stored incorrectly, they will not open in a blank email when clicked.

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6.1 Templates stored incorrectly

If the templates are not stored correctly in the database, then when clicked on, they will not open into a blank email causing the advisor to spend more time copying and pasting the template into an email.

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Sonar
Track Student Progress

R.A.T.C Elaboration Spec

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Track student progress	Christopher Meany

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2.2	Alternative Flows	4
2.2.1	Information not entered correctly	4
2.2.2	Information not entered	4
3.	Special Requirements	4
3.1	System Requirements	4
4.	Pre-conditions	4
4.1	Access to system	4
4.2	Access to the grade	4
5.	Post-conditions	4
5.1	Advisors are able to track progress of student	4
6.	Extension Points	5
6.1	Invalid Input of information	5
6.2	Information not entered	5

Track Student Progress

139. Track Student Progress

139.1 Brief Description

This allows the advisors to track the student's progress through the program

140. Flow of Events

140.1 Basic Flow

- Actor - Advisor
- The advisor first must log in with their administrator user name and log in password
- The advisor will be able to select a run query button
- This will allow them to run queries on an individual or multiple students at a

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- time that will meet whatever needs they have
- This will assist the advisors in keeping current with the students and knowing more information about them more easily.

140.2 Alternative Flows

Alternative flows are actions that occur if information is not entered correctly or not entered at all.

140.2.1 Information not entered correctly

If the advisors do not enter the student's information, grades, or certifications correctly, then this will cause issues with tracking them correctly as they progress through the program.

140.2.2 Information not entered

If the advisors forget to submit and enter information on a student, then they will not be able to accurately track the student's progress. If information is not entered, then the student will appear to be behind and can cause issues with scheduling and advising.

141. Special Requirements

These are requirements that must be met to allow the advisors to track the student's progress

141.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

142. Pre-conditions

These are conditions that must be met to allow for the advisors to track the students.

142.1 Access to the system

- Advisors must be able to log in
- They must be connected through the University of Louisville's network

142.2 Access to the student's grades

The advisor must be able to access the student's grades to carry them over to the database system.

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143. Post-conditions

These are the results if everything is tracked properly

143.1 Advisor tracks student's progress

If everything works correctly, and all information is entered correctly and in a timely manner, then the advisors will be able to track the student's progress as they move through the program.

144. Extension Points

If information is entered incorrectly or not entered at all, then advisors cannot properly track students

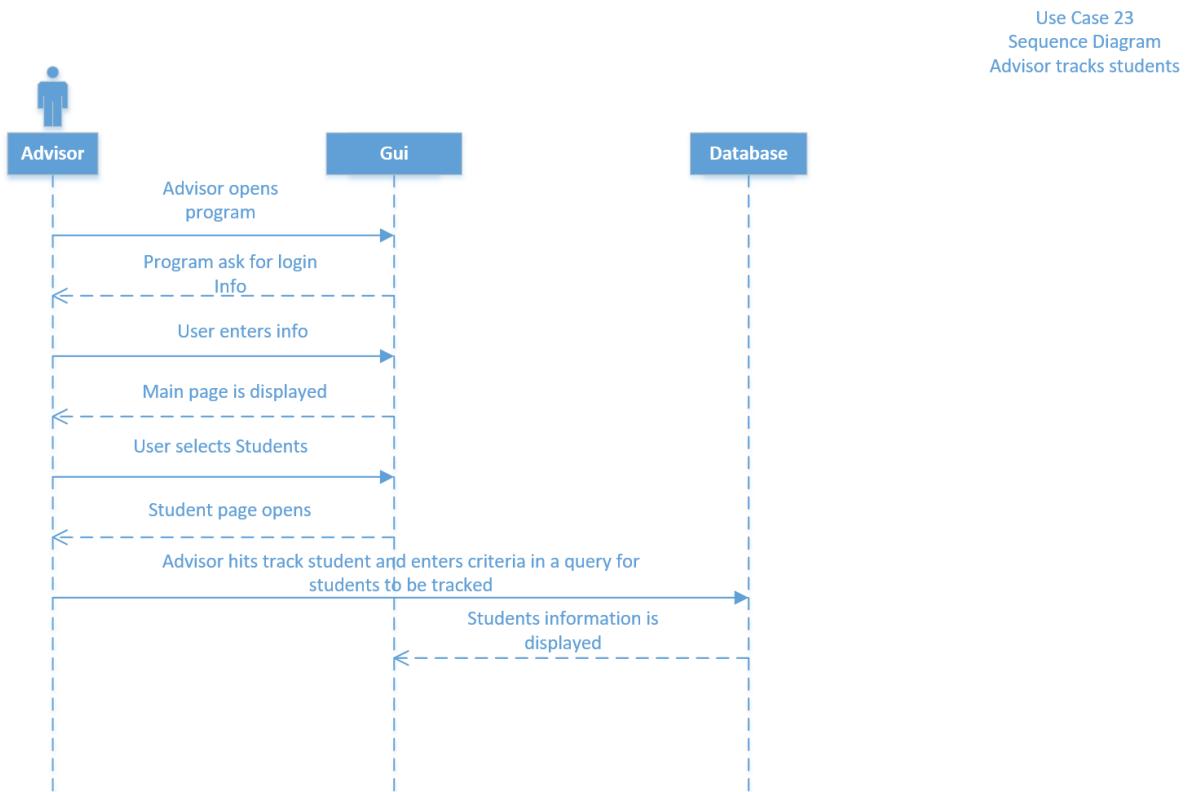
144.1 Invalid Input of information

If information is put in incorrectly, then the advisors will have trouble advising students and tracking their progress as they would be giving bad information or not know where a student truly stands.

144.2 Information not entered

If the information on a student is forgotten and not entered, then the system will show them as behind making it harder for an advisor to track the student correctly.

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Sonar

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Use Case Specification: Track Graduation

Version <1.0>

Revision History

Date	Version	Description	Author
19/Oct/16	1.0	Use Case: Track Graduation	Christopher Meany

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 - 2.2 Alternative Flows 4
 - 2.2.1 Information not entered correctly 4
 - 2.2.2 Information not entered 4
3. Special Requirements 4
 - 3.1 System Requirements 4
4. Pre-conditions 4
 - 4.1 Access to system 4
 - 4.2 Access to the grade 4
5. Post-conditions 4
 - 5.1 Advisors are able to track progress of student to graduation 5
6. Extension Points 5
 - 6.1 Invalid Input of information 5
 - 6.2 Information not entered 5

R.A.T.C Elaboration Spec

Use Case Specification: Track Graduation

1. Track Graduation

1.1 Brief Description

This allows the advisors to track the student's progress through the program for graduation

2. Flow of Events

2.1 Basic Flow

- Actor- Advisor
- Advisor will log in with their username and password
- Advisors will be able to run queries and search students individually or multiple at a time
- They will be able to check off classes as passed and failed as students complete them
- The advisor will be able to see when students have completed their required curriculum making them eligible for graduation.

2.2 Alternative Flows

Alternative flows are actions that occur if information is not entered correctly or not entered at all.

2.2.1 Information not entered correctly

If the advisors do not enter the student's information, grades, or certifications correctly, then this will cause issues with tracking their graduation date correctly as they progress through the program.

2.2.2 Information not entered

If the advisors forget to submit and enter information on a student, then they will not be able to accurately track the student's progress. If information is not entered, then the student will appear to be behind and can cause issues with scheduling and advising.

3. Special Requirements

These are requirements that must be met to allow the advisors to track the student's progress towards graduation

3.1 System Requirements

- Access to Windows Server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

R.A.T.C Elaboration Spec

4. Pre-conditions

These are conditions that must be met to allow for the advisors to track the student's progress towards graduation.

4.1 Access to the system

- Advisors must be able to log in to the system
- They must be connected through the University of Louisville's network

4.2 Access to the student's grades

The advisor must be able to access the student's grades to carry them over to the database system to show completion percentage towards graduation.

5. Post-conditions

These are the results if everything is tracked properly

5.1 Advisor tracks student's progress to graduation

If everything works correctly, and all information is entered correctly and in a timely manner, then the advisors will be able to track the student's progress as they move through the program and prepare them for graduation.

6. Extension Points

If information is entered incorrectly or not entered at all, then advisors cannot properly track student's progress towards graduation.

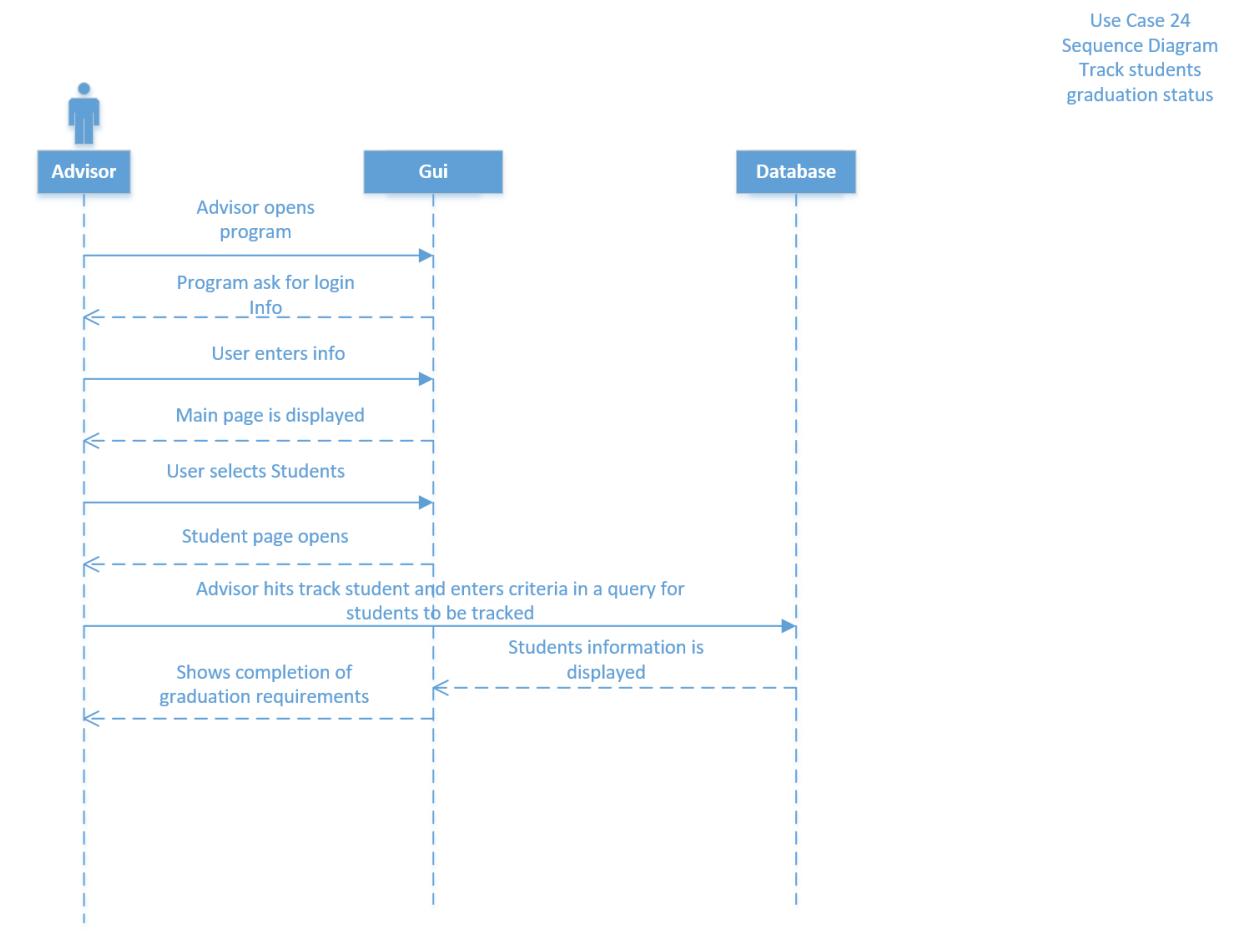
6.1 Invalid Input of information

If information is put in incorrectly, then the advisors will have trouble advising students and tracking their progress as they would be giving bad information or not know where a student truly stands.

6.2 Information not entered

If the information on a student is forgotten and not entered, then the system will show them as behind making it harder for an advisor to track the student correctly.

R.A.T.C Elaboration Spec



R.A.T.C Elaboration Spec

25.

145. Submission of Application to University

145.1 Brief Description

Form will allow students to submit their application to university for consideration.

146. Flow of Events

146.1 Basic Flow

The actor in this case would be the prospective student. The prospective student will enter their, name, address, email, phone number, high school information, and score information for ACT and SAT for review by university in order to make a decision. All fields must be entered correctly before further steps would be allowed.

146.2 Alternative Flows

146.2.1 Incorrect Information entered

Alternative flow would occur if information being entered is not the right type for the field and might result in errors immediately or later on when the information is used for other purposes.

146.2.1.1 Reset Form

When incorrect information is entered on screen, or form produces an error, reset form will allow the form to be reloaded.

146.2.2 Information not available

In the event, that student does not have required information available, form will allow the user to save the form to reenter the information.

147. Special Requirements

147.1 System Requirements

147.1.1 Windows Server 2012

147.1.2 Access SQL

147.2 Legal/Security Requirements

System must be secure in order to protect student information being entered. The system will also need to be compliant with FERPA.

148. Pre-conditions

System must be connected to internet for prospective students to be able to enter information. Connection to and from the system must be secure.

R.A.T.C Elaboration Spec

149. Post-conditions

149.1 Information sent to university

System will forward information collected from system to university of Louisville admissions office for consideration.

5.2 Provide confirmation

Confirmation will be provided to the user along with application number for tracking purposes.

150. Extension Points

150.1 Invalid Input

Invalid input would occur anytime Required fields are left empty, or incorrect character/number types are entered in the field.

Use case 25: Submission of application to school of nursing.

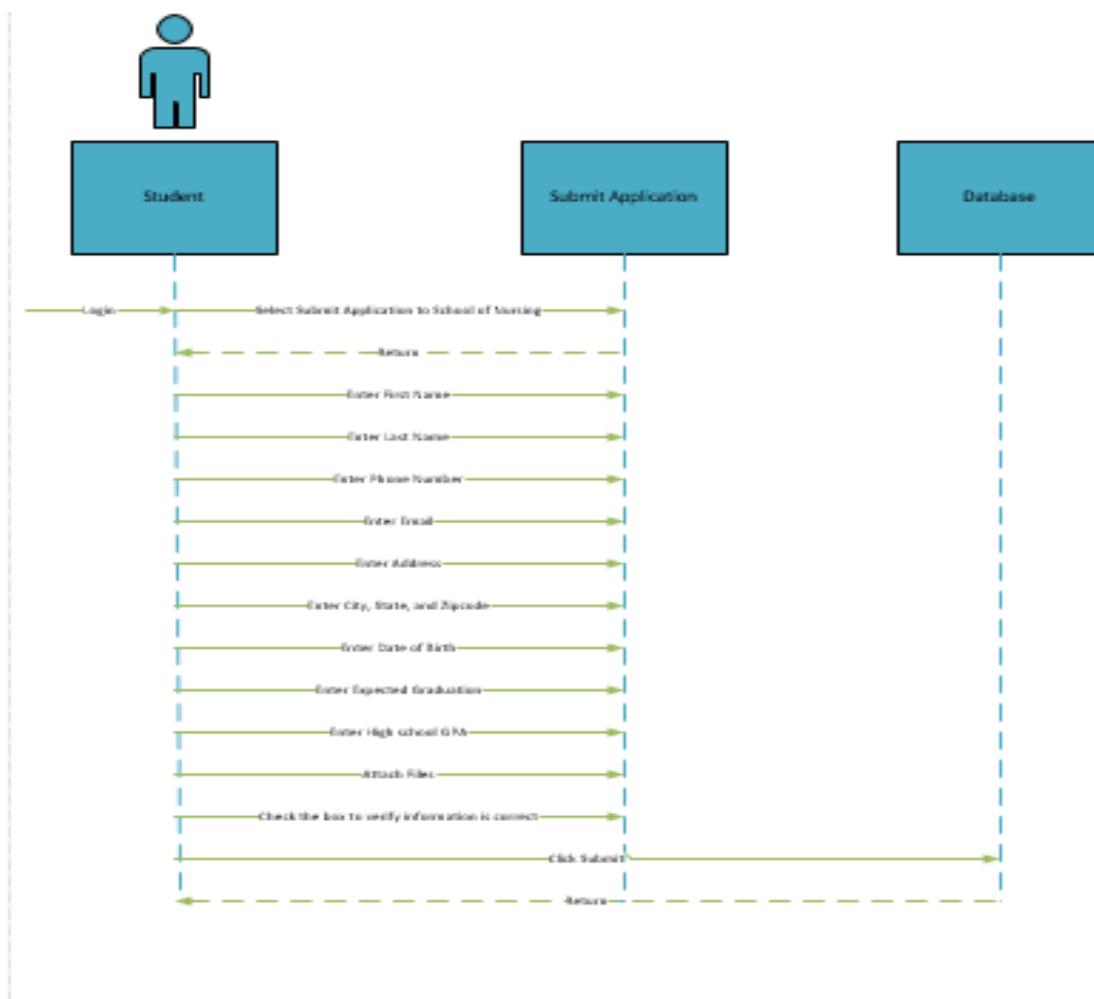
Student goes to the webpage

R.A.T.C Elaboration Spec

Student verifies/edits the Full Name, Address, Email Address, High school, ACT, SAT and attaches required documentation

Student marks the check box to verify that information is correct.

Student clicks the submit button to submit the application



R.A.T.C Elaboration Spec

1. Track Received Applications

150.2 Brief Description

Primarily for use by advisors, this will allow them to track scholarships submitted by students. They will be able to track filing status, steps processed, and pay out status of the scholarship status.

151. Flow of Events

151.1 Basic Flow

Advisors will be able to use a tracking number or student ID to track scholarships for students. They will be able to see when the application was filed, if it was eligible, which part of the process the application is in, and the payout status.

151.2 Alternative Flows

151.2.1 Invalid tracking information

Tracking information is invalid as in is incomplete, or does not exist. This would result in an error that would allow advisor to re-enter information.

151.2.2 Information does not exist

Information does not exist in the system yet. In this case system would allow user submit another application if allowed.

152. Special Requirements

152.1 System Requirements

- Windows Server 2012
- Access SQL 2016

152.2 Legal Requirements

System must be compliant with FERPA regulations.

153. Pre-conditions

153.1 Access to system

Advisor must be logged into the system on University of Louisville secure system

153.2 Access to Tracking information

Advisor must have access to the tracking information such as application number or student information before processing request through the system.

R.A.T.C Elaboration Spec

154. Post-conditions

154.1 Results provided

Tracking results are provided for the application.

154.2 Submit new application

System would direct advisor to submit a new scholarship application.

155. Extension Points

155.1 Invalid input

System would provide an error along with a notification when a valid input isn't entered or selection isn't made.

- Invalid format
- Invalid length
- Invalid characters

Use case 26: Track Received Scholarships

Advisor Logs on to the system

Advisor selects Check Reports

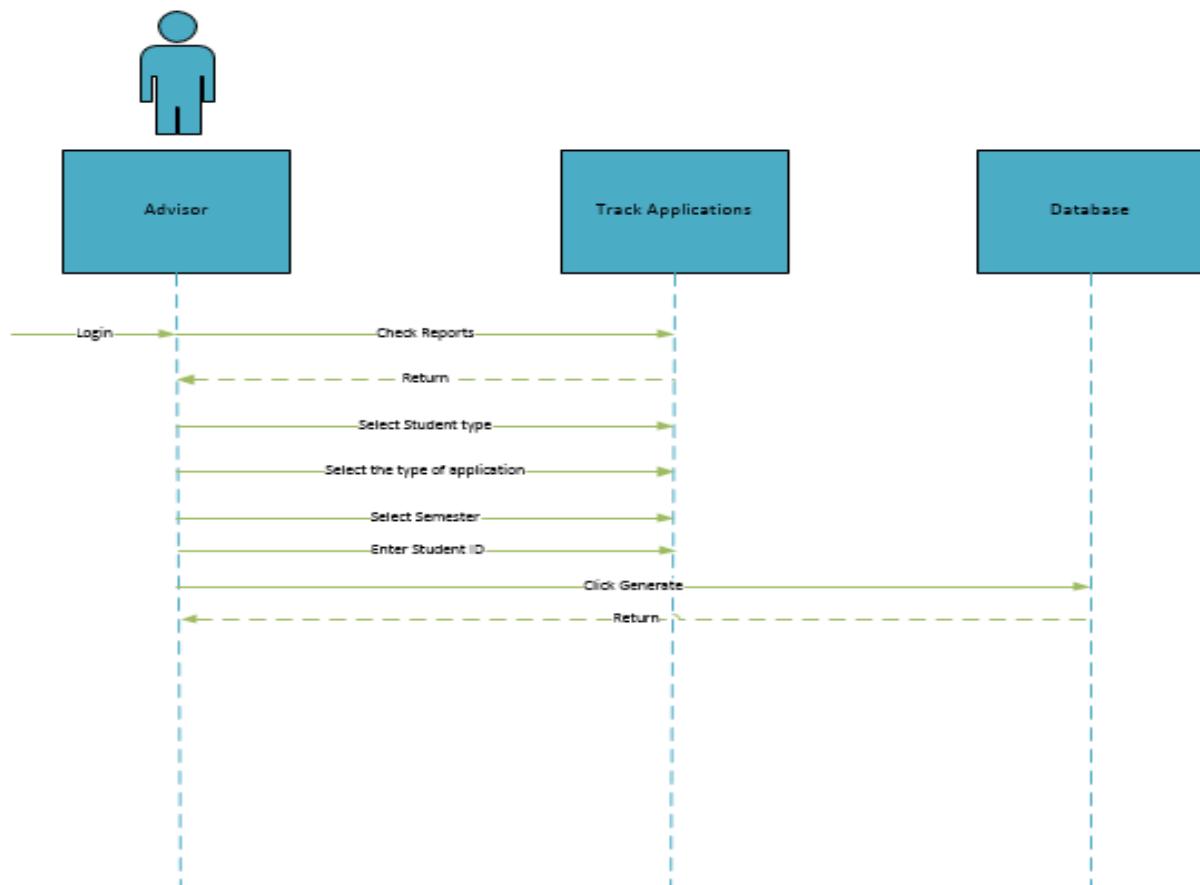
R.A.T.C Elaboration Spec

Advisor selects student type, application type, semester.

Advisor enters student ID information

Advisor clicks generate.

Report for the submitted application is generated



R.A.T.C Elaboration Spec

1. Submit Scholarship Applications

155.2 Brief Description

System would allow for submission of new applications for scholarship by students.

156. Flow of Events

156.1 Basic Flow

The actor in this case is the student who can use the system to file new application for scholarship. System would ask student to confirm some of the information already entered when student was created e.g. the contact number, email address, home address. It would also ask student to submit documentation such as transcripts, letters of recommendation and anything else that SON think they might need. Information entered from this will be transferred to the committee to help in their decision making process.

156.2 Alternative Flows

156.2.1 Required Fields not complete

Required information is not entered by the student resulting in an error. Some of the fields are not required, which is not part of this flow. Information such as contact information will be required resulting in errors if left empty, which in turn would result in interruption.

156.2.2 Save for later

This would allow student to save their information if they don't have required information available instead of having to start over. Students can just save the information in order to continue later after gathering information.

157. Special Requirements

157.1 System Requirements

- Windows server 2012
- Access SQL 2016
- Student account must be active in system.
- System and student must be connected via a secure connection.

157.2 Legal Requirements

System must be compliant with FERPA Regulations.

R.A.T.C Elaboration Spec

158. Pre-conditions

158.1 Active Student Account

Student must have an active account with the university before access is allowed to the application system.

158.2 Access to system

Student must be connected to the network and must have secure access to the system.

159. Post-conditions

159.1 Submit scholarship application

System would submit application for the student for review by committee and will email a tracking number to student and advisor.

160. Extension Points

160.1 Invalid input

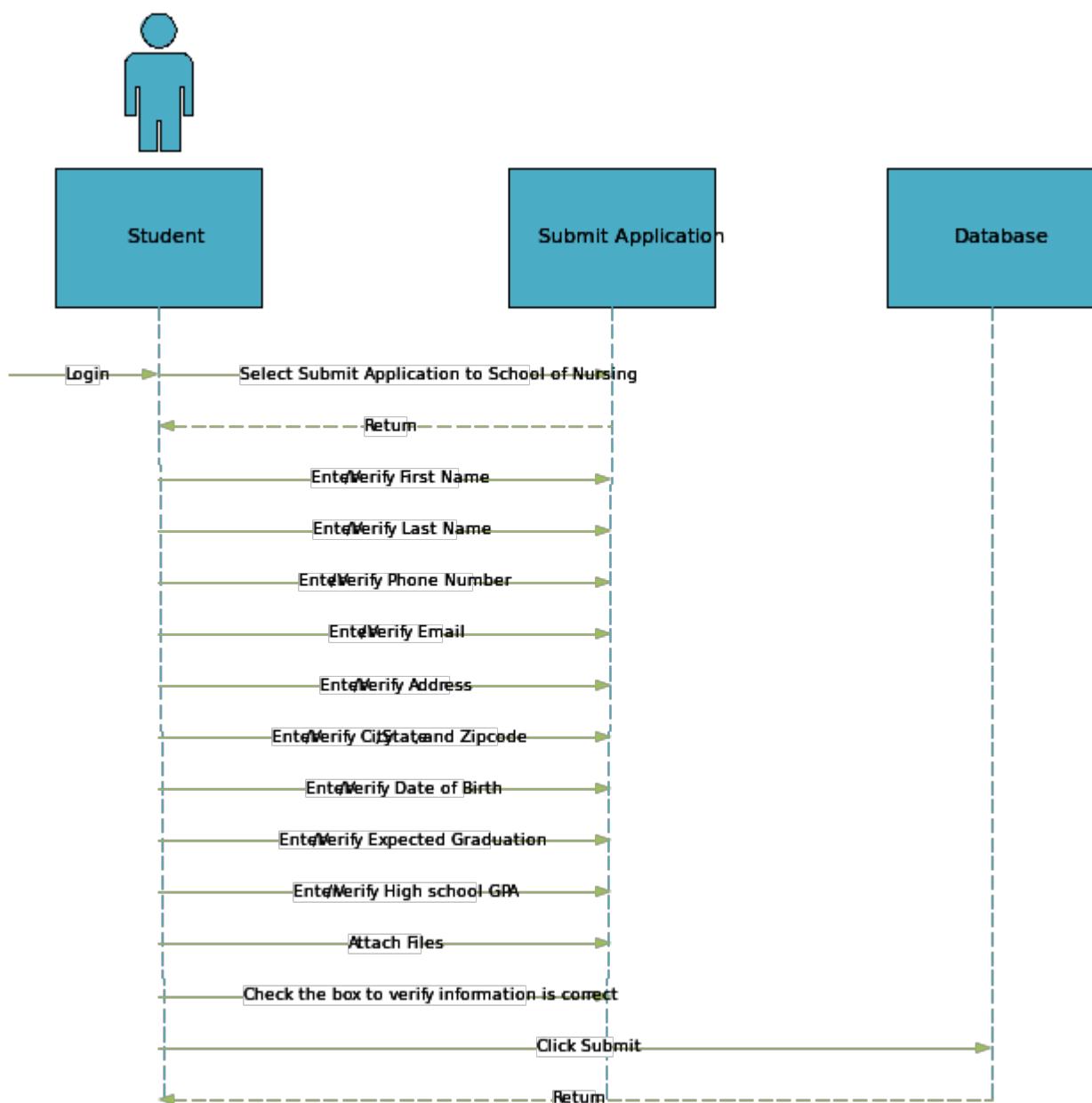
System will provide an error whenever:

- Invalid characters are entered
- Input is of invalid length
- Format is incorrect

160.2 Student does not exist

System would provide an error when the student trying to access the application portal does not exist in the system.

R.A.T.C Elaboration Spec



R.A.T.C Elaboration Spec

28.

161. Track scholarship eligibility

161.1 Brief Description

Track scholarship eligibility will check eligibility of student to receive a scholarship

162. Flow of Events

162.1 Basic Flow

The actor in this case would be the advisor who will use information from *submit scholarship application* in order to check if the student qualifies for scholarships. Eligibility status will be to decide which applications will be accepted and forwarded to decision making committee.

162.2 Alternative Flows

162.2.1 Missing Required information

An error would result if the information provided by an advisor is incorrect causing incorrect eligibility status. Advisor might be entering wrong application number for student and mixes eligibility status for different students.

162.2.2 Reset Form

Form will be reset for next application to complete tasks with least amount of delay

163. Special Requirements

163.1 System Requirements

- Access to Windows Server 2012
- Access SQL database
- Access to secure network

163.2 Legal Requirements

System and user must be connected to secure network firewall and be compliant with FERPA regulations

164. Pre-conditions

164.1 Access to system

Advisor must have secure access to student information on the system. Access will be behind university firewall to keep student information safe.

R.A.T.C Elaboration Spec

164.2 Valid Student

Student information must be valid before the process can be completed.

165. Post-conditions

165.1 Scholarship eligibility

System would provide the eligibility results to the advisor for application to move to next step

166. Extension Points

166.1 Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters
- Student does not exist in the system

Use Case 28: Submit Scholarships

Student logs in to the system using their credentials.

Student selects submit application(Scholarships)

R.A.T.C Elaboration Spec

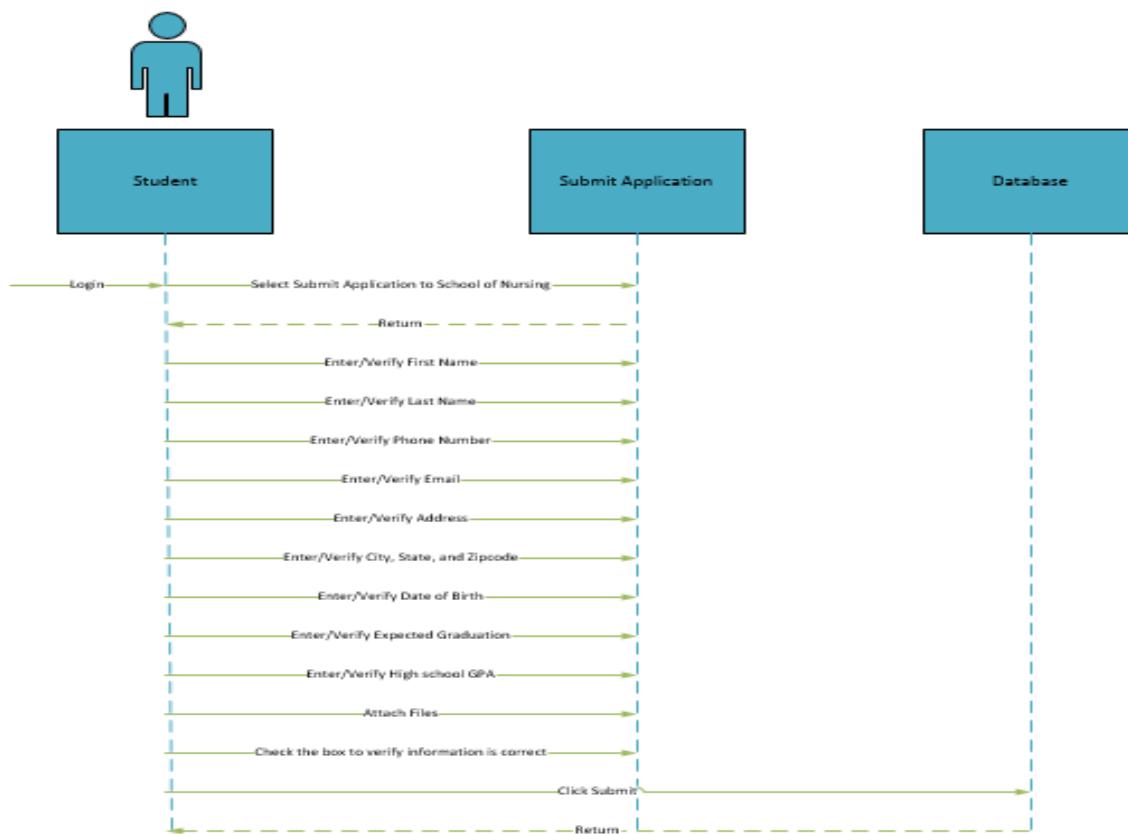
Student Enters/Verifies their Name, Phone Number, email, Address, Date of Birth, Expected Graduation, and GPA

Student attaches required documents to the submission

Student verifies that all of the information is correct

Student clicks submit

Application is submitted for review



R.A.T.C Elaboration Spec

167. Track Marketing efforts

167.1 Brief Description

Track Marketing efforts will have advisors as the primary actor who will use the system to coordinate marketing efforts.

168. Flow of Events

168.1 Basic Flow

Advisors will use information from the database and run preset queries such as how many students that were contacted via email, web, phone applied for the school respectively. The queries will be managed as a team effort with the school of nursing to look at their needs. It can be modified in future but will track different measures such as student how many students were attracted from web, TV, and Billboard advertisements and how many of those students actually applied. The information and queries will be formatted to make it very easy to read and operate. Advisors will use the drop down boxes to get necessary data. Compare check boxes will allow advisors to compare the different on a single screen instead of printing out several reports.

168.2 Alternative Flows

168.2.1 Access backup
System will attempt to connect to backup if primary data is corrupt.

168.2.2 Provide errors
System will provide error if the data in the primary and backup database is corrupt. Error will also appear if user tries to retrieve report before making selection, in effect requesting empty reports.

169. Special Requirements

169.1 System Requirements

- Access to windows server 2012
- Access SQL database
- Data must be available

169.2 Legal Requirements

System must be compliant with FERPA and must keep student information safe from outside access.

R.A.T.C Elaboration Spec

170. Pre-conditions

170.1 Access to system

Advisors must have access to the system when they are connected to the network behind university firewall.

170.2 Availability of valid data

System must contain valid data to be process and that data must be free from errors and redundancy.

171. Post-conditions

171.1 Marketing effort results

System will provide results for the selected options that can be used by advisors for decision making process.

171.2 Errors

System will provide error if the data requested does not exist or was corrupted after attempting to load it from the back up.

172. Extension Points

172.1 Corrupt Data

Data could become corrupt in which case the system will try to retrieve good data for processing from backup.

172.2 Valid data

Data used for processing must be redundancy and error free to provide accurate information to the user.

Use case 29: Track Marketing efforts

Advisor logs in to the system

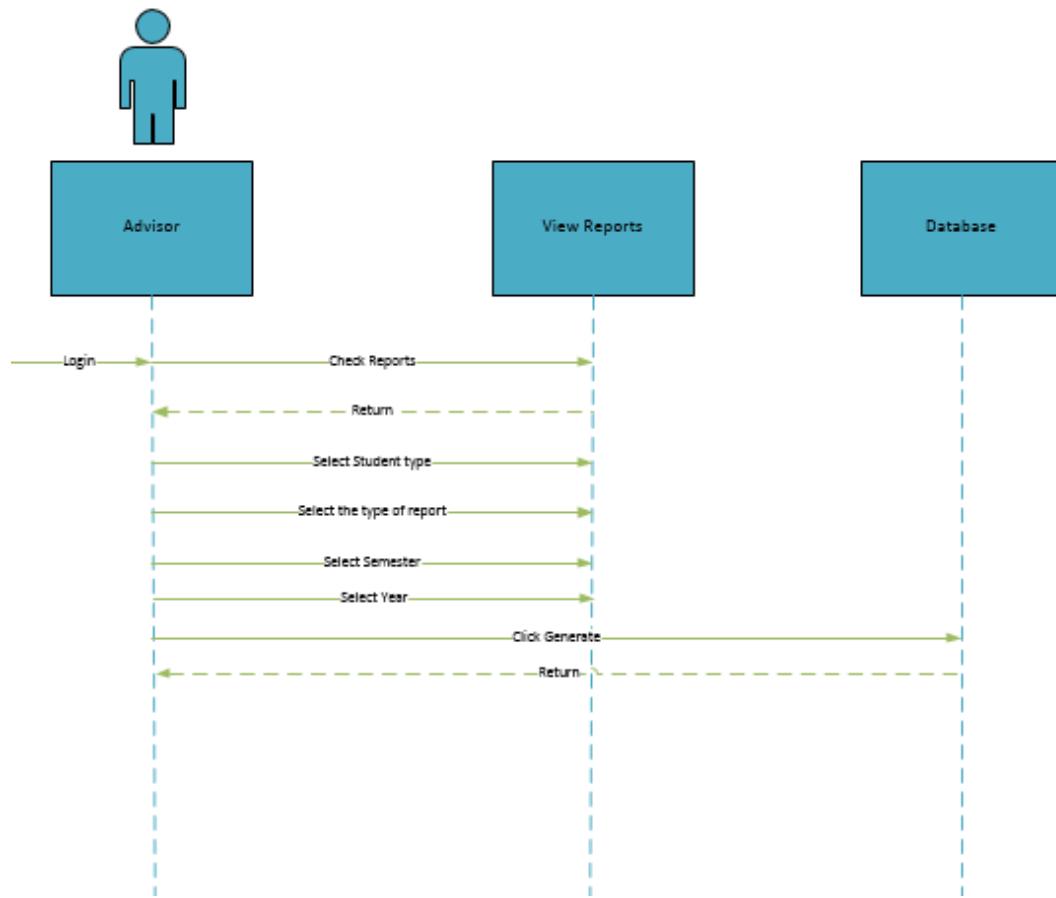
Advisor selects view reports

R.A.T.C Elaboration Spec

Advisor selects student type, report type, semester, and year

Advisor clicks generate

Report is generated based on the selected criteria



R.A.T.C Elaboration Spec

1. View Reports for Admissions decisions

172.3 Brief Description

Allows the board of admissions to go over application reports to make admission decision.

173. Flow of Events

173.1 Basic Flow

The actor in this case would be the board of admission which will log in to the system to retrieve report for all students. The report will comprise of their application, their personal letters, letters of recommendation, and their transcript.

173.2 Alternative Flows

173.2.1 *Incomplete report*

In some cases, the report might not contain the required/necessary information for the committee to make their decision. System will send the application back to advisor to gather the necessary information.

173.2.2 *Reset form*

This will reset the form for board to enter information to pull the report for the next student

174. Special Requirements

174.1 System Requirements

- Windows server 2012
- Access SQL database
- Preset instruction to generate reports with necessary information
- Board members must have secure access to the system
- Reports must be simple and easy to understand

174.2 Legal Requirements

System must be compliant with FERPA.

175. Pre-conditions

175.1 Access to System

Board members must have access to the system using a secure network behind university firewalls

175.2 Application must be filed by student

Application must be filed by students before board can use system to generate reports.

R.A.T.C Elaboration Spec

175.3 Information in the system must be valid

System must have valid and up-to-date information for each student being considered.

176. Post-conditions

176.1 Admissions report generated

System will generate report for each student with necessary information to streamline decision making process for members of the board.

176.2 Errors Generated

Errors could be generated due to corrupt or invalid information.

Use case 30: View Reports for admissions decisions

Board of Admissions member logs in to the system

Board of Admissions member selects view reports

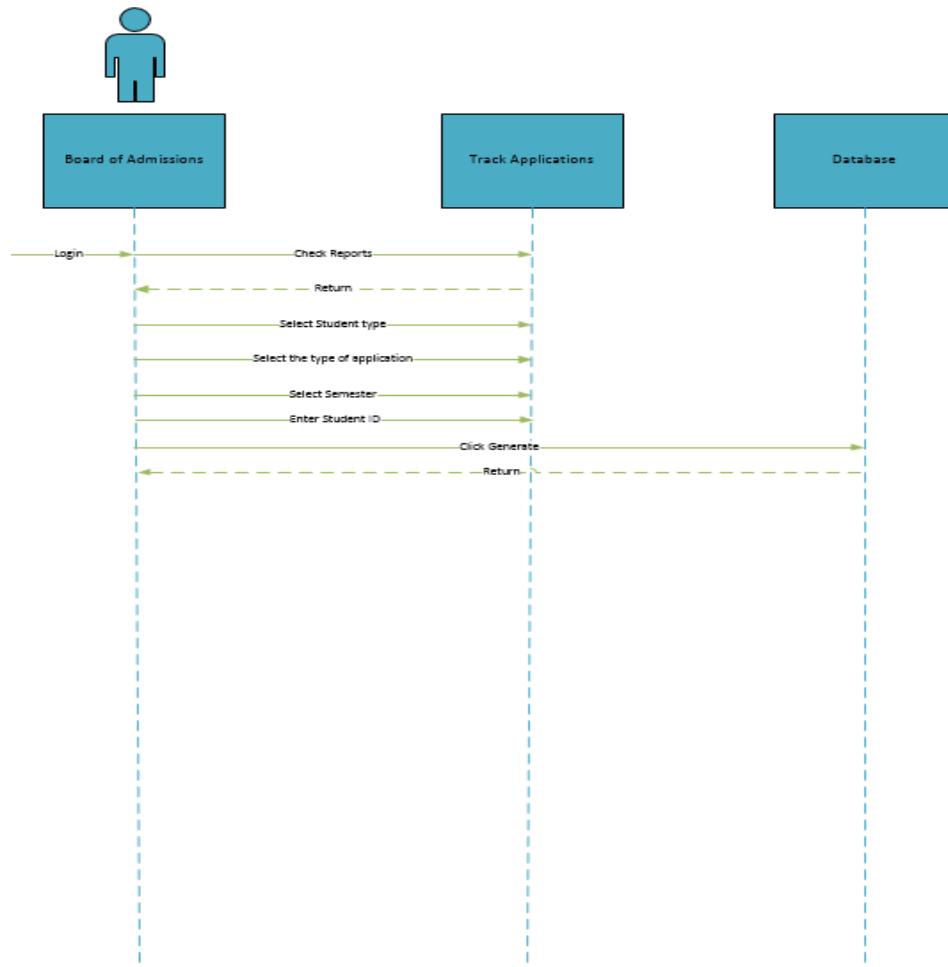
R.A.T.C Elaboration Spec

Board of Admissions member selects student type, and report type

Board of Admissions member enters student ID

Board of Admissions member clicks generate

Report is generated based on the selected criteria



R.A.T.C Elaboration Spec

177. Submission of program application

177.1 Brief Description

This will allow students to submit application for their desired program of study

178. Flow of Events

178.1 Basic Flow

Students, being the primary actors, will be able to file their applications for entry into their program of study after being accepted into the university. Students will be required to submit their name, address, email address, contact number, grades, and submit documents such as transcripts, letters of recommendation and personal letter.

178.2 Alternative Flows

178.2.1 Invalid Input

In a case where the input by student is incorrect, system will provide an error notifying user of such. Invalid input could be in the form of invalid length, format, and/or characters. User is given chance to fix the error by changing input.

178.2.2 Save for later

Allows student to save the application to be submitted later. All information already entered and saved is kept in the database for a limited amount of that will be determined by School of Nursing. Student will use the application number and pin to reload the application and complete it.

178.2.3 Reset Form

User may want to reset the form and start the whole process again. This will reset the application for that.

179. Special Requirements

179.1 System Requirements

- Windows Server 2012
- Access SQL 2016
- Web for entry
- Secure network access for students.

179.2 Legal requirements

System must be compliant with FERPA.

R.A.T.C Elaboration Spec

180. Pre-conditions

180.1 Access to System

System must be available to students over the internet.

180.2 Valid Student account

Student must be enrolled at the university before being able to apply for a specific programs.

181. Post-conditions

181.1 Information sent to university

System will forward information collected from system to School of Nursing office for consideration.

5.2 Provide confirmation

Confirmation will be provided to the user along with application number for tracking purposes.

182. Extension Points

182.1 Invalid Input

Invalid input would occur anytime Required fields are left empty, or incorrect character/number types are entered in the field.

R.A.T.C Elaboration Spec

Student logs in to the system using their credentials.

Student selects submit application(Scholarships)

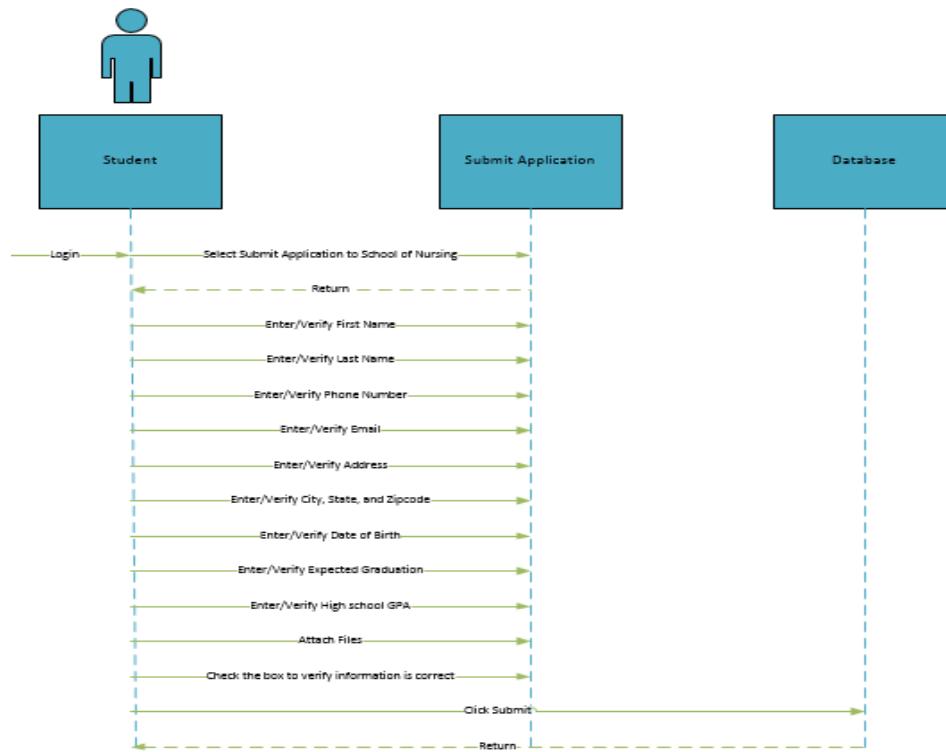
Student Enters/Verifies their Name, Phone Number, email, Address, Date of Birth, Expected Graduation, and GPA

Student attaches required documents to the submission

Student verifies that all of the information is correct

Student clicks submit

Application is submitted for review



R.A.T.C Elaboration Spec

183. Add to database storage

183.1 Brief Description

Adds more storage to the existing database

184. Flow of Events

184.1 Basic Flow

Database will continue to grow with time, as new students are added, and more data is accumulated for each student. Staff, as the primary actors, will be able to expand storage for the database in the future to fit their needs at the time. This will lower the chances of them needing a new system any time soon. System admin can log in to the system and expand database storage up to the max available.

184.2 Alternative Flows

184.2.1 Max Size reached

In the event that the database is already using the max storage available on the server, system admin will be given the option request more storage to be added to the server by university IT which will allow system admin to expand storage later.

184.2.2 Lower storage

System admin will have the option to lower size for the database if business needs require it.

185. Special Requirements

185.1 System requirements

Staff would need admin access for the following

- Microsoft windows server 2012
- SQL 2016

185.2 Regulatory requirements

University IT is in control of the server and would have to authorize changes by SON staff members.

186. Pre-conditions

186.1 Access to system

Staff must have admin access to the data base and servers. Staff would require IT assistance in some scenarios such as adding more drives to the server.

R.A.T.C Elaboration Spec

187. Post-conditions

187.1 Database expanded

Database will be expanded to the desired size

187.2 Error generated

Error could be generated if the database size is larger than server storage available or if the user does not have required access.

188. Extension Points

188.1 Dependencies

Database expansion is highly dependent on the server specifications that are controlled by university IT and must be updated by them. This results in a lot of added steps and would require additional time to get approval.

Use case 32: Add to database storage

System Admin logs in to the system

System admin verifies current database size

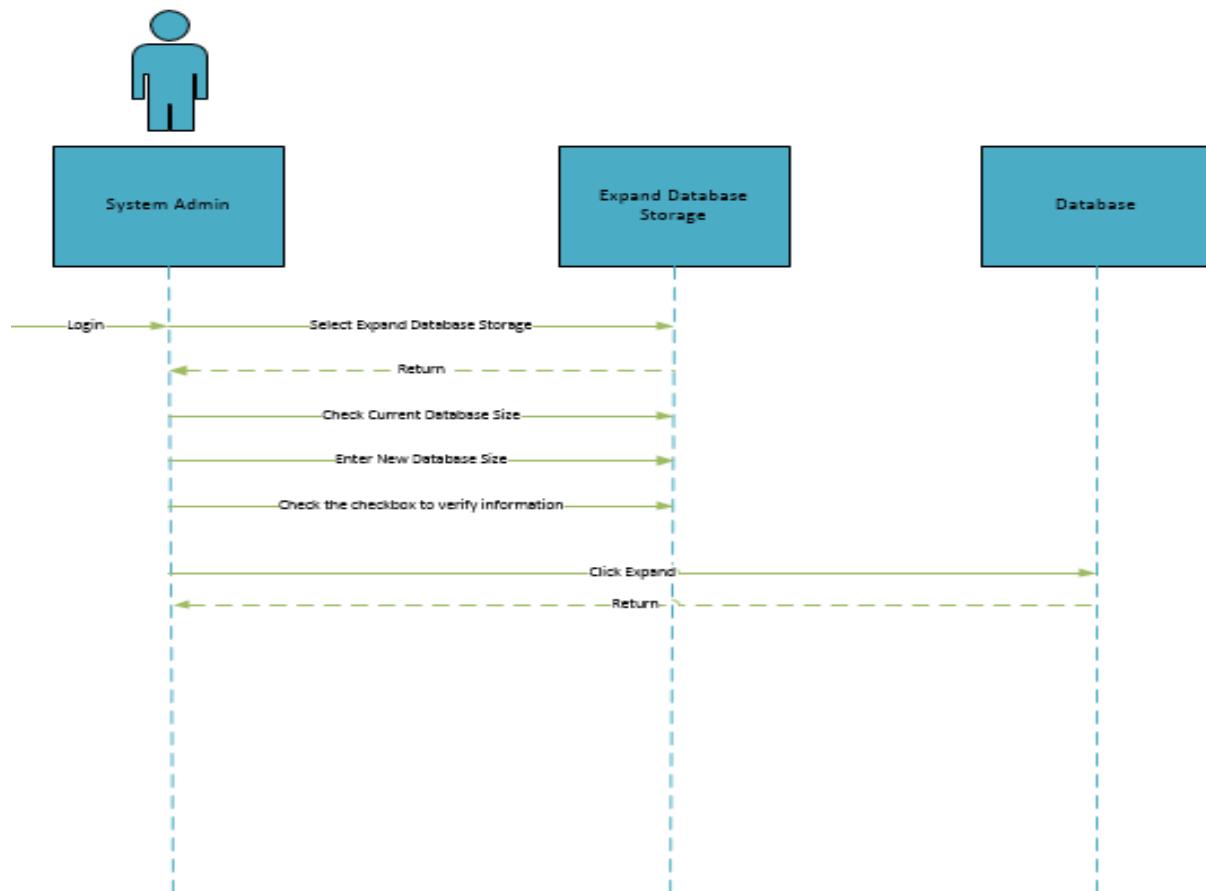
System admin enters the desired database size

R.A.T.C Elaboration Spec

System admin checks the checkbox to verify

System admin clicks expand

Database is expanded to the desired size depending on if enough physical storage is available



33.

189. Add graduated students to alumni list

189.1 Brief Description

Allows advisors to add graduated students to alumni list.

R.A.T.C Elaboration Spec

190. Flow of Events

190.1 Basic Flow

Advisors as the primary actor will be able to access information of students and add graduate students to the alumni list. This will generate a list of students that qualify preselected criteria and advisors will be able to select one, multiple, or all students and add them to the alumni list. This list could be used for soliciting donations, or provide updates to alumni about upcoming events etc.

190.2 Alternative Flows

190.2.1 *None selected*

At least one student must be selected for the task to be completed otherwise it will result in an error.

190.2.1.1 Cancel

In the event, an error is generated where advisor doesn't make required selections, system will allow user to cancel the task and go to the previous screen.

190.2.2 Reset Form

Form would allow user to reset the form which will unselect all selections for user to start over.

191. Special Requirements

191.1 System Requirements

- Microsoft windows server 2012
- SQL 2016

191.2 Valid student information

Student must contain required information for students before student can be added to the alumni list.

191.3 Legal Requirements

System must be compliant with FERPA regulations and hence must keep student information safe. Advisors will need to access system from behind the university firewall.

192. Pre-conditions

192.1 Access to system

Advisors must have access to system via a secure network

R.A.T.C Elaboration Spec

192.2 Student required

Student must be in the database with appropriate information to be added on the alumni list.

193. Post-conditions

193.1 Alumni List updated

Selected students will be added to the alumni list.

193.2 Errors Generated

Errors will be generated in the event student information is corrupt, invalid, or student already exists on the list.

194. Extension Points

194.1 Invalid Student data

Student information must exist in the system. The information must contain name, address, phone numbers, and email. Student must not be on the alumni list prior to the event.

Use case 33: Add graduated students to alumni list

Advisor logs in to the system

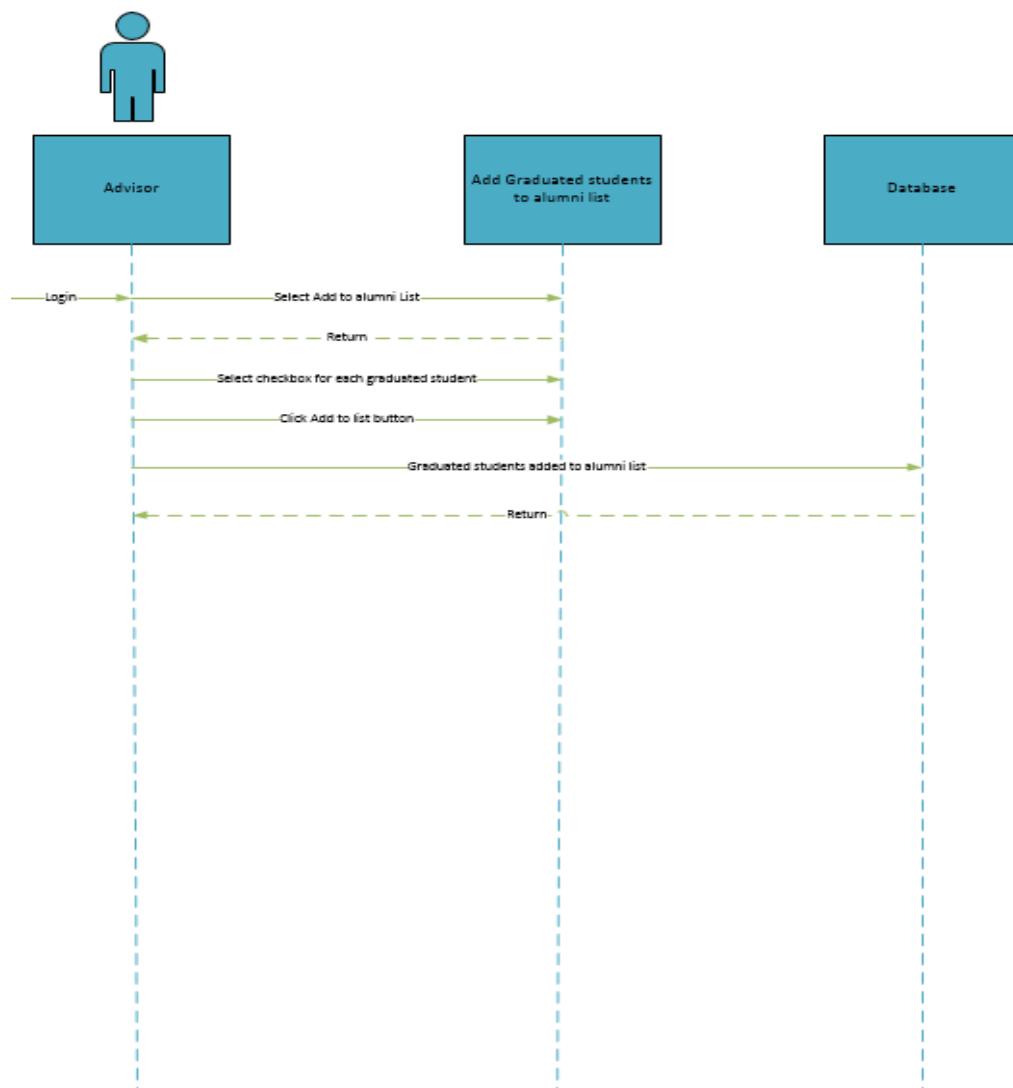
Advisor selects Add Graduated Students to alumni List

R.A.T.C Elaboration Spec

Advisor checks the checkbox to select students to be added to the list

Advisor clicks the add to list button

Graduated students are added to the alumni list



R.A.T.C Elaboration Spec

195. Email Alumni form

195.1 Brief Description

Allows advisors to email student added to the alumni list to request updated contact information

196. Flow of Events

196.1 Basic Flow

Advisors will be able to log in to the system in order to email graduated students being added to the alumni email list to provide their updated contact information. Advisors will be able to select one, multiple, or all students on the alumni list to send email requesting updated contact information. System will provide a templated which will automatically personalize email for each alumnus.

196.2 Alternative Flows

196.2.1 None selected

At least one student must be selected for the task to be completed otherwise it will result in an error.

196.2.1.1 Cancel

In the event, an error is generated where advisor doesn't make required selections, system will allow user to cancel the task and go to the previous screen.

196.2.2 Reset Form

Form would allow user to reset the form which will unselect all selections for user to start over.

197. Special Requirements

197.1 System Requirements

- Microsoft windows server 2012
- SQL 2016

197.2 Student must be alumni

Student must be on the alumni list before they can be emailed to request updated information

197.3 Legal Requirements

System must be compliant with FERPA regulations and hence must keep student information safe. Advisors will need to access system from behind the university firewall.

R.A.T.C Elaboration Spec

198. Pre-conditions

198.1 Access to system

Advisors must have access to system via a secure network

198.2 Student required

Student must be in the database with appropriate information and be on the alumni list before they can be contacted

199. Post-conditions

199.1 Alumni List emailed

Selected students will be added to the alumni list.

199.2 Errors Generated

Errors will be generated in the event student information is corrupt, invalid, or student has been contacted in the last 7 days.

200. Extension Points

200.1 Information Requested

Information requested via email will include current non-university email address, updated phone number, and mailing address.

R.A.T.C Elaboration Spec

Advisor logs in to the system

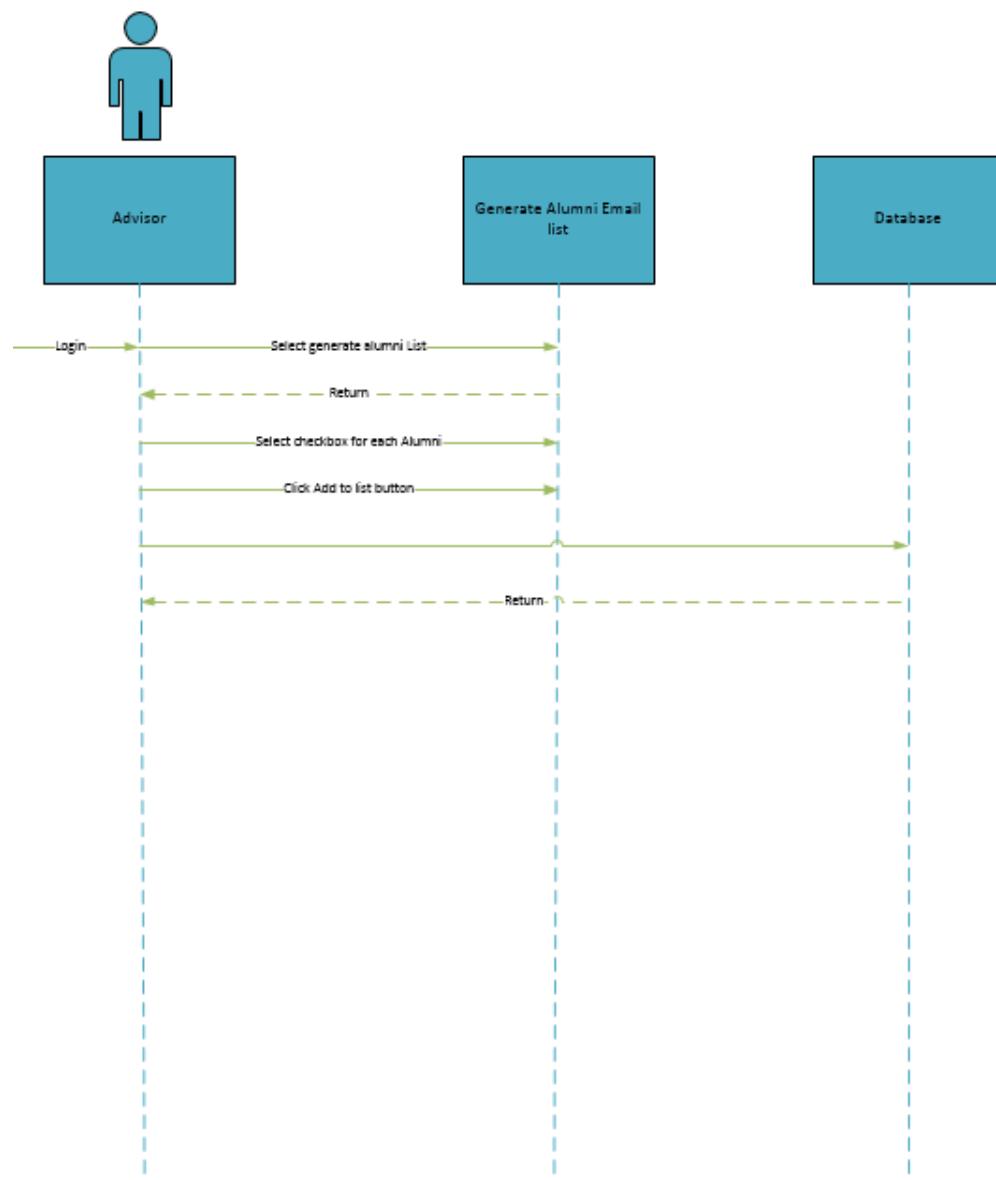
Advisor selects Generate alumni email List

Advisor checks the checkbox to select students to be added to the list

Advisor clicks the add to list button

Alumni list to mail is generated

R.A.T.C Elaboration Spec



R.A.T.C Elaboration Spec

35.

1. Email Alumni form

200.2 Brief Description

Advisors will use the form to update the contacts for alumni with information provided through the email.

201. Flow of Events

201.1 Basic Flow

Advisors will be able log into the system in order to update the Email, Phone number, and mailing address for the everyone on the alumni list.

201.2 Alternative Flows

201.2.1 None selected

At least one student must be selected to update the information for.

201.2.1.1 Cancel

In the event, an error is generated where advisor doesn't make required selections, system will allow user to cancel the task and go to the previous screen.

201.2.2 Reset Form

This will reset the form for advisor the clear the information for alum. This saves time for deleting data in each field.

202. Special Requirements

202.1 System Requirements

- Microsoft windows server 2012
- SQL 2016

202.2 Student must be alumnus

Student must be on the alumni list before their information can be updated.

202.3 Legal Requirements

System must be compliant with FERPA regulations and hence must keep student information safe. Advisors will need to access system from behind the university firewall to be safe. Contact information provided by alumni doesn't have to be behind university firewall and can be stored anywhere.

R.A.T.C Elaboration Spec

203. Pre-conditions

203.1 Access to system

Advisors must have access to system via a secure network.

203.2 Student required

Student must be in the database with appropriate information and be on the alumni list before they can be contacted.

204. Post-conditions

204.1 Alumnus information updated

Contact information updated and replaced with information received from alumnus email response.

204.2 Errors Generated

Errors will be generated in the event student information is corrupt, invalid, or alumnus does not exist in the system.

205. Extension Points

205.1 Information to be updated

Information requested via email will include current non-university email address, updated phone number, and mailing address.

R.A.T.C Elaboration Spec

Advisor logs in to the system using their credentials.

Advisor selects submit application(Scholarships)

Advisor Enters/Verifies their Name, Phone Number, email, and Address

Advisor verifies that all of the information is correct

Advisor clicks submit

Information is updated in the system



R.A.T.C Elaboration Spec

1. Email Alumni form

205.2 Brief Description

Allows advisors to email student added to the alumni list to request donations.

206. Flow of Events

206.1 Basic Flow

Advisors will be able to log in to the system in order to email graduated on the alumni email list. Advisors will be able to select one, multiple, or all students on the alumni list to send email requesting donations. System will provide a template which will automatically personalize email for each alumnus.

206.2 Alternative Flows

206.2.1 None selected

At least one student must be selected for the task to be completed otherwise it will result in an error.

206.2.1.1 Cancel

In the event, an error is generated where advisor doesn't make required selections, system will allow user to cancel the task and go to the previous screen.

206.2.2 Reset Form

Form would allow user to reset the form which will unselect all selections for user to start over.

207. Special Requirements

207.1 System Requirements

- Microsoft windows server 2012
- SQL 2016

207.2 Student must be alumni

Student must be on the alumni list before they can be emailed to request donations

207.3 Legal Requirements

System must be compliant with FERPA regulations and hence must keep student information safe. Advisors will need to access system from behind the university firewall.

R.A.T.C Elaboration Spec

208. Pre-conditions

208.1 Access to system

Advisors must have access to system via a secure network

208.2 Student required

Student must be in the database with appropriate information and be on the alumni list before they can be contacted

209. Post-conditions

209.1 Alumni List emailed

Selected students will be added to the alumni list.

209.2 Errors Generated

Errors will be generated in the event student information is corrupt, invalid, or student has been contacted in the last 7 days.

210. Extension Points

210.1 Donations

Email will provide details on how alumni can provide support to the SON from the school website.

R.A.T.C Elaboration Spec

Use Case 36: Generate email list to ask alumni for donations

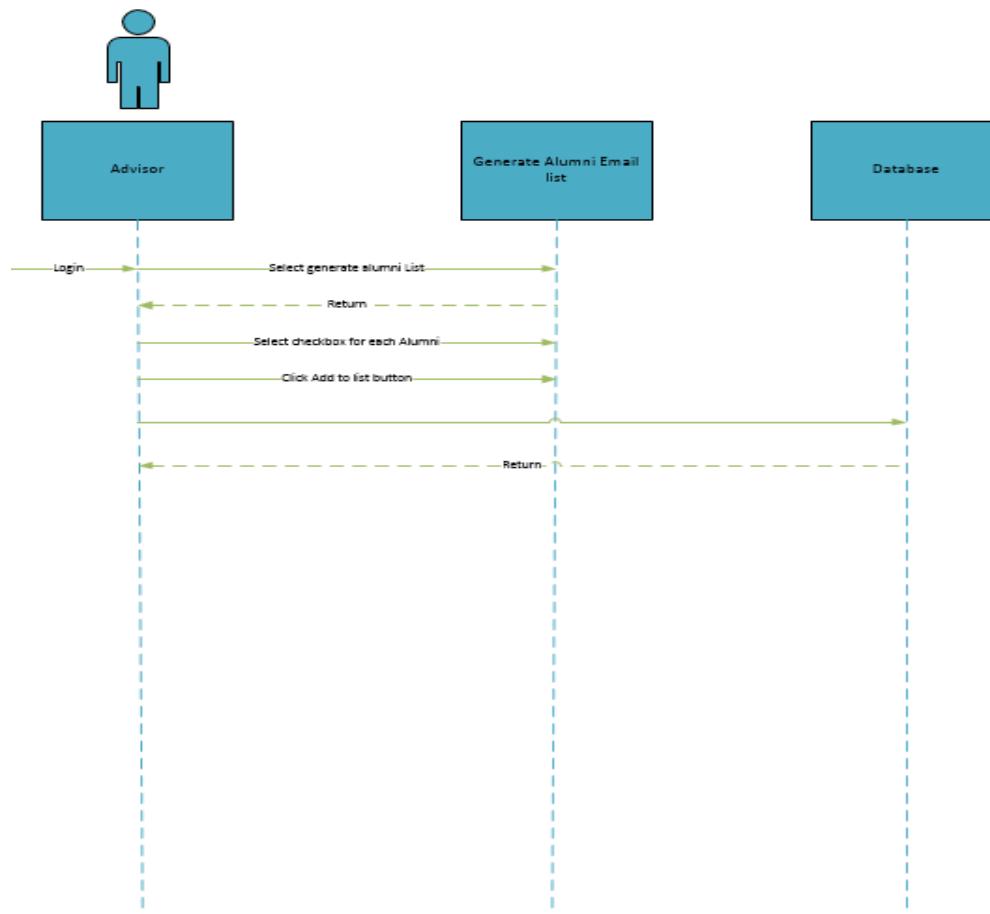
Advisor logs in to the system

Advisor selects Generate alumni email List

Advisor checks the checkbox to select students to be added to the list

Advisor clicks the add to list button

Alumni list to be emailed is generated



R.A.T.C Elaboration Spec

Use Case 37: Create Upper Division Student

Create Upper Division Student

Brief Description

Create Upper Division Student will create a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting upper division student information into the form and then submitting, which will create a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects create student
- Advisor inputs Student ID
- Advisor inputs University E-mail
- Advisor inputs First Name
- Advisor inputs MI
- Advisor inputs Last Name
- Advisor inputs Address
- Advisor inputs City
- Advisor selects State
- Advisor inputs Zip Code
- Advisor inputs Primary Phone Number
- Advisor inputs Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects Program
- Advisor selects Enrollment
- Advisor selects Anticipated Graduation Date
- Advisor inputs notes

Alternative Flows

R.A.T.C Elaboration Spec

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Reset Form

- Reset button clicked
- All fields cleared

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 37

Create Upper Division Student

Advisor logs in

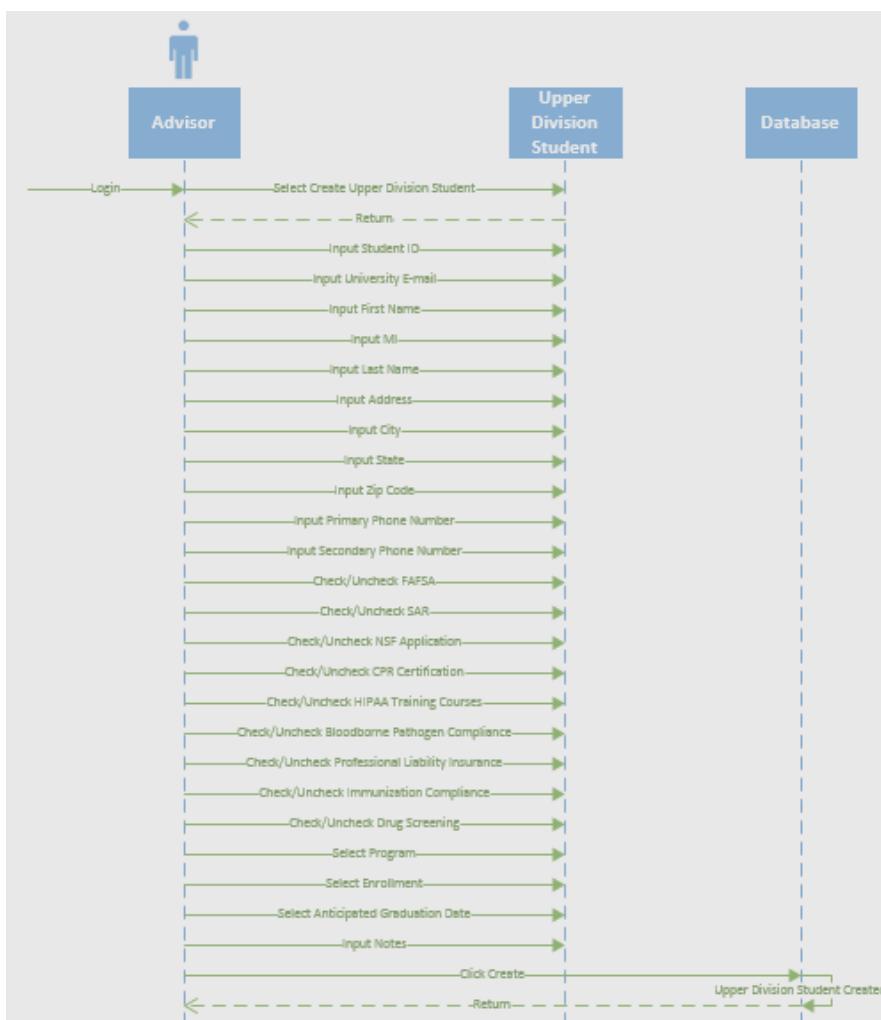
Advisor selects create student

Advisor Inputs/selects/checks following fields...

Advisor clicks create

Student is added to database

Once added successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 38: Edit Upper Division Student

Create Upper Division Student

Brief Description

Edit Upper Division Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting/editing upper division student information into the form and then submitting, which will update a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects edit student
- Advisor inputs/edits Student ID
- Advisor inputs/edits University E-mail
- Advisor inputs/edits First Name
- Advisor inputs/edits MI
- Advisor inputs/edits Last Name
- Advisor inputs/edits Address
- Advisor inputs/edits City
- Advisor selects/edits State
- Advisor inputs/edits Zip Code
- Advisor inputs/edits Primary Phone Number
- Advisor inputs/edits Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects/edits Program
- Advisor selects/edits Enrollment
- Advisor selects/edits Anticipated Graduation Date
- Advisor inputs/edits notes
- Advisor clicks save

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked

R.A.T.C Elaboration Spec

- Message pop up indicating unmet conditions

Delete Student

- Delete button clicked

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 38

Edit Upper Division Student

Advisor logs in

Advisor selects edit student

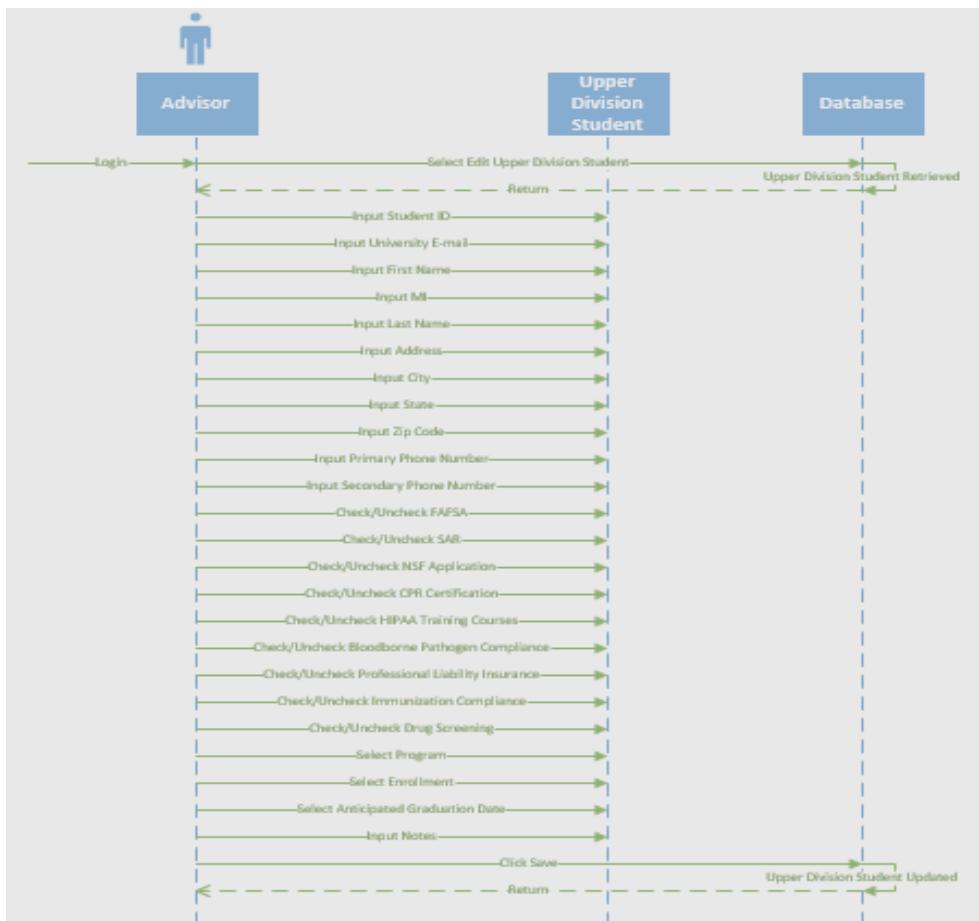
Database is accessed to retrieve existing student

Advisor edits/inputs/selects/checks following fields...

Advisor clicks save

Student is updated in database

Once updated successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 39: Delete Upper Division Student

Create Upper Division Student

Brief Description

Delete Upper Division Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is deleting upper division student information from the database and moved to a temporary dump file. Advisor must also input login information to confirm delete action.

Basic Flow

- Advisor selects edit student
- Advisor clicks delete
- Advisor inputs username
- Advisor inputs password
- Advisor clicks delete

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Cancel

- Cancels button clicked
- Returns to edit student

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

R.A.T.C Elaboration Spec

Post-conditions

- Delete Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 39

Delete Upper Division Student

Advisor logs in

Advisor selects edit student

Database is accessed to retrieve existing student

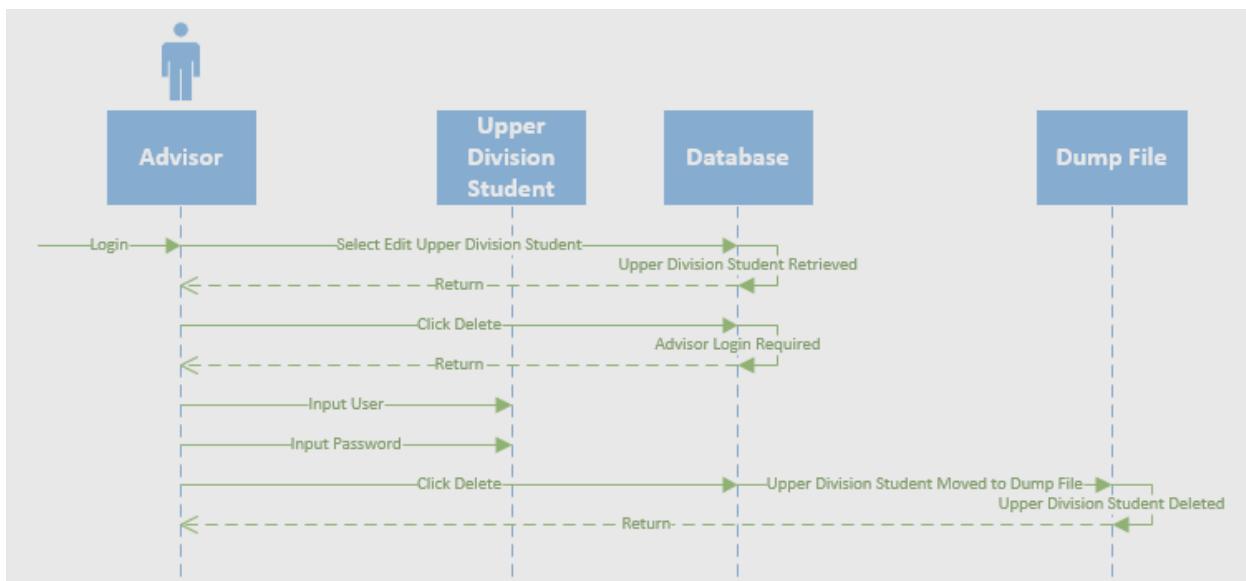
Advisor clicks delete

Advisor inputs username and login

Advisor confirms delete

Student is deleted from database and moved to temp dump file

Once deleted successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 40: Create Lower Division Student

Create Lower Division Student

Brief Description

Create Lower Division Student will create a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting lower division student information into the form and then submitting, which will create a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects create student
- Advisor inputs Student ID
- Advisor inputs University E-mail
- Advisor inputs First Name
- Advisor inputs MI
- Advisor inputs Last Name
- Advisor inputs Address
- Advisor inputs City
- Advisor selects State
- Advisor inputs Zip Code
- Advisor inputs Primary Phone Number
- Advisor inputs Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects Program
- Advisor selects Enrollment
- Advisor selects Anticipated Graduation Date
- Advisor inputs notes

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked

R.A.T.C Elaboration Spec

- Message pop up indicating unmet conditions

Reset Form

- Reset button clicked
- All fields cleared

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 40

Create Lower Division Student

Advisor logs in

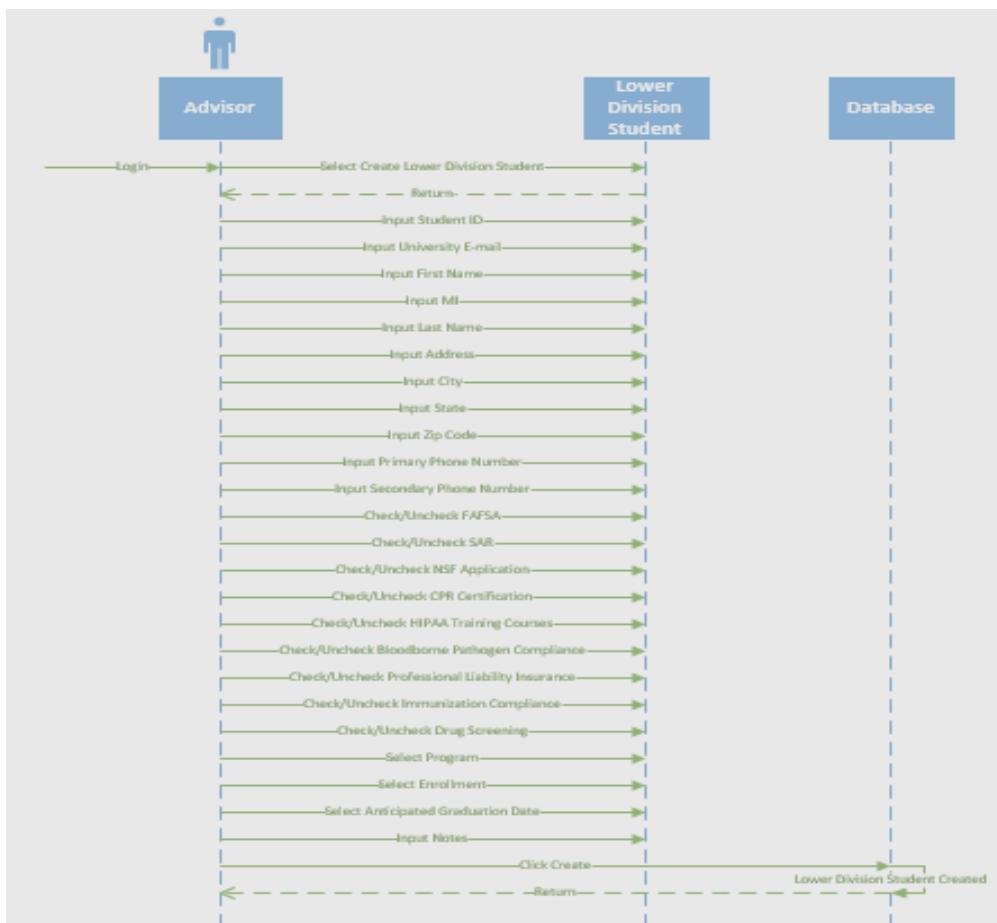
Advisor selects create student

Advisor Inputs/selects/checks following fields...

Advisor clicks create

Student is added to database

Once added successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 41: Edit Lower Division Student

Create Lower Division Student

Brief Description

Edit Lower Division Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting/editing lower division student information into the form and then submitting, which will update a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects edit student
- Advisor inputs/edits Student ID
- Advisor inputs/edits University E-mail
- Advisor inputs/edits First Name
- Advisor inputs/edits MI
- Advisor inputs/edits Last Name
- Advisor inputs/edits Address
- Advisor inputs/edits City
- Advisor selects/edits State
- Advisor inputs/edits Zip Code
- Advisor inputs/edits Primary Phone Number
- Advisor inputs/edits Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects/edits Program
- Advisor selects/edits Enrollment
- Advisor selects/edits Anticipated Graduation Date
- Advisor inputs/edits notes
- Advisor clicks save

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked

R.A.T.C Elaboration Spec

- Message pop up indicating unmet conditions

Delete Student

- Delete button clicked

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 41

Edit Lower Division Student

Advisor logs in

Advisor selects edit student

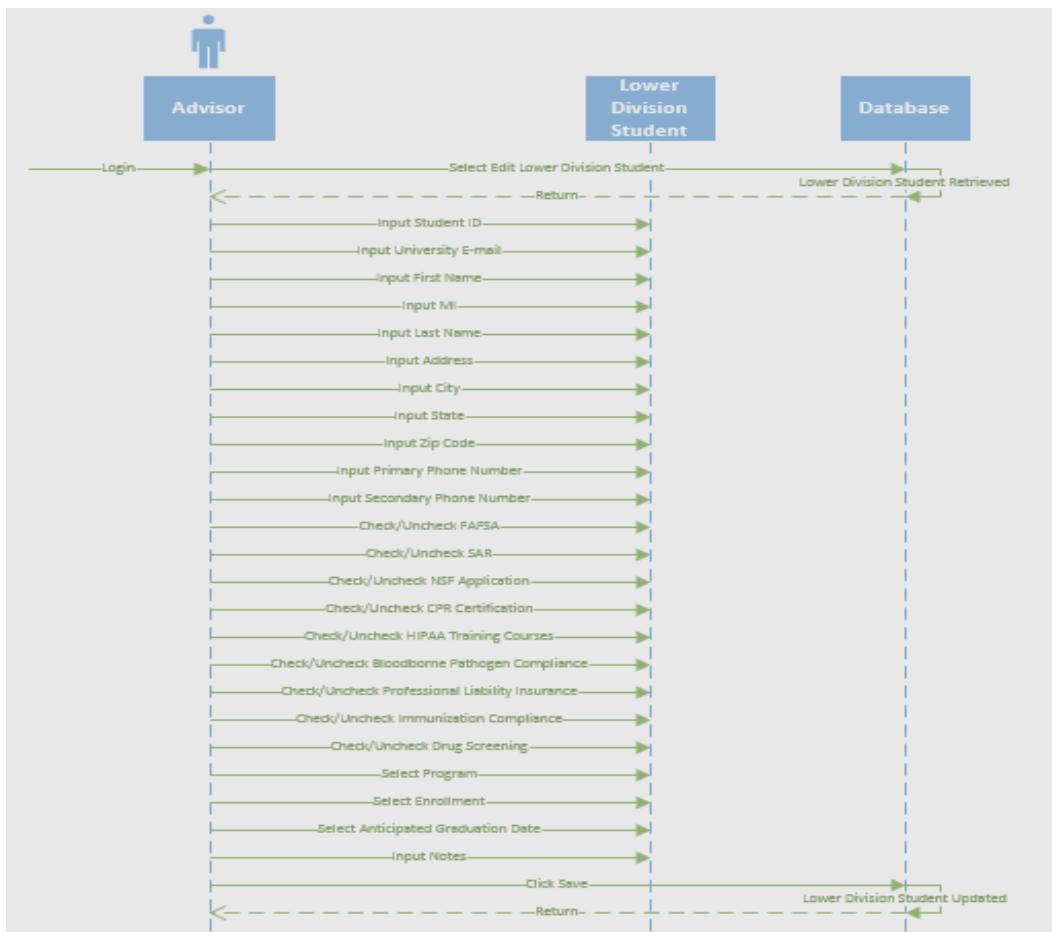
Database is accessed to retrieve existing student

Advisor edits/inputs/selects/checks following fields...

Advisor clicks save

Student is updated in database

Once updated successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 42: Lower Upper Division Student

Create Lower Division Student

Brief Description

Delete Lower Division Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is deleting lower division student information from the database and moved to a temporary dump file. Advisor must also input login information to confirm delete action.

Basic Flow

- Advisor selects edit student
- Advisor clicks delete
- Advisor inputs username
- Advisor inputs password
- Advisor clicks delete

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Cancel

- Cancels button clicked
- Returns to edit student

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

R.A.T.C Elaboration Spec

Post-conditions

- Delete Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 42

Delete Lower Division Student

Advisor logs in

Advisor selects edit student

Database is accessed to retrieve existing student

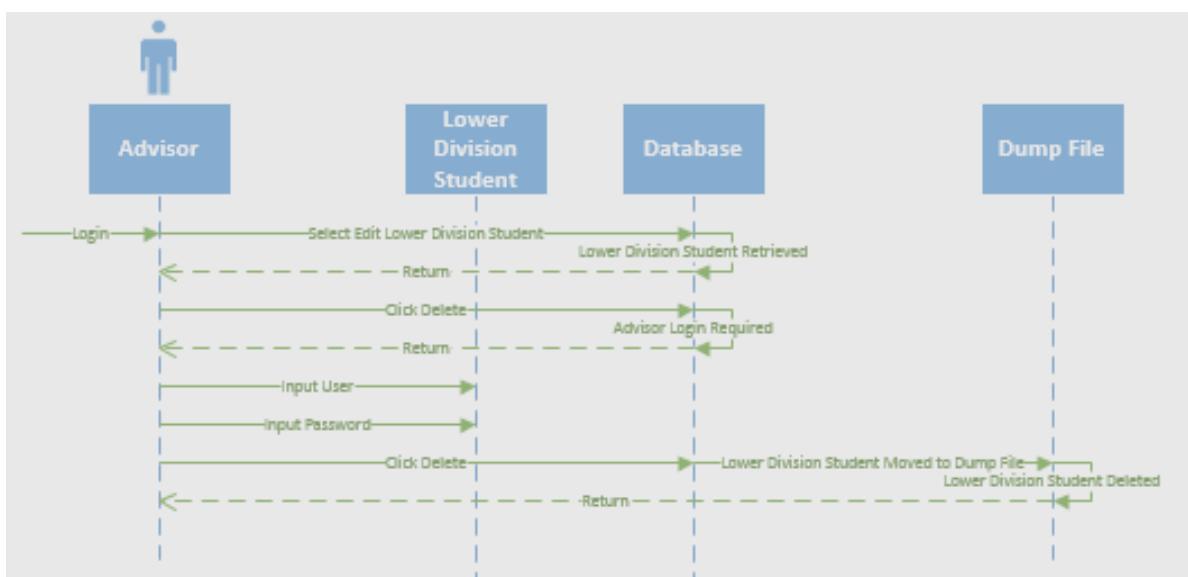
Advisor clicks delete

Advisor inputs username and login

Advisor confirms delete

Student is deleted from database and moved to temp dump file

Once deleted successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 43: Create Perspective Student

Create Perspective Student

Brief Description

Create Perspective Student will create a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting perspective student information into the form and then submitting, which will create a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects create student
- Advisor inputs Student ID
- Advisor inputs University E-mail
- Advisor inputs First Name
- Advisor inputs MI
- Advisor inputs Last Name
- Advisor inputs Address
- Advisor inputs City
- Advisor selects State
- Advisor inputs Zip Code
- Advisor inputs Primary Phone Number
- Advisor inputs Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects Program
- Advisor selects Enrollment
- Advisor selects Anticipated Graduation Date
- Advisor inputs notes

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked

R.A.T.C Elaboration Spec

- Message pop up indicating unmet conditions

Reset Form

- Reset button clicked
- All fields cleared

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 43

Create Perspective Student

Advisor logs in

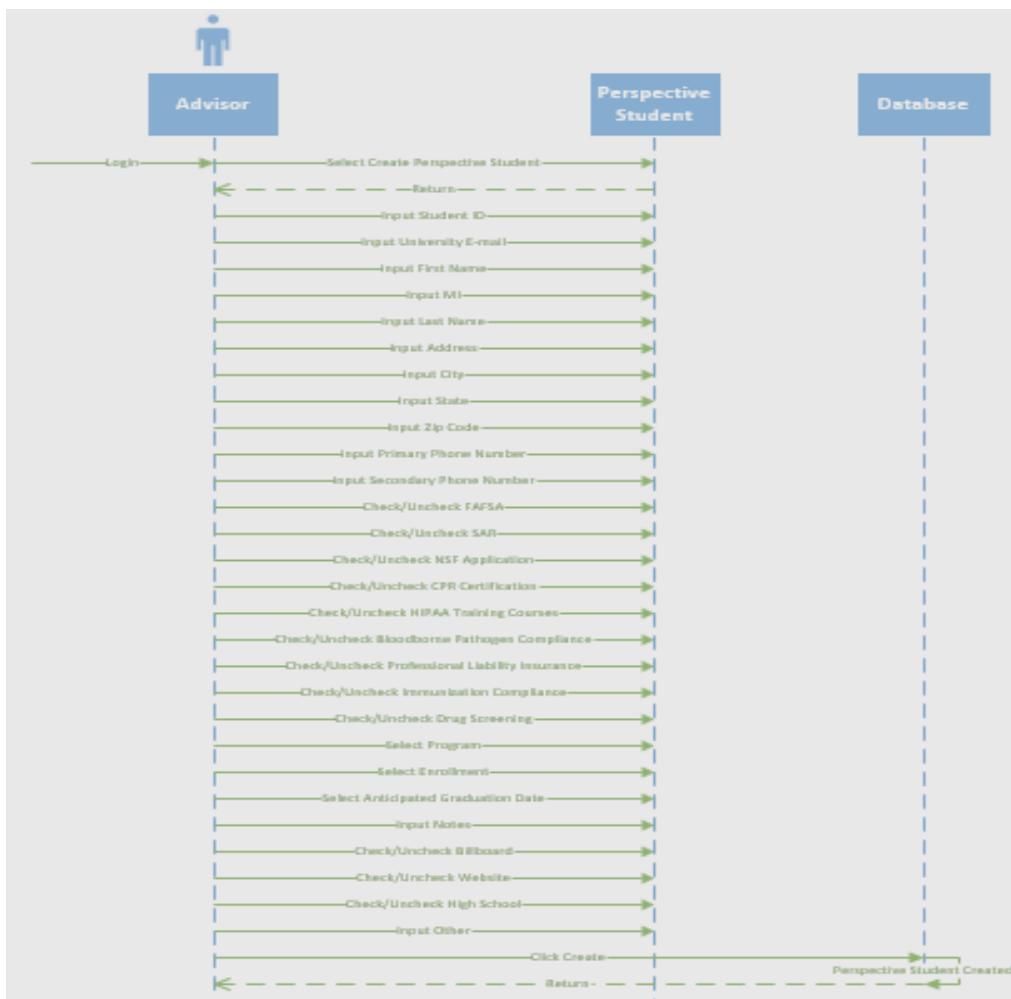
Advisor selects create student

Advisor Inputs/selects/checks following fields...

Advisor clicks create

Student is added to database

Once added successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 44: Edit Upper Division Student

Create Perspective Student

Brief Description

Edit Perspective Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting/editing perspective student information into the form and then submitting, which will update a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects edit student
- Advisor inputs/edits Student ID
- Advisor inputs/edits University E-mail
- Advisor inputs/edits First Name
- Advisor inputs/edits MI
- Advisor inputs/edits Last Name
- Advisor inputs/edits Address
- Advisor inputs/edits City
- Advisor selects/edits State
- Advisor inputs/edits Zip Code
- Advisor inputs/edits Primary Phone Number
- Advisor inputs/edits Secondary Phone Number
- Advisor checks/unchecks FAFSA
- Advisor checks/unchecks SAR
- Advisor checks/unchecks NSF Application
- Advisor checks/unchecks CPR Certification
- Advisor checks/unchecks HIPAA Training Courses
- Advisor checks/unchecks Blood borne Pathogen Compliance
- Advisor checks/unchecks Professional Liability Insurance
- Advisor checks/unchecks Immunization Compliance
- Advisor checks/unchecks Drug Screening
- Advisor selects/edits Program
- Advisor selects/edits Enrollment
- Advisor selects/edits Anticipated Graduation Date
- Advisor inputs/edits notes
- Advisor clicks save

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

R.A.T.C Elaboration Spec

- Create button clicked
- Message pop up indicating unmet conditions

Delete Student

- Delete button clicked

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 43

Create Perspective Student

Advisor logs in

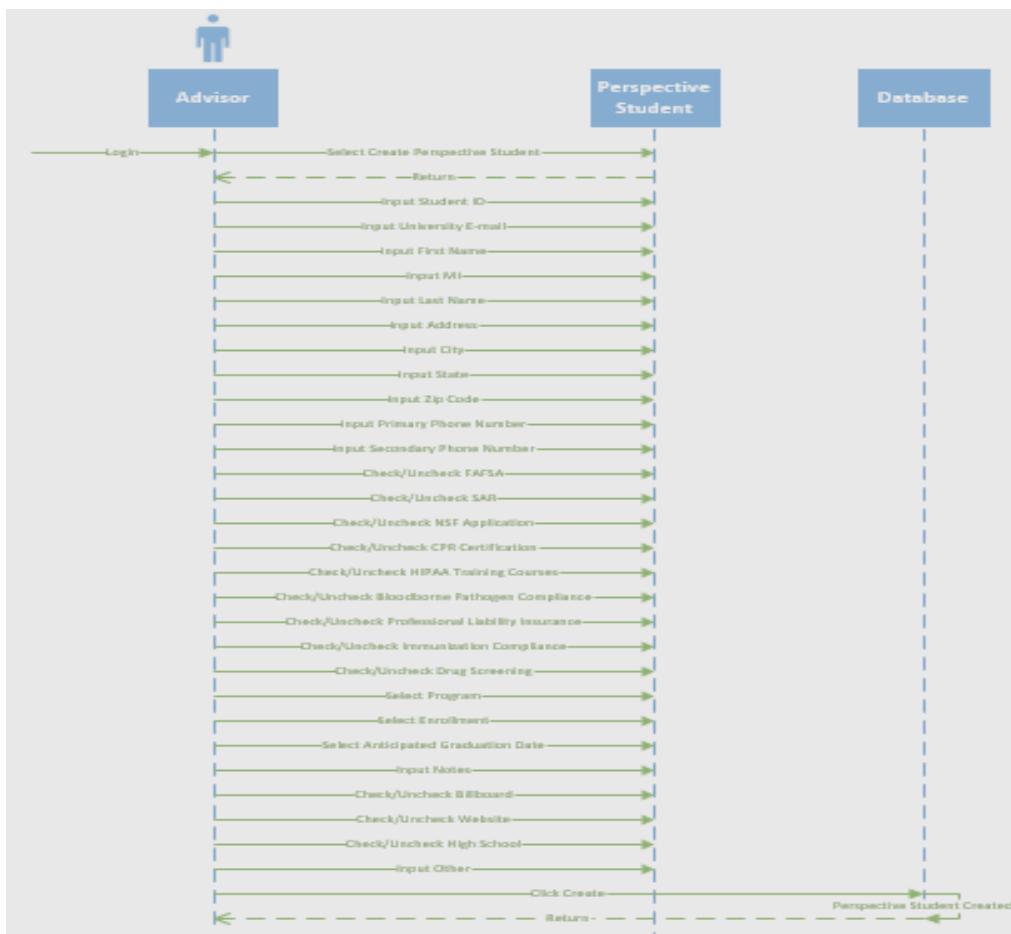
Advisor selects create student

Advisor Inputs/selects/checks following fields...

Advisor clicks create

Student is added to database

Once added successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 45: Delete Perspective Student

Create Perspective Division Student

Brief Description

Delete Perspective Student will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is deleting perspective student information from the database and moved to a temporary dump file. Advisor must also input login information to confirm delete action.

Basic Flow

- Advisor selects edit student
- Advisor clicks delete
- Advisor inputs username
- Advisor inputs password
- Advisor clicks delete

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Cancel

- Cancels button clicked
- Returns to edit student

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

R.A.T.C Elaboration Spec

Post-conditions

- Delete Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 45

Delete Perspective Student

Advisor logs in

Advisor selects edit student

Database is accessed to retrieve existing student

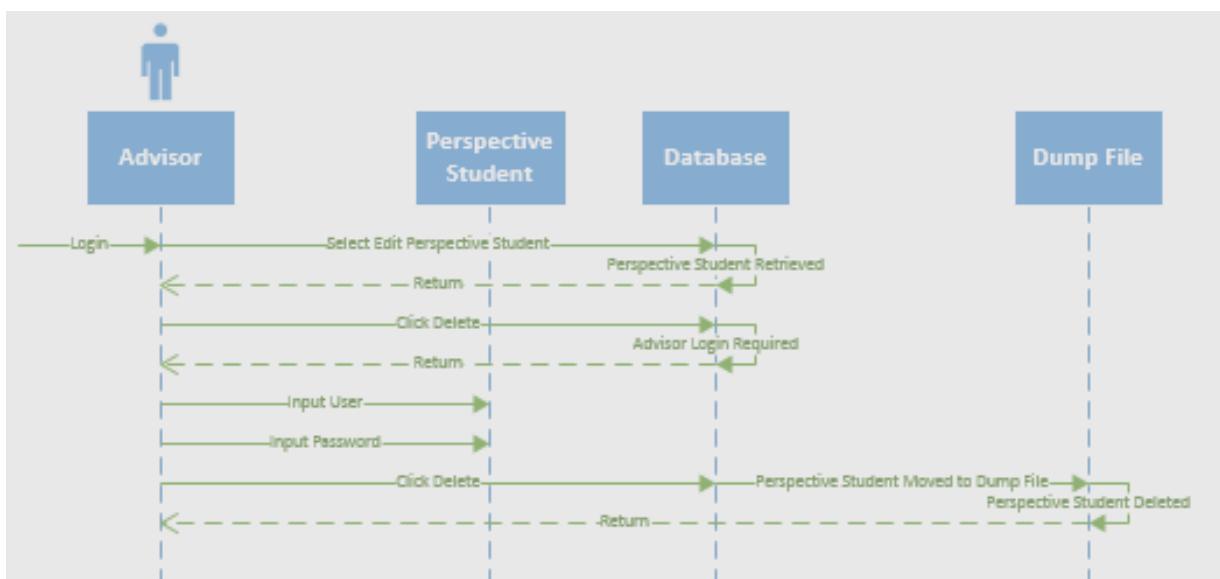
Advisor clicks delete

Advisor inputs username and login

Advisor confirms delete

Student is deleted from database and moved to temp dump file

Once deleted successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 46: Create Graduate

Create Graduate

Brief Description

Create Graduate will create a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting graduate information into the form and then submitting, which will create a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects create student
- Advisor inputs Student ID
- Advisor inputs University E-mail
- Advisor inputs First Name
- Advisor inputs MI
- Advisor inputs Last Name
- Advisor inputs Address
- Advisor inputs City
- Advisor selects State
- Advisor inputs Zip Code
- Advisor inputs Primary Phone Number
- Advisor inputs Secondary Phone Number
- Advisor inputs Employer
- Advisor selects Salary Range
- Advisor selects Program
- Advisor selects Enrollment
- Advisor selects Anticipated Graduation Date
- Advisor inputs notes

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Reset Form

- Reset button clicked
- All fields cleared

Special Requirements

R.A.T.C Elaboration Spec

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 46

Create Graduate

Advisor logs in

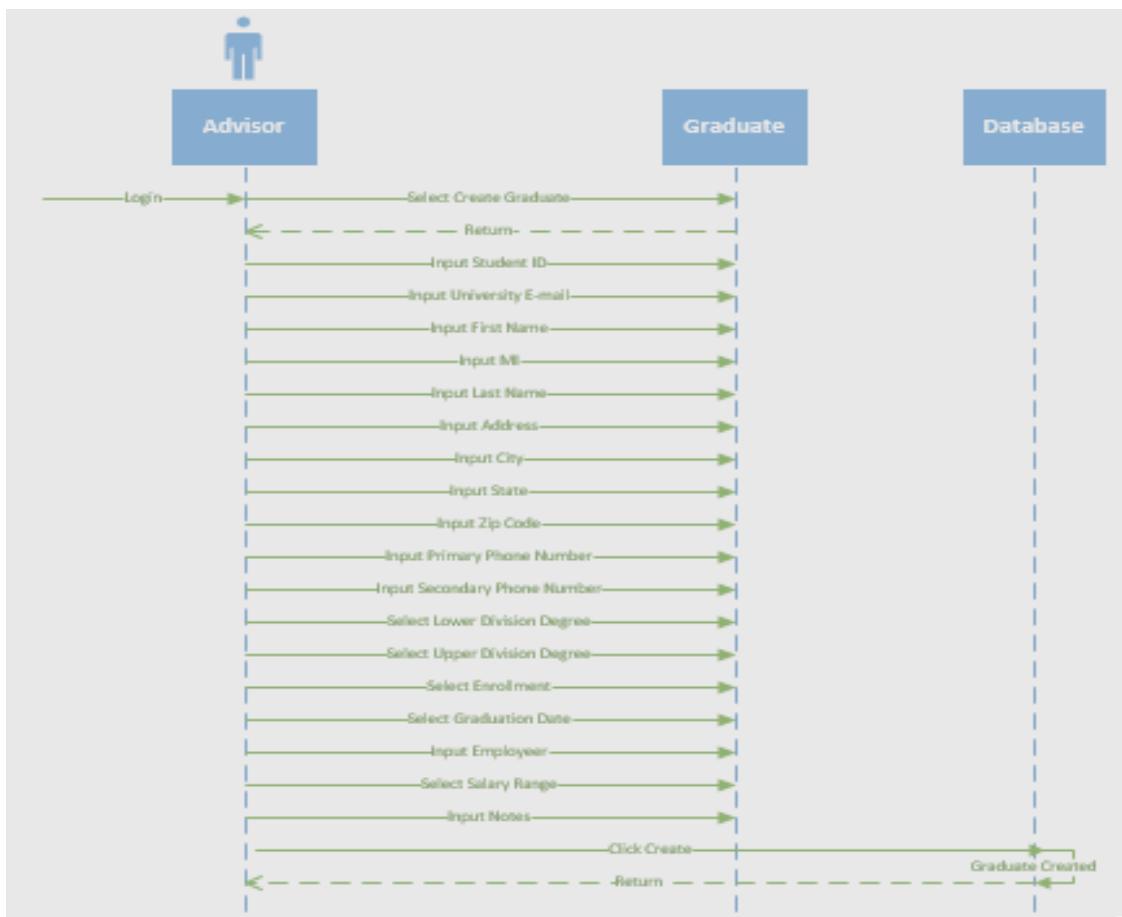
Advisor selects create student

Advisor Inputs/selects/checks following fields...

Advisor clicks create

Student is added to database

Once added successfully, returns to starting point



Use Case 47: Edit Graduate

R.A.T.C Elaboration Spec

Create Graduate

Brief Description

Edit Graduate will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is inputting/editing graduate information into the form and then submitting, which will update a student in the database. All required fields of the form must be correctly filled out to submit and create student.

Basic Flow

- Advisor selects edit student
- Advisor inputs/edits Student ID
- Advisor inputs/edits University E-mail
- Advisor inputs/edits First Name
- Advisor inputs/edits MI
- Advisor inputs/edits Last Name
- Advisor inputs/edits Address
- Advisor inputs/edits City
- Advisor selects/edits State
- Advisor inputs/edits Zip Code
- Advisor inputs/edits Primary Phone Number
- Advisor inputs/edits Secondary Phone Number
- Advisor inputs/edits Employer
- Advisor selects/edits Salary Range
- Advisor selects/edits Program
- Advisor selects/edits Enrollment
- Advisor selects/edits Anticipated Graduation Date
- Advisor inputs/edits notes
- Advisor clicks save

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Delete Student

- Delete button clicked

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012

R.A.T.C Elaboration Spec

- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

Post-conditions

- Creation Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Use Case: 47

Edit Graduate

Advisor logs in

Advisor selects edit student

Database is accessed to retrieve existing student

Advisor edits/inputs/selects/checks following fields...

Advisor clicks save

Student is updated in database

Once updated successfully, returns to starting point



R.A.T.C Elaboration Spec

Use Case 48: Delete Graduate

Create Graduate

Brief Description

Delete Graduate will edit a student in the database.

Flow of Events

The actor in this case is the Advisor that is deleting graduate information from the database and moved to a temporary dump file. Advisor must also input login information to confirm delete action.

Basic Flow

- Advisor selects edit student
- Advisor clicks delete
- Advisor inputs username
- Advisor inputs password
- Advisor clicks delete

Alternative Flows

Alternative flows are actions that occur when creating student does not properly occur.

Required Fields Not Complete

- Create button clicked
- Message pop up indicating unmet conditions

Cancel

- Cancels button clicked
- Returns to edit student

Special Requirements

- Logged in with Advisor access

System Requirements

- Access to Windows server 2012
- Access SQL 2016
- Due to FERPA restrictions we must store student information and grades on secure University of Louisville servers

Pre-conditions

- Logged in

Access to System

- Advisor must be logged in
- Connected to secure network

R.A.T.C Elaboration Spec

Post-conditions

- Delete Successful

Extension Points

If a field on the form is not filled out in the correct format and message will pop-up describing discrepancy.

Invalid input

- Incorrect format
- Incorrect number of characters in a field
- Invalid characters

R.A.T.C Elaboration Spec

Delete Graduate

Advisor logs in

Advisor selects edit student

Database is accessed to retrieve existing student

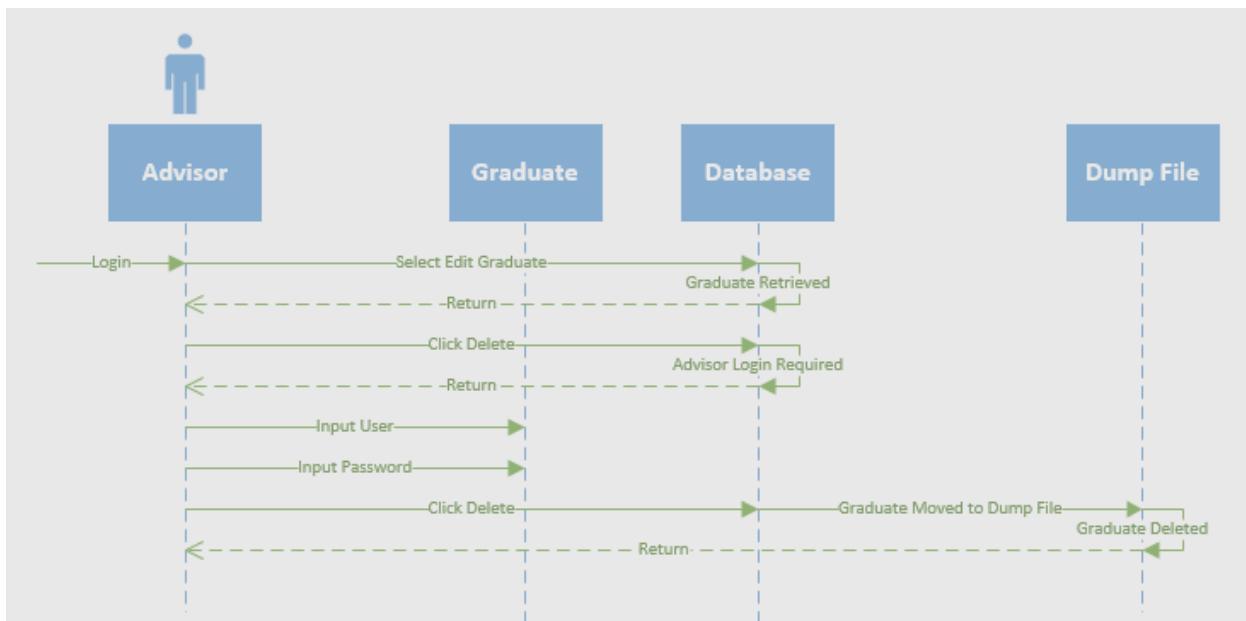
Advisor clicks delete

Advisor inputs username and login

Advisor confirms delete

Student is deleted from database and moved to temp dump file

Once deleted successfully, returns to starting point



Create Admin

R.A.T.C Elaboration Spec

211. Use-Case Name

Create Admin

211.1 Brief Description

When the system is designed, there will be an Admin account created for the initial setup purposes. In order to ensure the administrative role can change hands, and to provide support for multiple administrator accounts (should the school ever need it) the SONAR system will need a page for creating admin users. Below is the flow describing how to complete this task.

212. Flow of Events

212.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Admin
- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new administrator when the first log on to the SONAR system as they will be prompted to complete the information upon logging in.
- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

212.2 Alternative Flows

- 212.2.1 *Cancel Create User*
- Should the admin wish to cancel the creation of a user, all they must do is click the Cancel button located to the right of the Create button on the Create Admin page.

213. Special Requirements

213.1 < First Special Requirement >

Must be connected to School of Nursing network or connected through virtual Lab.

R.A.T.C Elaboration Spec

214. Pre-conditions

214.1 User Type

The use of the system must be and Admin.

214.2 Logged In

The Admin must be successfully logged into the system.

215. Post-conditions

215.1 New Admin Created

A new Admin account will have been created, and will have the full privileges associated with that account.

216. Extension Points

216.1 Incomplete Required Fields Finish

If the admin creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the admin clicks the finish button, an error will display asking the admin to enter information into the required fields before continuing.

216.2 Incomplete Required Fields Browse

If the admin creating the account has not filled out the required fields, and the admin tries to browse away from the create admin page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the admin click Yes, the admin will leave the page, and lose any information they had previously entered. If they click No, the admin will stay on the current page until they hit finish or cancel.

R.A.T.C Elaboration Spec

Create Administrator

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop

down box the admin must click to select a user type. The admin will click the dropdown and select

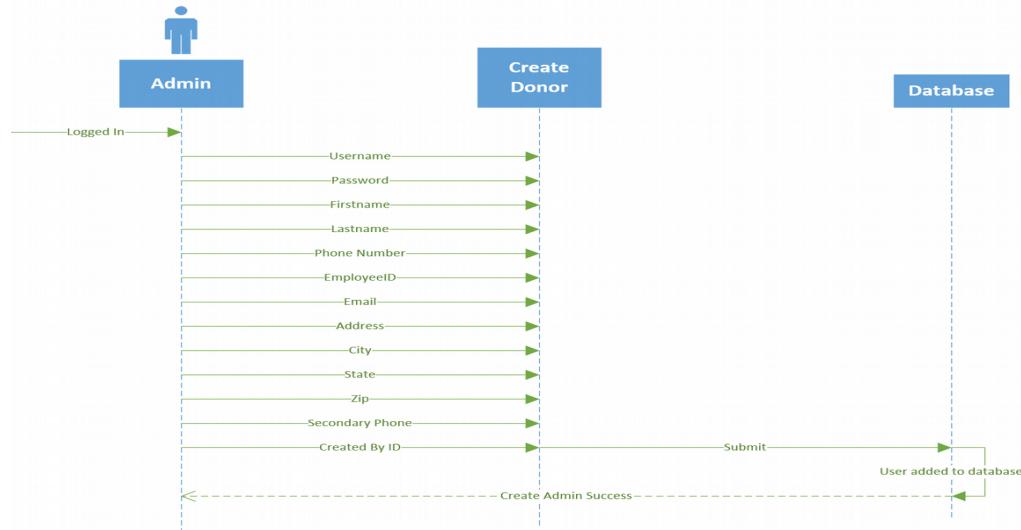
Admin

- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new administrator when the first

log on to the SONAR system as they will be prompted to complete the information upon logging in.

- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

R.A.T.C Elaboration Spec



Create Professor

217. Use-Case Name

Create Professor

217.1 Brief Description

Professor accounts will need to be created in order to allow the professors using the system to upload grades to it. This process is described below

218. Flow of Events

218.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Professor
- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new professor

R.A.T.C Elaboration Spec

- when the first log on to the SONAR system as they will be prompted to complete the information upon logging in.
- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

218.2 Alternative Flows

- 218.2.1 *Cancel Create User*
- Should the admin wish to cancel the creation of a user, all they must do is click the Cancel button located to the right of the Create button on the Create Admin page.

219. Special Requirements

219.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

220. Pre-conditions

220.1 User Type

The user of the system must be and Admin.

220.2 Logged In

The Admin must be successfully logged into the system.

221. Post-conditions

221.1 New Admin Created

A new Professor account will have been created, and will have the full privileges associated with that account.

222. Extension Points

222.1 Incomplete Required Fields Finish

If the admin creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the admin clicks the finish button, an error will display asking the admin to enter information into the required fields before continuing.

222.2 Incomplete Required Fields Browse

If the admin creating the account has no filled out the required fields, and the admin tries to browse away from the create admin page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the admin clicks Yes, the admin will leave the page, and lose any information they had previously entered. If they click No, the admin will stay on the current page until they hit finish or cancel.

R.A.T.C Elaboration Spec

Create Professor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The Admin will click the Create User button

- Admin will be presented with a new screen, on the top left of the create user screen will be a drop

down box the admin must click to select a user type. The admin will click the dropdown and select

Professor

- The admin will then enter the username, a temporary password, first name, last name, employeeID,

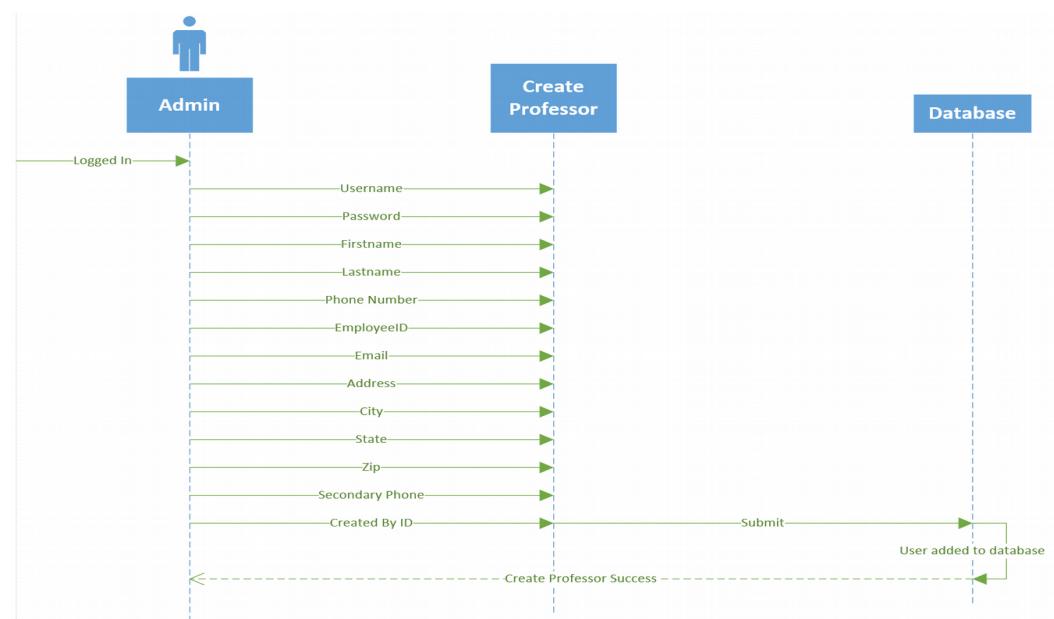
R.A.T.C Elaboration Spec

middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new professor when the first log

on to the SONAR system as they will be prompted to complete the information upon logging in.

- The Admin will hit the Finish button that appears beneath the user information after it has all been

filled out.



Create Advisor

223. Use-Case Name

Create Advisor

223.1 Brief Description

Advisor accounts will need to be created in order to grant SON advisors access to the system and the ability to create, update, and delete students. As well as track student progress and pull reports. The following describes how Advisors are to be created.

R.A.T.C Elaboration Spec

224. Flow of Events

224.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Advisor
- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new advisor when they first log on to the SONAR system as they will be prompted to complete the information upon logging in.
- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

224.2 Alternative Flows

224.2.1 Cancel Create User

- Should the admin wish to cancel the creation of a user, all they must do is click the Cancel button located to the right of the Create button on the Create Admin page.

225. Special Requirements

225.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

226. Pre-conditions

226.1 User Type

The user of the system must be and Admin.

226.2 Logged In

The Admin must be successfully logged into the system.

227. Post-conditions

227.1 New Admin Created

A new Advisor account will have been created, and will have the full privileges associated with that account.

R.A.T.C Elaboration Spec

228. Extension Points

228.1 Incomplete Required Fields Finish

If the admin creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the admin clicks the finish button, an error will display asking the admin to enter information into the required fields before continuing.

228.2 Incomplete Required Fields Browse

If the admin creating the account has no filled out the required fields, and the admin tries to browse away from the create admin page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the admin clicks Yes, the admin will leave the page, and lose any information they had previously entered. If they click No, the admin will stay on the current page until they hit finish or cancel.

Create Advisor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

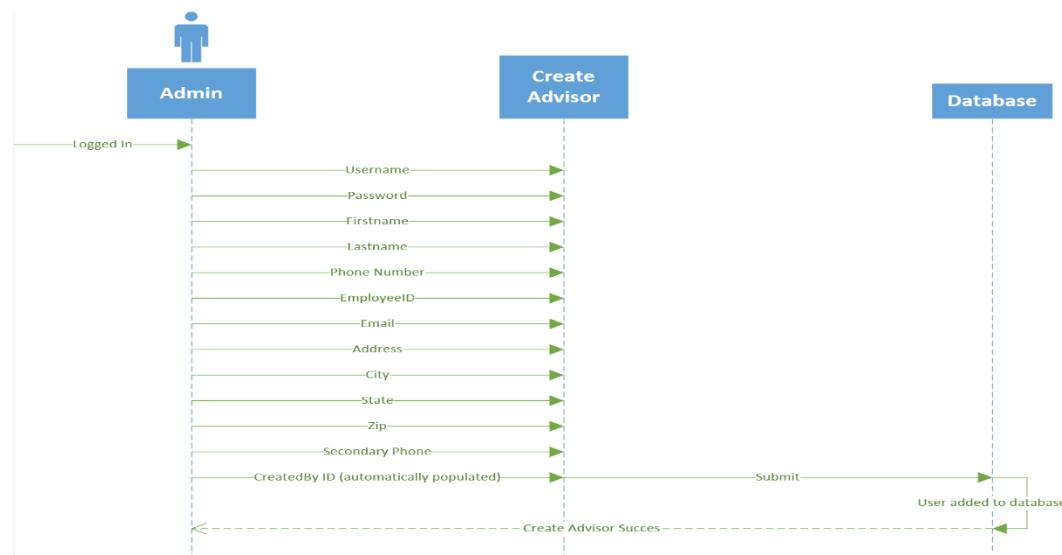
users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The Admin will click the Create User button

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- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Advisor
- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new advisor when they first log on to the SONAR system as they will be prompted to complete the information upon logging in.
- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.



Create Committee Member

229. Use-Case Name

Create Committee Member

R.A.T.C Elaboration Spec

229.1 Brief Description

Advisor accounts will need to be created in order to grant SON advisors access to the system and the ability to create, update, and delete students. As well as track student progress and pull reports. The following describes how Advisors are to be created.

230. Flow of Events

230.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Committee Member
- The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new professor when they first log on to the SONAR system as they will be prompted to complete the information upon logging in.
- The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

230.2 Alternative Flows

230.2.1 Cancel Create User

- Should the admin wish to cancel the creation of a user, all they must do is click the Cancel button located to the right of the Create button on the Create Admin page.

231. Special Requirements

231.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

232. Pre-conditions

232.1 User Type

The user of the system must be and Admin.

R.A.T.C Elaboration Spec

232.2 Logged In

The Admin must be successfully logged into the system.

233. Post-conditions

233.1 New Admin Created

A new Committee Member account will have been created, and will have the full privileges associated with that account.

234. Extension Points

234.1 Incomplete Required Fields Finish

If the admin creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the admin clicks the finish button, an error will display asking the admin to enter information into the required fields before continuing.

234.2 Incomplete Required Fields Browse

If the admin creating the account has no filled out the required fields, and the admin tries to browse away from the create admin page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the admin clicks Yes, the admin will leave the page, and lose any information they had previously entered. If they click No, the admin will stay on the current page until they hit finish or cancel.

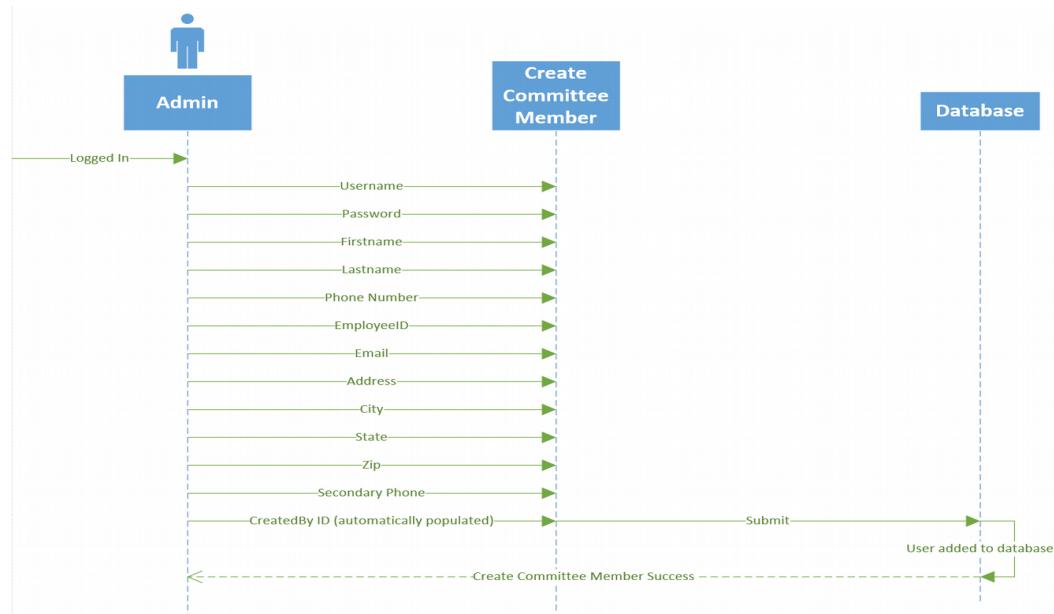
Create Committee Member

The Admin will browse from their home page to the Manage Users tab

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- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The Admin will click the Create User button
- Admin will be presented with a new screen, on the top left of the create user screen will be a drop down box the admin must click to select a user type. The admin will click the dropdown and select Committee Member
 - The admin will then enter the username, a temporary password, first name, last name, employeeID, middle initial, address, city, state, zip, primary and secondary phone. Required fields are Username, password, first name, and last name. The rest can be filled out by the new professor when they first log on to the SONAR system as they will be prompted to complete the information upon logging in.
 - The Admin will hit the Finish button that appears beneath the user information after it has all been filled out.

R.A.T.C Elaboration Spec



Update Admin

235. Use-Case Name

Update Admin

235.1 Brief Description

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

236. Flow of Events

236.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.

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- The Admin will make the changes they wish to make and hit save.

236.2 Alternative Flows

- 236.2.1 *Cancel Update*
 - The Admin will browse from their home page to the Manage Users tab
 - Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
 - The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
 - Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
 - The admin will hit cancel to gracefully stop the update.

237. Special Requirements

237.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

238. Pre-conditions

238.1 User Type

The use of the system must be and Advisor

238.2 Logged In

The Advisor must be successfully logged into the system.

239. Post-conditions

239.1 Updated User

The user the admin has chosen to edit will be saved to the system with updated values.

240. Extension Points

240.1 Incomplete Required Fields Finish

If the admin has cleared out one of the users required fields and attempts to save, the system will display an error asking the admin to fill in the required field before continuing.

240.2 Incomplete Required Fields Browse

If the admin has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the admin if they wish to continue away from the page and discard the

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changes made. If the admin hits Yes, the information previously entered will be discarded and the page will change. If the admin hit No, the system will remain on the current page and allow the admin to continue editing the user, or save the changes to the user and populate these changes in the system.

Update Admin

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

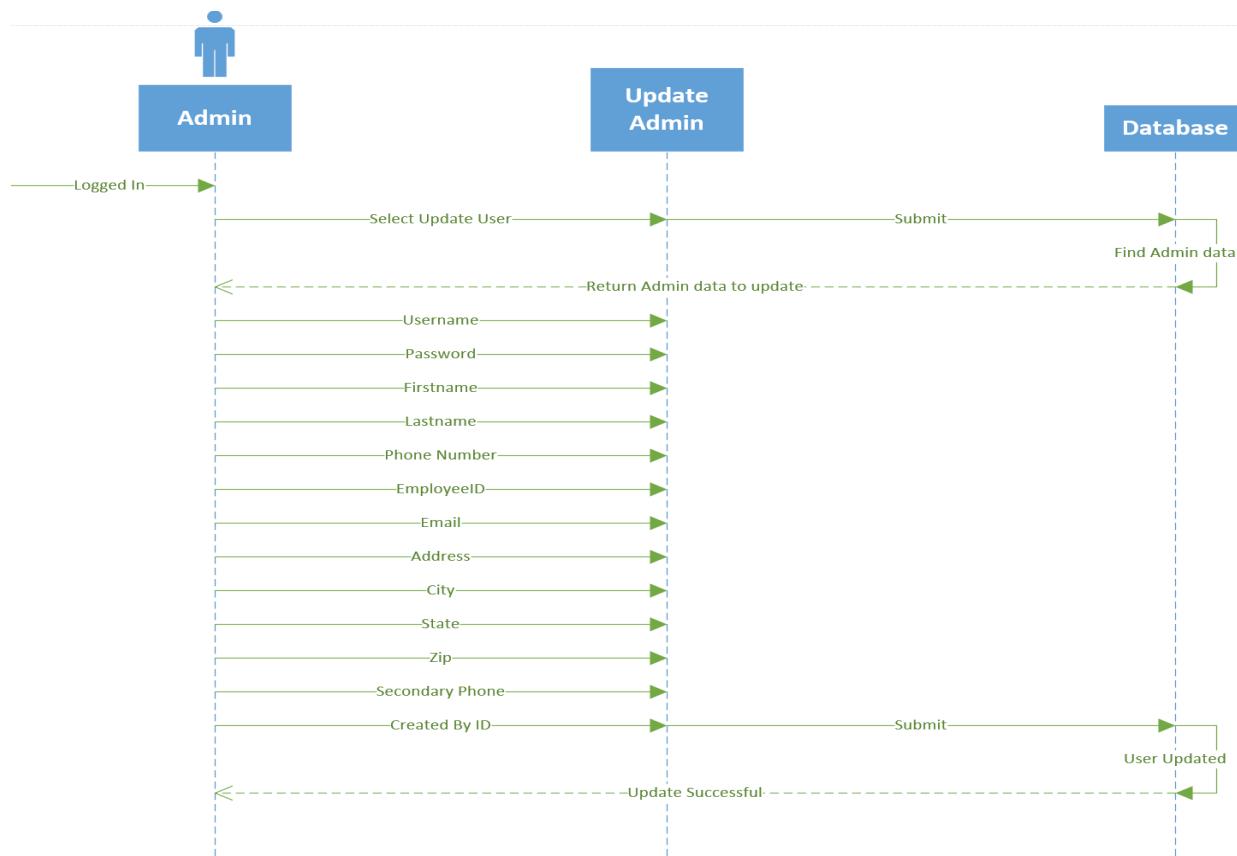
hit enter.

- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that

displays the user's information.

- The Admin will make the changes they wish to make and hit save.

R.A.T.C Elaboration Spec



Update Professor

241. Use-Case Name

Update Professor

241.1 Brief Description

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

242. Flow of Events

242.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the

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screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will make the changes they wish to make and hit save.

242.2 Alternative Flows

242.2.1 Cancel Update

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The admin will hit cancel to gracefully stop the update.

243. Special Requirements

243.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

244. Pre-conditions

244.1 User Type

The use of the system must be and Admin

244.2 Logged In

The Admin must be successfully logged into the system.

245. Post-conditions

245.1 Updated User

The user the admin has chosen to edit will be saved to the system with updated values.

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246. Extension Points

246.1 Incomplete Required Fields Finish

If the admin has cleared out one of the users required fields and attempts to save, the system will display an error asking the admin to fill in the required field before continuing.

246.2 Incomplete Required Fields Browse

If the admin has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the admin if they wish to continue away from the page and discard the changes made. If the admin hits Yes, the information previously entered will be discarded and the page will change. If the admin hit No, the system will remain on the current page and allow the admin to continue editing the user, or save the changes to the user and populate these changes in the system.

Update Professor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

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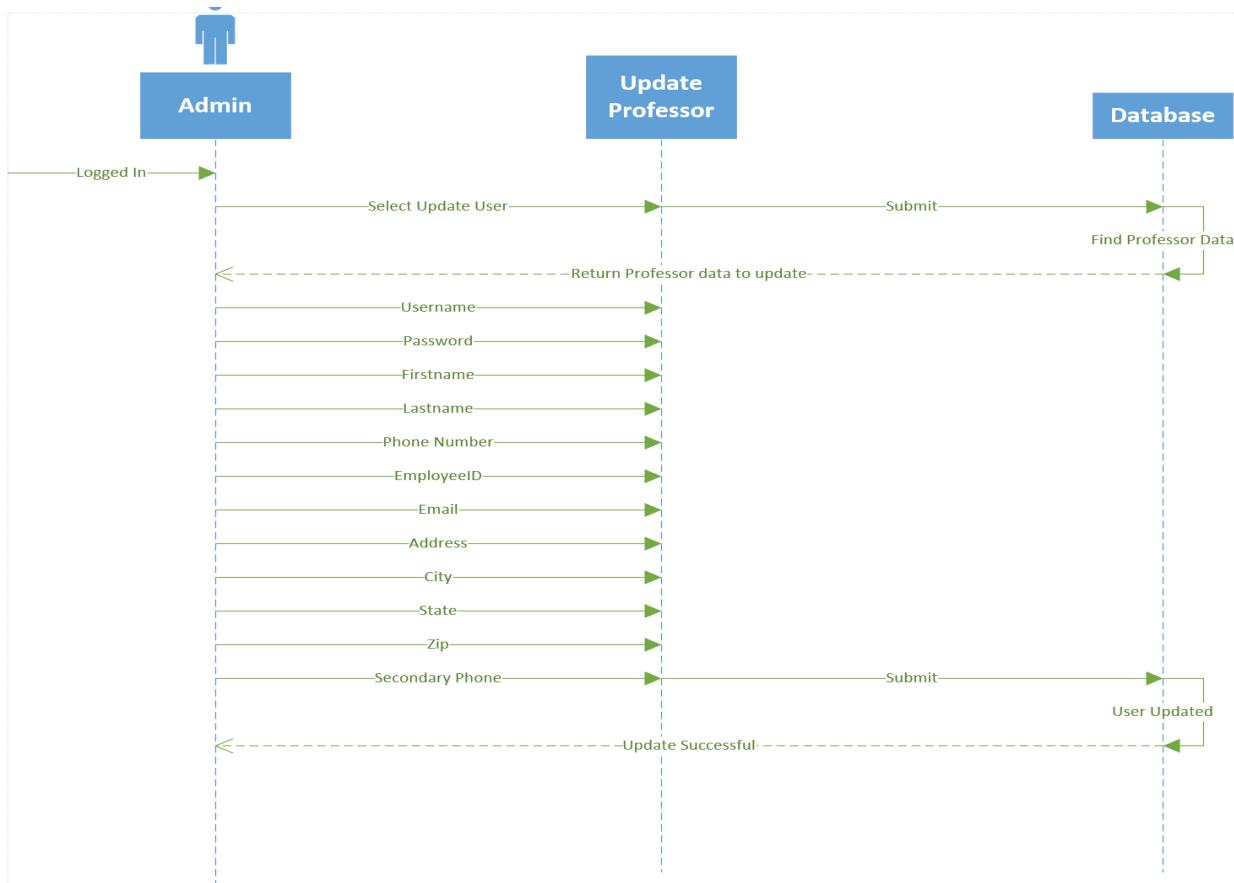
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

hit enter.

- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page

that displays the user's information.

- The Admin will make the changes they wish to make and hit save.



Update Advisor

247. Use-Case Name

Update Advisor

R.A.T.C Elaboration Spec

247.1 Brief Description

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

248. Flow of Events

248.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will make the changes they wish to make and hit save.

248.2 Alternative Flows

248.2.1 Cancel Update

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The admin will hit cancel to gracefully stop the update.

249. Special Requirements

249.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

250. Pre-conditions

250.1 User Type

The use of the system must be and Admin

R.A.T.C Elaboration Spec

250.2 Logged In

The Admin must be successfully logged into the system.

251. Post-conditions

251.1 Updated User

The user the admin has chosen to edit will be saved to the system with updated values.

252. Extension Points

252.1 Incomplete Required Fields Finish

If the admin has cleared out one of the users required fields and attempts to save, the system will display an error asking the admin to fill in the required field before continuing.

252.2 Incomplete Required Fields Browse

If the admin has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the admin if they wish to continue away from the page and discard the changes made. If the admin hits Yes, the information previously entered will be discarded and the page will change. If the admin hit No, the system will remain on the current page and allow the admin to continue editing the user, or save the changes to the user and populate these changes in the system.

Update Advisor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

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users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

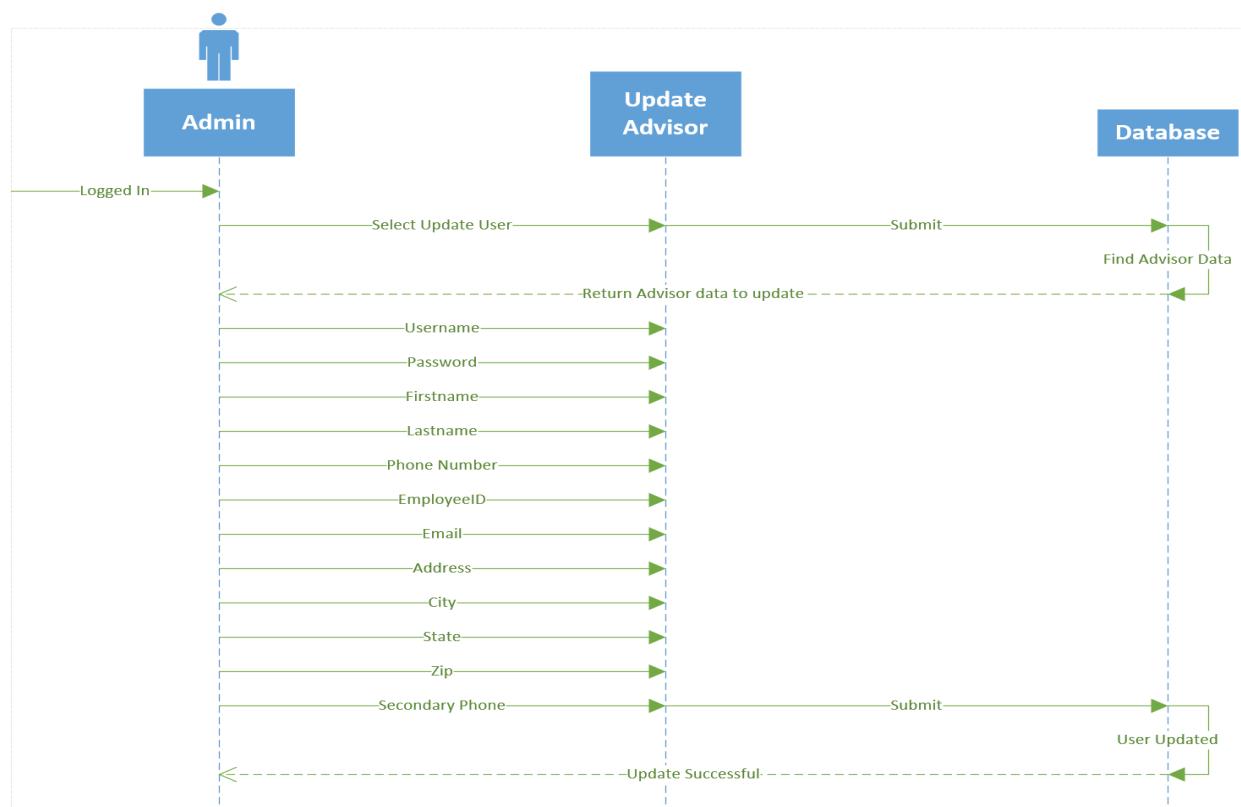
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

hit enter.

- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that

displays the user's information.

- The Admin will make the changes they wish to make and hit save.



Update Professor

R.A.T.C Elaboration Spec

253. Use-Case Name

Update Committee Member

253.1 Brief Description

As information changes, Admins will need the ability to update their information in order to stay current. This also allows passwords to be manually changed as a fail-safe to the email resets should the admin need their password changed.

254. Flow of Events

254.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will make the changes they wish to make and hit save.

254.2 Alternative Flows

254.2.1 Cancel Update

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The admin will hit cancel to gracefully stop the update.

255. Special Requirements

255.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

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256. Pre-conditions

256.1 User Type

The use of the system must be and Admin

256.2 Logged In

The Admin must be successfully logged into the system.

257. Post-conditions

257.1 Updated User

The user the admin has chosen to edit will be saved to the system with updated values.

258. Extension Points

258.1 Incomplete Required Fields Finish

If the admin has cleared out one of the users required fields and attempts to save, the system will display an error asking the admin to fill in the required field before continuing.

258.2 Incomplete Required Fields Browse

If the admin has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the admin if they wish to continue away from the page and discard the changes made. If the admin hits Yes, the information previously entered will be discarded and the page will change. If the admin hit No, the system will remain on the current page and allow the admin to continue editing the user, or save the changes to the user and populate these changes in the system.

R.A.T.C Elaboration Spec

Update Professor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

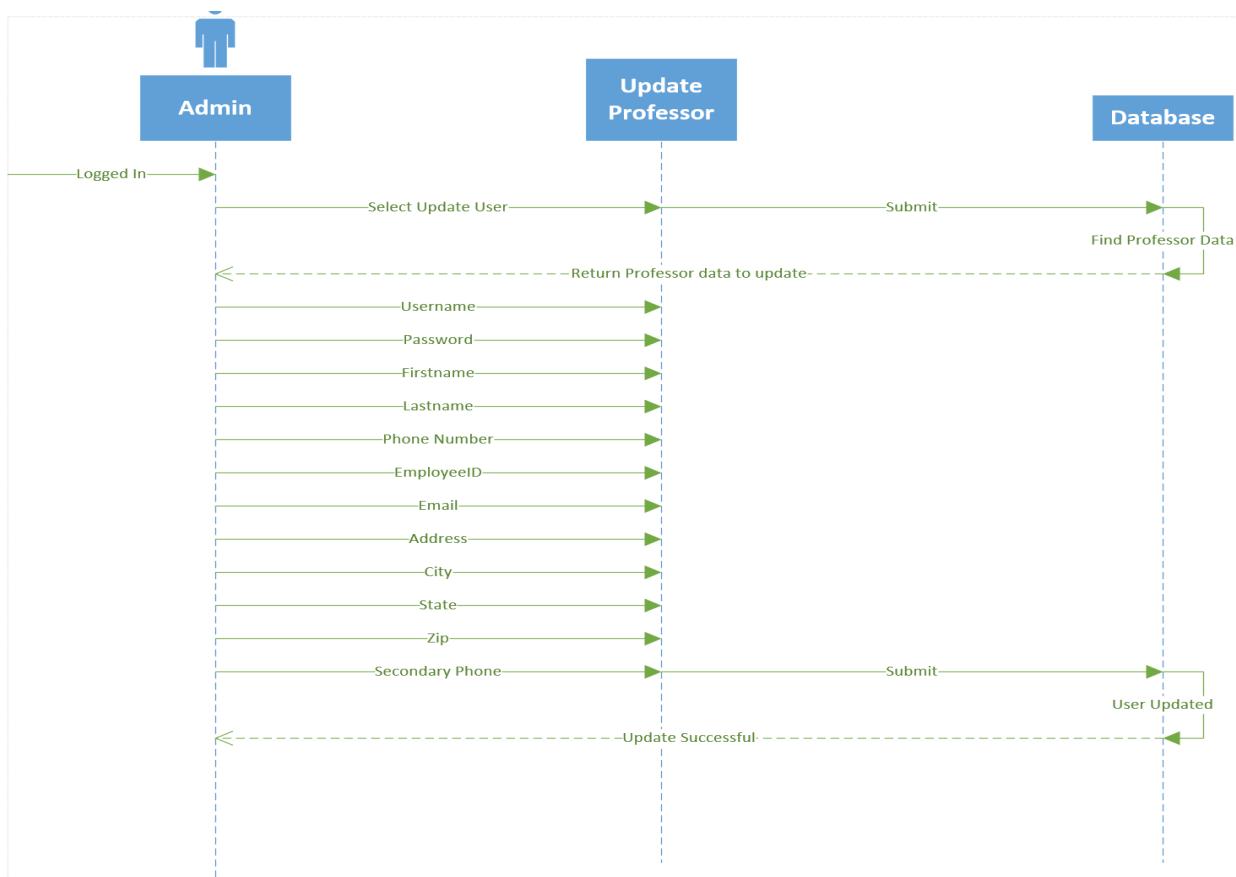
hit enter.

- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page

that displays the user's information.

- The Admin will make the changes they wish to make and hit save.

R.A.T.C Elaboration Spec



Delete Admin

259. Use-Case Name

Delete Admin

259.1 Brief Description

It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will 'delete' the admin from the system. This will effectively turn off the administrator's access, and their login will no longer function.

R.A.T.C Elaboration Spec

260. Flow of Events

260.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will hit the Delete button and save.

260.2 Alternative Flows

260.2.1 *Cancel Delete*

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The admin will hit Cancel to stop delete.

261. Special Requirements

261.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

262. Pre-conditions

262.1 User Type

The use of the system must be and Admin

262.2 Logged In

The Admin must be successfully logged into the system.

R.A.T.C Elaboration Spec

263. Post-conditions

263.1 ‘Deleted’ User

The user the admin deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

264. Extension Points

264.1 Deleted Wrong User

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. All an admin would have to do is search through the list, either manually or with the search tool, double click the ‘deleted’ user, and check the Restore checkbox on the bottom right corner of the users page, and hit Save.

Delete Administrator

The Admin will browse from their home page to the Manage Users tab

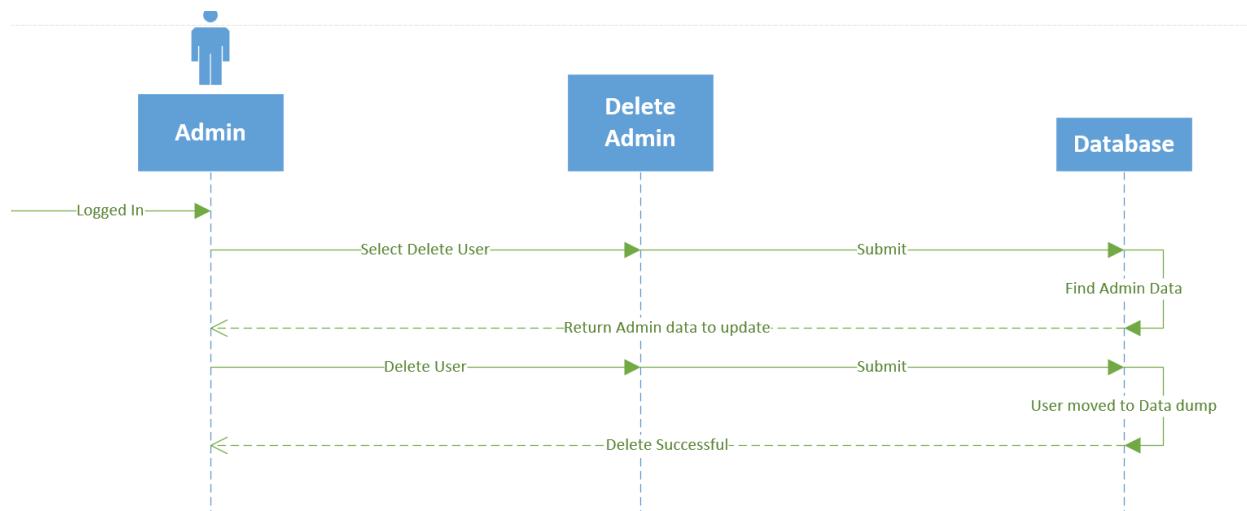
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

R.A.T.C Elaboration Spec

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will hit the Delete button and save.



Delete Professor

R.A.T.C Elaboration Spec

265. Use-Case Name

Delete Professor

265.1 Brief Description

It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will ‘delete’ the admin from the system. This will effectively turn off the administrator’s access, and their login will no longer function.

266. Flow of Events

266.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user’s information.
- The Admin will hit the Delete button and save.

266.2 Alternative Flows

266.2.1 Cancel Delete

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user’s information.
- The admin will hit Cancel to stop delete.

267. Special Requirements

267.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

R.A.T.C Elaboration Spec

268. Pre-conditions

268.1 User Type

The use of the system must be and Admin

268.2 Logged In

The Admin must be successfully logged into the system.

269. Post-conditions

269.1 ‘Deleted’ User

The user the admin deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

270. Extension Points

270.1 Deleted Wrong User

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. All an admin would have to do is search through the list, either manually or with the search tool, double click the ‘deleted’ user, and check the Restore checkbox on the bottom right corner of the users page, and hit Save.

R.A.T.C Elaboration Spec

Delete Professor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

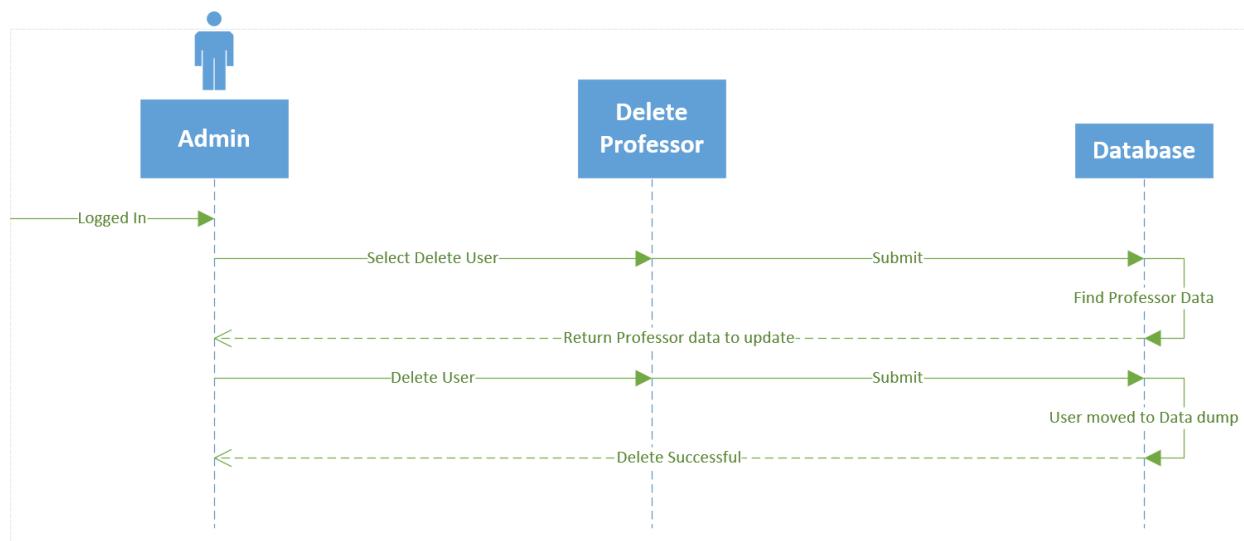
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

hit enter.

- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that

displays the user's information.

- The Admin will hit the Delete button and save.



R.A.T.C Elaboration Spec

Delete Advisor

271. Use-Case Name

Delete Advisor

271.1 Brief Description

It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will 'delete' the admin from the system. This will effectively turn off the administrator's access, and their login will no longer function.

272. Flow of Events

272.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will hit the Delete button and save.

272.2 Alternative Flows

- ##### 272.2.1 Cancel Delete
- The Admin will browse from their home page to the Manage Users tab
 - Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
 - The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.

R.A.T.C Elaboration Spec

- Next the admin will double click the user in the listbox they wish to edit.
This will open up a page that displays the user's information.
- The admin will hit Cancel to stop delete.

273. Special Requirements

273.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

274. Pre-conditions

274.1 User Type

The use of the system must be and Admin

274.2 Logged In

The Admin must be successfully logged into the system.

275. Post-conditions

275.1 'Deleted' User

The user the admin deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

276. Extension Points

276.1 Deleted Wrong User

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. All an admin would have to do is search through the list, either manually or with the search tool, double click the 'deleted' user, and check the Restore checkbox on the bottom right corner of the users page, and hit Save.

R.A.T.C Elaboration Spec

Delete Advisor

The Admin will browse from their home page to the Manage Users tab

- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the

users currently in the system. There will be search bar to the right of the list box which allows the

admin to search through the list of users, and a button beneath the search bar labeled Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and

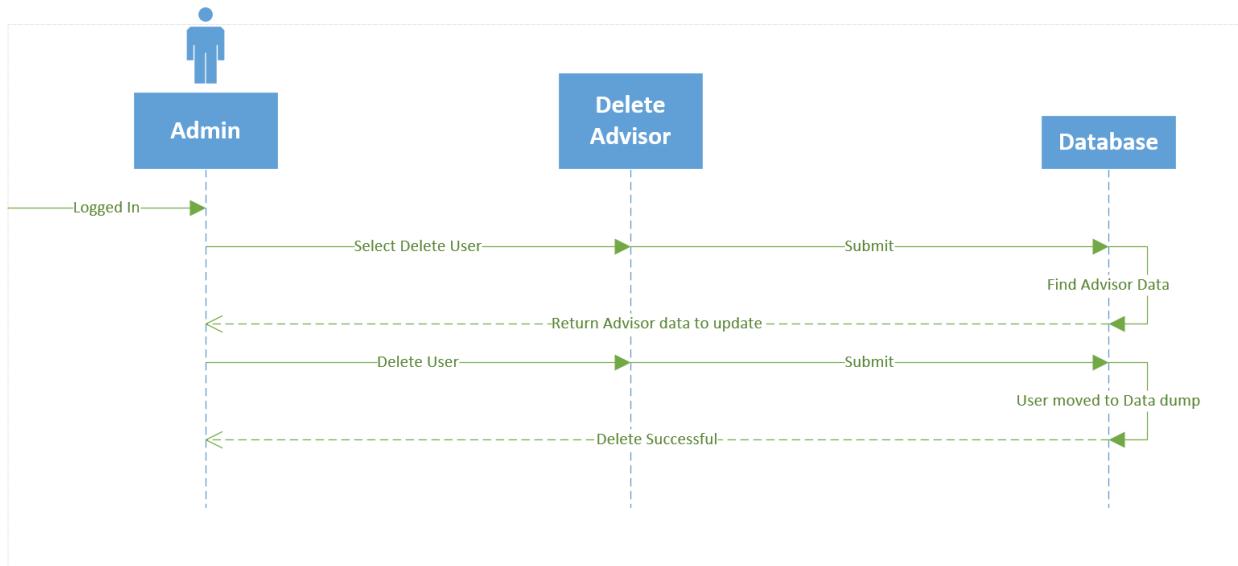
hit enter.

- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that

displays the user's information.

- The Admin will hit the Delete button and save.

R.A.T.C Elaboration Spec



Delete Committee Member

277. Use-Case Name

Delete Committee Member

277.1 Brief Description

It is not expected the once an admin is created, they will always be a part of the School of Nursing. In case an admin needs to have their access turned off, there will be an option that will 'delete' the admin from the system. This will effectively turn off the administrator's access, and their login will no longer function.

278. Flow of Events

278.1 Basic Flow

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled

R.A.T.C Elaboration Spec

Create Users

- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will hit the Delete button and save.

278.2 Alternative Flows

278.2.1 Cancel Delete

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The admin will hit Cancel to stop delete.

279. Special Requirements

279.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

280. Pre-conditions

280.1 User Type

The use of the system must be and Admin

280.2 Logged In

The Admin must be successfully logged into the system.

281. Post-conditions

281.1 'Deleted' User

The user the admin deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

282. Extension Points

282.1 Deleted Wrong User

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. All an admin would have to do is search through the list, either manually or with the search tool, double click the 'deleted' user, and

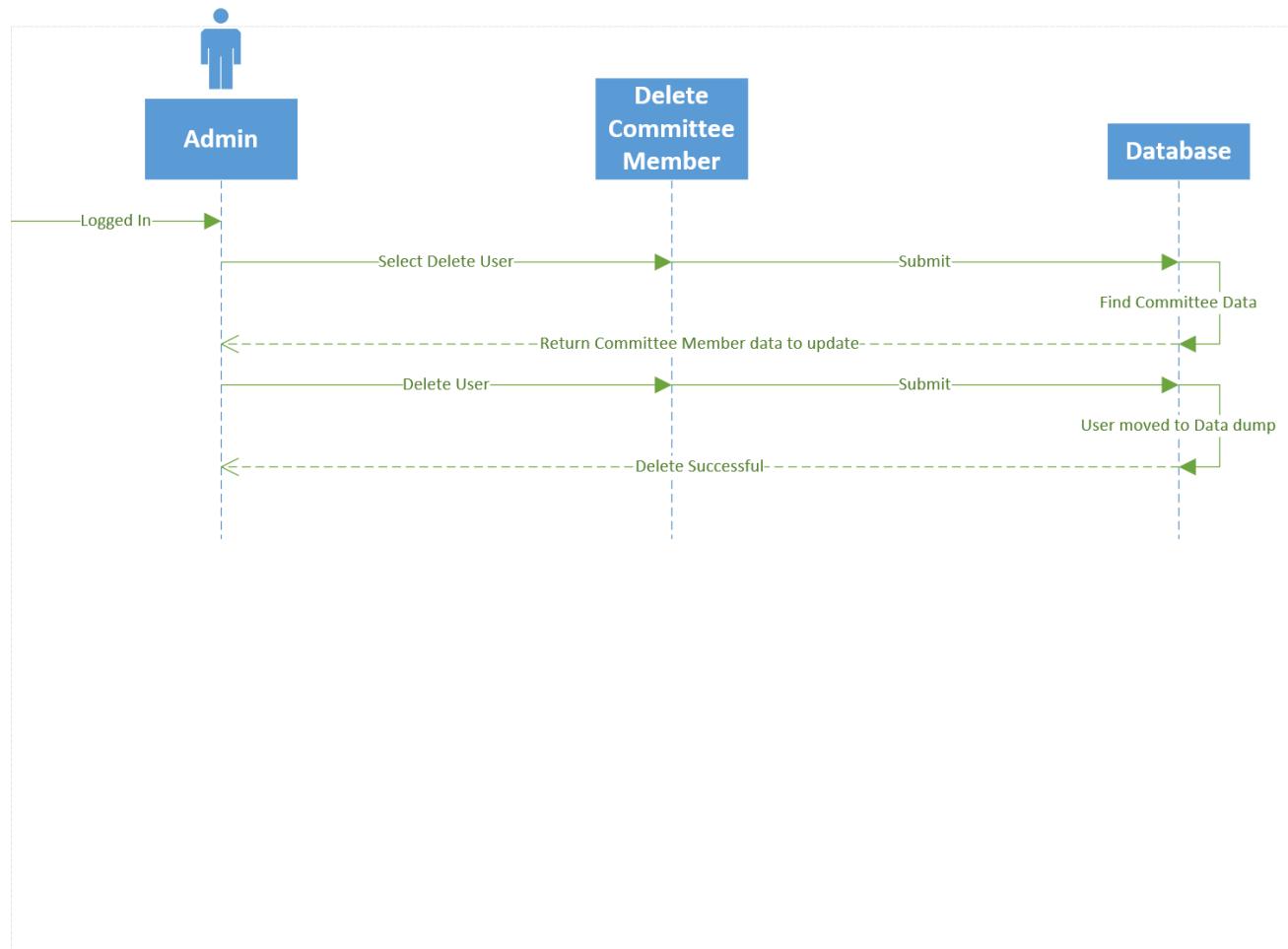
R.A.T.C Elaboration Spec

check the Restore checkbox on the bottom right corner of the users page, and hit Save.

Use case 60:

- The Admin will browse from their home page to the Manage Users tab
- Next the Admin will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The admin enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the admin will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The Admin will hit the Delete button and save.

R.A.T.C Elaboration Spec



Submit Student Documents

283. Use-Case Name

Submit Student Documents

283.1 Brief Description

Students will periodically need to upload documents to the system for Advisors to review. The flow below describes how students will upload documents for Advisors to review.

R.A.T.C Elaboration Spec

284. Flow of Events

284.1 Basic Flow

- The student will brows to the Upload Documents tab from the student homepage.
- The student will select the document type they wish to upload, and then hit Browse.
- The student will see a File Explorer windows open, they will brows the file they wish to upload and hit the Upload button.
- Students will now see the Upload Documents page again, this time with the name of the documents the wish to submit between the Select document type and the submit buttons.
- The Student will hit submit, which will send an email alert to their advisor letting them know the student has submitted the document, and what kind of document they've submitted.

284.2 Alternative Flows

284.2.1 *Cancel Submission*

- The student will brows to the Upload Documents tab from the student homepage.
- The student will select the document type they wish to upload, and then hit Browse.
- The student will see a File Explorer windows open, they will brows the file they wish to upload and hit the Upload button.
- Students will now see the Upload Documents page again, this time with the name of the documents the wish to submit between the Select document type and the submit buttons.
- The student will hit Cancel to gracefully stop the document upload.

285. Special Requirements

285.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

286. Pre-conditions

286.1 User Type

The user of the system must be an student.

286.2 Logged In

The student must be successfully logged into the system.

287. Post-conditions

287.1 Document Uploaded

The student's document will successfully be uploaded. The student's advisor will be notified that the document has been submitted for review.

R.A.T.C Elaboration Spec

288. Extension Points

288.1 Document Rejected

If the Student attempts to upload a document that is not a .docx, .jpg, .pdf, png, .xlsx, .doc, or .xls, the file will be rejected and the student will be asked to resubmit using one of the appropriate file types.

288.2 No Document Selected

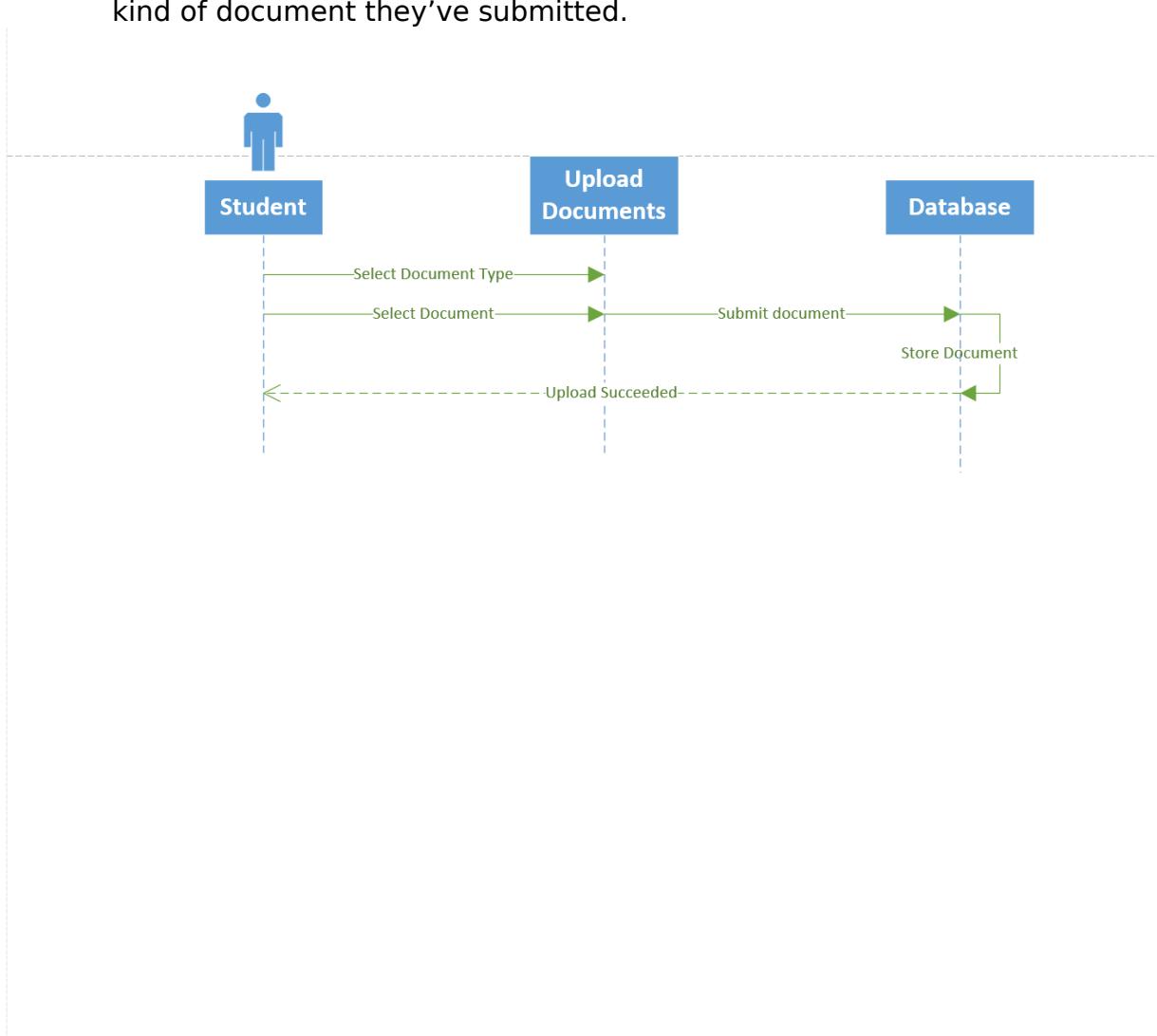
If the student hits the submit button before selecting a document, the SONAR system will throw an error message asking the student to select a document before submitting.

Use Case 61:

- The student will browse to the Upload Documents tab from the student homepage.
- The student will select the document type they wish to upload, and then hit Browse.

R.A.T.C Elaboration Spec

- The student will see a File Explorer windows open, they will brows the file they wish to upload and hit the Upload button.
 - Students will now see the Upload Documents page again, this time with the name of the documents the wish to submit between the Select document type and the submit buttons.
 - The Student will hit submit, which will send an email alert to their advisor letting them know the student has submitted the document, and what kind of document they've submitted.



Create Prospective Student

R.A.T.C Elaboration Spec

289. Use-Case Name

Create Prospective Student

289.1 Brief Description

Prospective Students interested in enrolling in the school of nursing will need a way to find out more information about the school, and need a way to schedule visits with the school in order to get a feel for the program. This describes how a prospective student would create an account.

290. Flow of Events

290.1 Basic Flow

- The prospective student will browse to the SONAR system site
- The prospective student will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Prospective Student, Donor, or Alumni. The student will select Prospective Student
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Create Account button

290.2 Alternative Flows

290.2.1 Cancel Create User

- The prospective student will browse to the SONAR system site
- The prospective student will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Prospective Student, Donor, or Alumni. The student will select Prospective Student
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Cancel button

291. Special Requirements

291.1 Connectivity

To the Internet

292. Pre-conditions

292.1 Not Current User

The prospective student cannot currently have an account with the SONAR system.

R.A.T.C Elaboration Spec

293. Post-conditions

293.1 New Prospective Student Created

A new Prospective Student account will have been created, and will have the full privileges associated with that account.

294. Extension Points

294.1 Incomplete Required Fields Finish

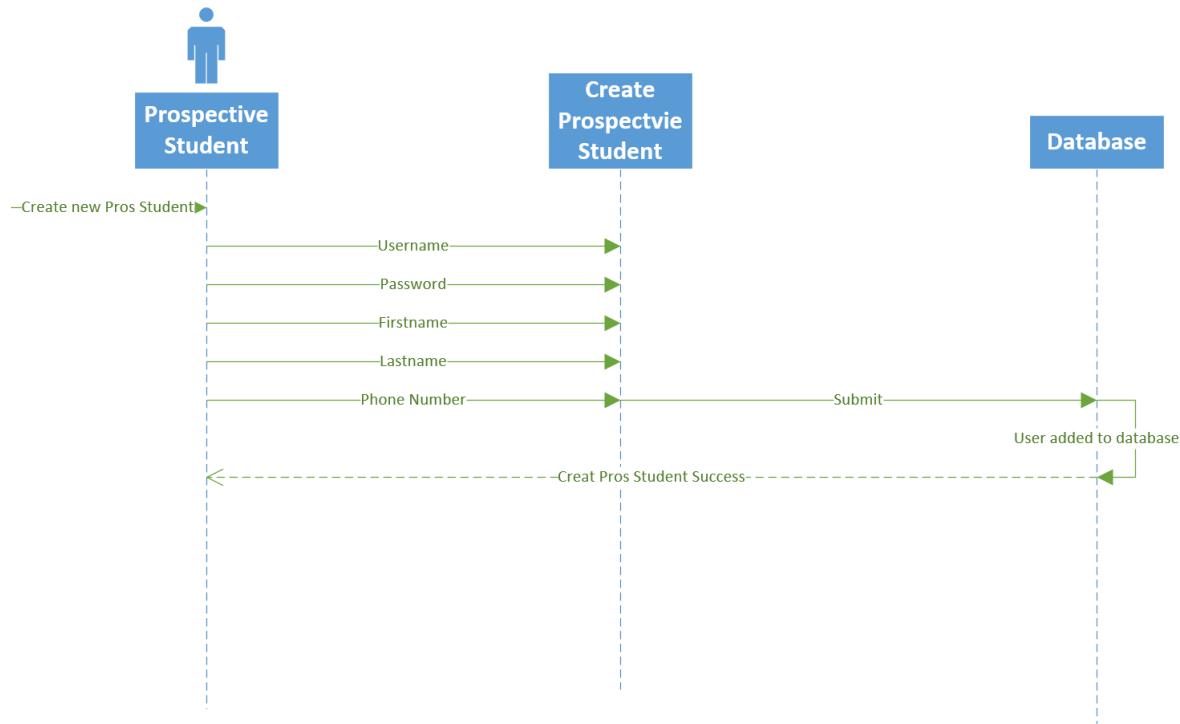
If the prospective creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the student clicks the finish button, an error will display asking the student to enter information into the required fields before continuing.

294.2 Incomplete Required Fields Browse

If the student creating the account has not filled out the required fields, and the student tries to browse away from the Create Prospective Student page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the student click Yes, the student will leave the page, and lose any information they had previously entered. If they click No, the student will stay on the current page until they hit finish or cancel.

R.A.T.C Elaboration Spec

- The prospective student will browse to the SONAR system site
- The prospective student will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Prospective Student, Donor, or Alumni. The student will select Prospective Student
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Create Account button



Update Prospective Student

R.A.T.C Elaboration Spec

295. Use-Case Name

Update Prospective Student

295.1 Brief Description

Prospective Students who have created accounts may need to change their information after the account has been created. The flow of this is described below

296. Flow of Events

296.1 Basic Flow

- The prospective student will browse to the SONAR system site
- The prospective student will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The student will hit save

296.2 Alternative Flows

296.2.1 Cancel Update User

- The prospective student will browse to the SONAR system site
- The prospective student will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The Prospective Student will hit cancel

297. Special Requirements

297.1 Connectivity

Must have internet connection

298. Pre-conditions

298.1 User Type

The user must be a Prospective Student

298.2 Logged In

The Prospective Student must be logged in

299. Post-conditions

299.1 Updated Prospective Student

The Prospective Student's information will be updated.

R.A.T.C Elaboration Spec

300. Extension Points

300.1 Incomplete Required Fields Finish

If the student has cleared out one of the users required fields and attempts to save, the system will display an error asking the student to fill in the required field before continuing.

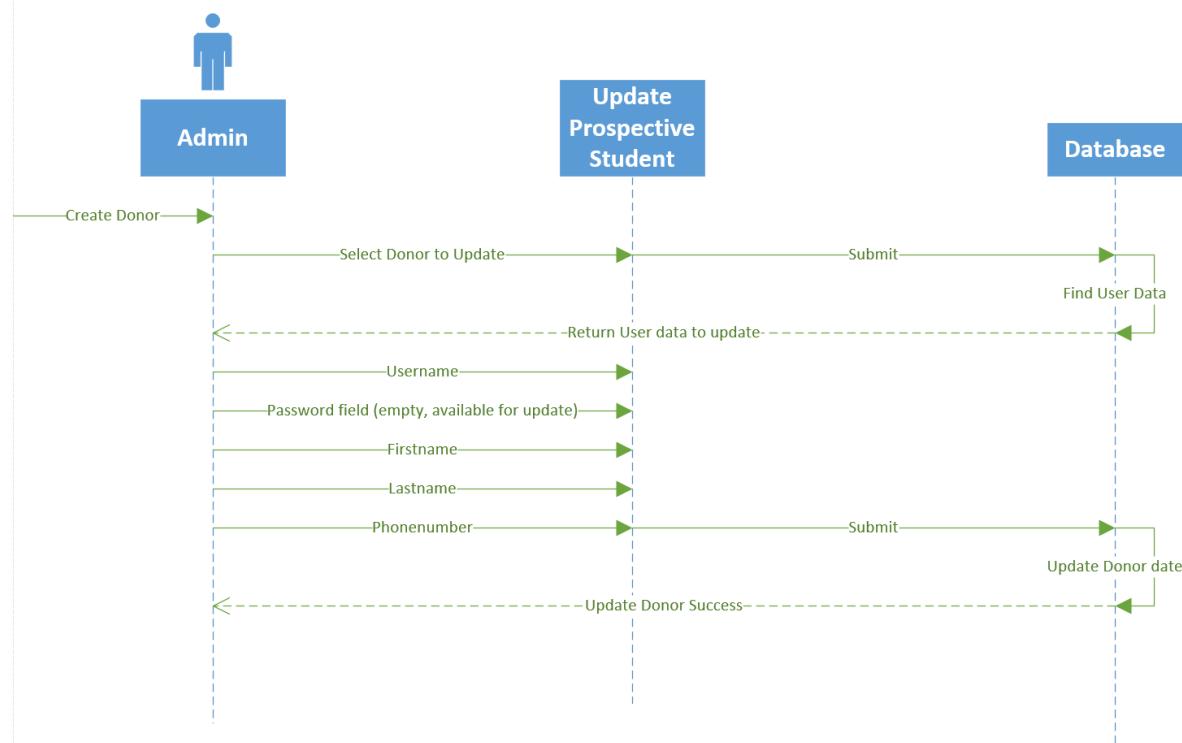
300.2 Incomplete Required Fields Browse

If the student has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the student if they wish to continue away from the page and discard the changes made. If the student hits Yes, the information previously entered will be discarded and the page will change. If the student hit No, the system will remain on the current page and allow the student to continue editing the user, or save the changes to the user and populate these changes in the system.

R.A.T.C Elaboration Spec

Use Case 63:

- The prospective student will browse to the SONAR system site
- The prospective student will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The student will hit save



R.A.T.C Elaboration Spec

Delete Prospective Student

301. Use-Case Name

Delete Prospective Student

301.1 Brief Description

To keep Prospective Student accounts from taking up more space than necessary on the SONAR system, advisors will have the ability to delete them from the system after a certain period of inactivity in a mass delete.

302. Flow of Events

302.1 Basic Flow

- The Advisor will browse to the Student Page, where they will run a multi student query for Prospective Students. When the Prospective Student is selected, a delete button will appear to the left of the area that will display the student's information
- The Prospective Students will be listed in order by date created with the date created listed along with the Prospective Student's name.
- The advisor will then be able to select all of the accounts they wish to delete
- The advisor will click delete button

302.2 Alternative Flows

302.2.1 Cancel Delete

- The Advisor will browse from their home page to the Manage Users tab
- Next the Advisor will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
- The advisor enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
- Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
- The advisor will hit Cancel to stop delete.

303. Special Requirements

303.1 Connectivity

Must have internet connection

R.A.T.C Elaboration Spec

304. Pre-conditions

304.1 User Type

The use of the system must be and Advisor

304.2 Logged In

The Advisor must be successfully logged into the system.

305. Post-conditions

305.1 ‘Deleted’ Users

The user the advisor deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

306. Extension Points

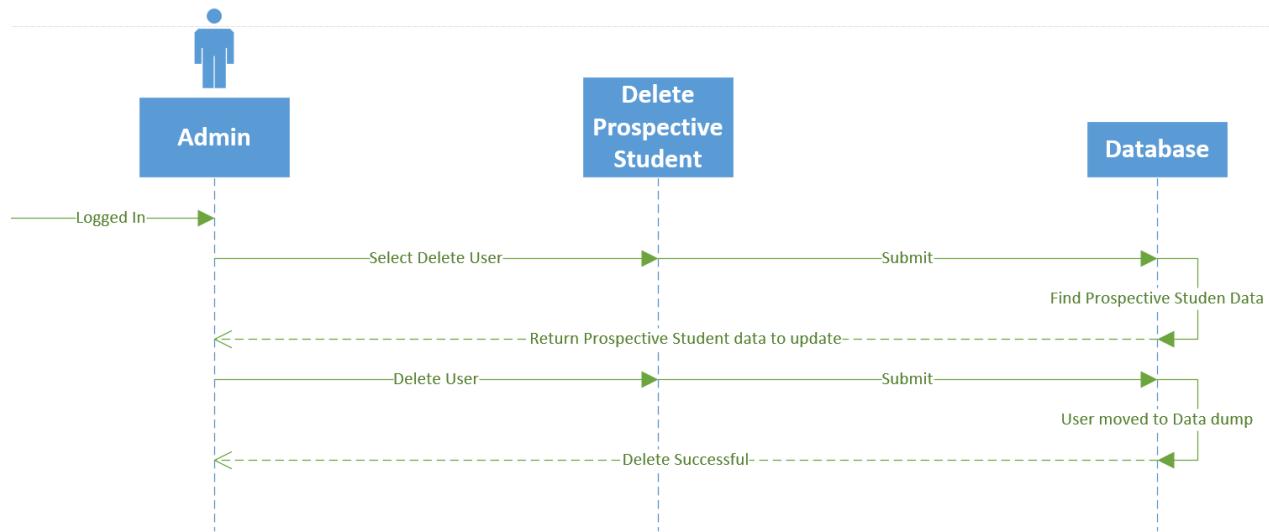
306.1 Deleted Wrong User(s)

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. An administrator would have to go through and re-add the Prospective Students that need accounts reinstated.

R.A.T.C Elaboration Spec

Use 64:

- The Advisor will browse to the Student Page, where they will run a multi student query for Prospective Students. When the Prospective Student is selected, a delete button will appear to the left of the area that will display the student's information
- The Prospective Students will be listed in order by date created with the date created listed along with the Prospective Student's name.
- The advisor will then be able to select all of the accounts they wish to delete
- The advisor will click delete button



R.A.T.C Elaboration Spec

SignUp for Visits

307. Use-Case Name

SignUp for Visits

307.1 Brief Description

Prospective Students will need to have the ability to find out more information about the School of Nursing. The account they create will allow students to email advisors from their homepage, or sign up for visits. The following describes how students will sign up for visits.

308. Flow of Events

308.1 Basic Flow

- The Prospective Student will browse to the Visits tab on their home screen
- The student will be presented with a calendar with days/times marked for available campus visits
- The student will select the time/date they wish to schedule a visit and hit Schedule
- The student will receive a confirmation email letting them know the visit has been scheduled.

308.2 Alternative Flows

308.2.1 Cancel Visit

- The Prospective Student will browse to the Visits tab on their home screen
- The student will be presented with a calendar with days/times marked for available campus visits
- The Student will see their scheduled visit highlighted on the calendar
- The student will select the visit, and hit Cancel
- The student will receive a confirmation email the visit has been cancelled.

309. Special Requirements

309.1 Connectivity

The user must be connected to the internet

310. Pre-conditions

310.1 User Type

The use of the system must be a Prospective Student

310.2 Logged In

The Advisor must be successfully logged into the system.

R.A.T.C Elaboration Spec

311. Post-conditions

311.1 Created Visit

The visit will be created.

312. Extension Points

312.1 Forgotten Save

If a user does not save changes before navigating away from the page, their progress will be lost and they will have to start the process over if they wish to enroll in a visit

R.A.T.C Elaboration Spec

Create Donor

313. Use-Case Name

Create Donor

313.1 Brief Description

Donors interested in enrolling in the school of nursing will need a way to find out more information about the school, and need a way to schedule visits with the school in order to get a feel for the program. This describes how a Donor would create an account.

314. Flow of Events

314.1 Basic Flow

- The Donor will browse to the SONAR system site
- The Donor will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Prospective Student, Donor, or Alumni. The student will select Donor
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Create Account button

314.2 Alternative Flows

314.2.1 Cancel Create User

- The Donor will browse to the SONAR system site
- The Donor will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Donor, Donor, or Alumni. The student will select Donor
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Cancel button

315. Special Requirements

315.1 Connectivity

Must have internet connection

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316. Pre-conditions

316.1 Not Current User

The Donor cannot currently have an account with the SONAR system.

317. Post-conditions

317.1 New Donor Created

A new Donor account will have been created, and will have the full privileges associated with that account.

318. Extension Points

318.1 Incomplete Required Fields Finish

If the prospective creating the account has not filled out the required fields (indicated as required by the asterisk next to the field name) and the student clicks the finish button, an error will display asking the student to enter information into the required fields before continuing.

318.2 Incomplete Required Fields Browse

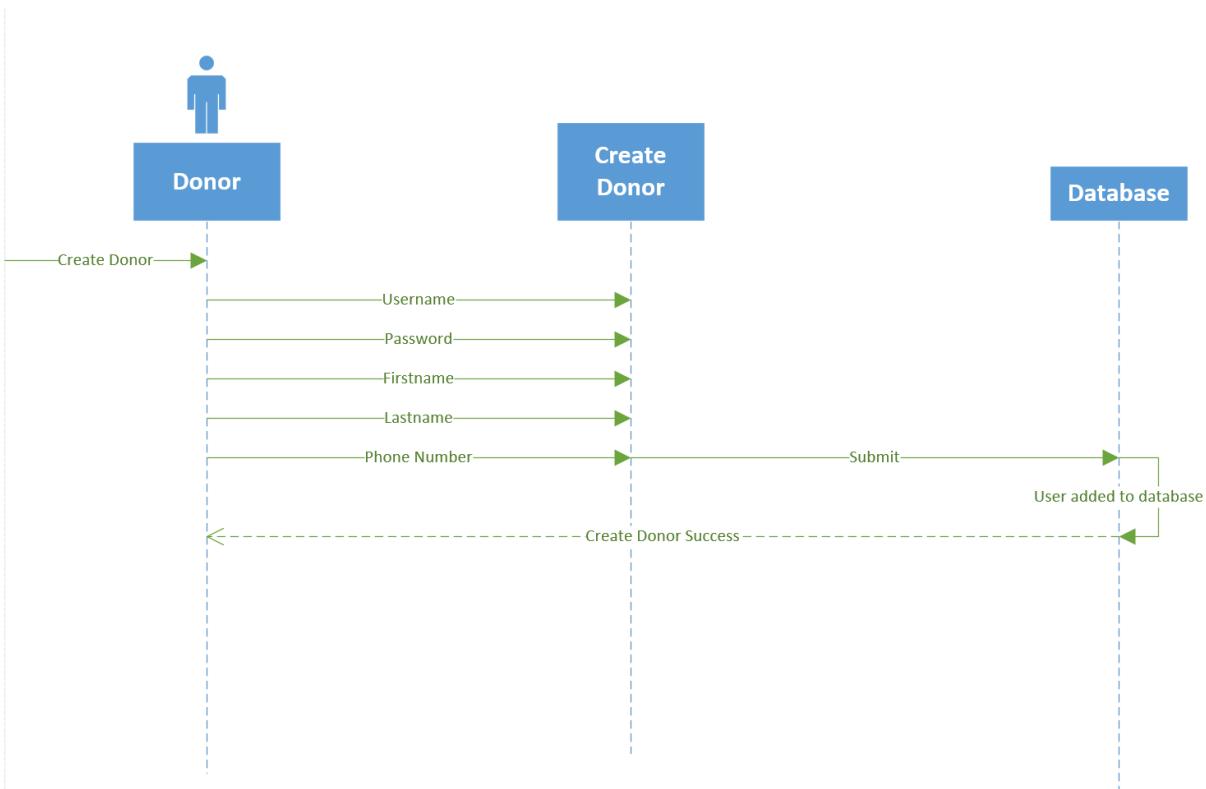
If the student creating the account has not filled out the required fields, and the student tries to browse away from the Create Donor page, they will be prompted with an error asking if they wish to discard the information they have previously entered. If the student click Yes, the student will leave the page, and lose any information they had previously entered. If they click No, the student will stay on the current page until they hit finish or cancel.

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Use case 66:

- The Donor will browse to the SONAR system site
- The Donor will click the No Account link on the login page
- They will then be redirected to another page asking what kind of account they'd like to create, the options will be Prospective Student, Donor, or Alumni. The student will select Donor
- The student will be asked to supply a valid email address, a password, their first name, last name, and phone number.
- The Student will be asked to fill out a captcha box
- The student will hit the Create Account button

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Update Donor

319. Use-Case Name

Update Donor

319.1 Brief Description

Donors who have created accounts may need to change their information after the account has been created. The flow of this is described below

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320. Flow of Events

320.1 Basic Flow

- The Donor will browse to the SONAR system site
- The Donor will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The student will hit save

320.2 Alternative Flows

320.2.1 *Cancel Update User*

- The Donor will browse to the SONAR system site
- The Donor will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The Donor will hit cancel

321. Special Requirements

321.1 Connectivity

Must have internet connection

322. Pre-conditions

322.1 User Type

The user must be a Donor

322.2 Logged In

The Donor must be logged in

323. Post-conditions

323.1 Updated Donor

The Donor's information will be updated.

324. Extension Points

324.1 Incomplete Required Fields Finish

If the student has cleared out one of the users required fields and attempts to save, the system will display an error asking the student to fill in the required field before continuing.

324.2 Incomplete Required Fields Browse

If the student has updated values and they do not save, then try to browse to another page using the currently open tab, the system will display an error asking the student if they wish to continue away from the page and discard

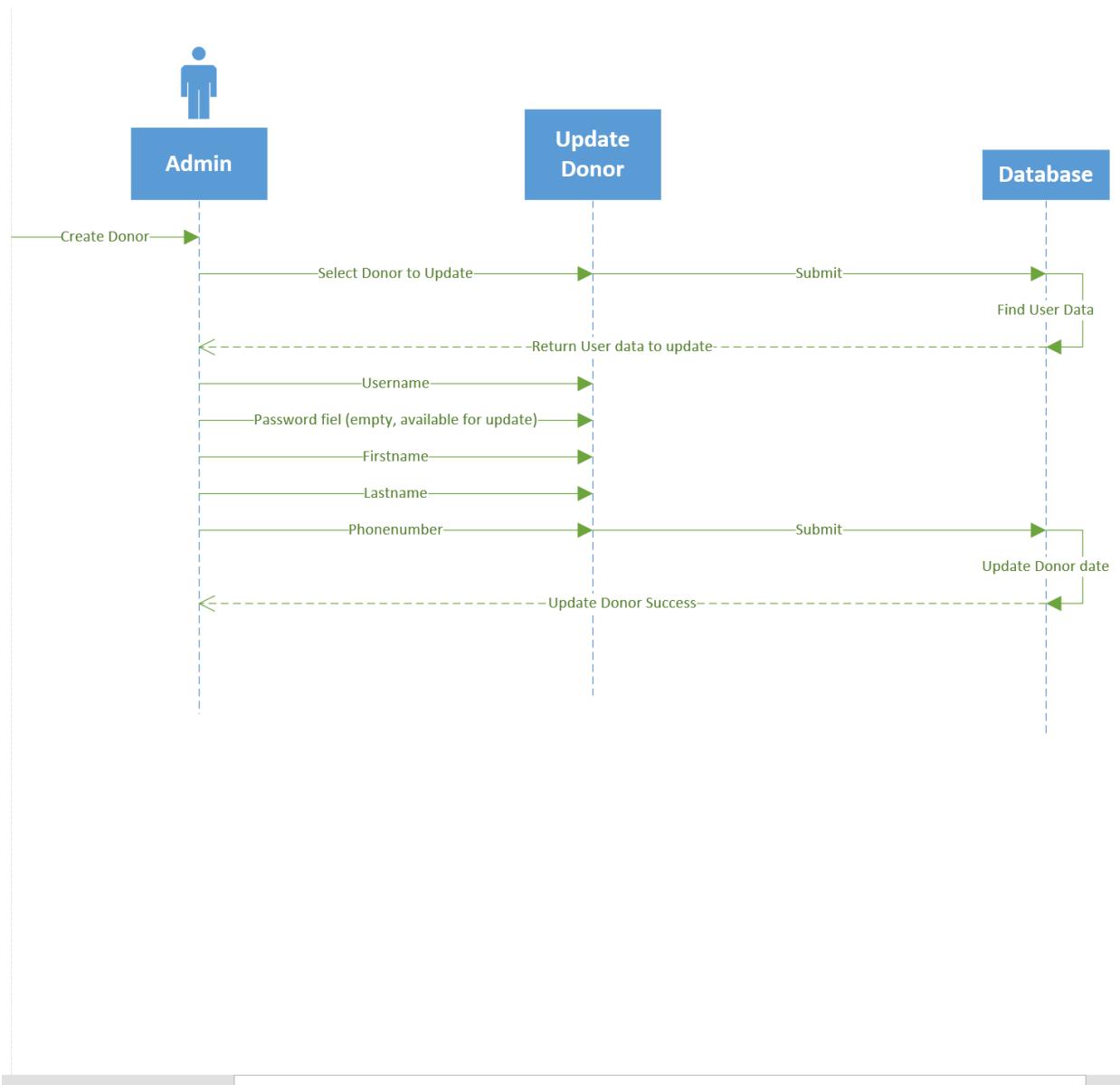
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the changes made. If the student hits Yes, the information previously entered will be discarded and the page will change. If the student hit No, the system will remain on the current page and allow the student to continue editing the user, or save the changes to the user and populate these changes in the system.

Use case 67:

- The Donor will browse to the SONAR system site
- The Donor will log in to the SONAR system
- The student will select the Update Information tab
- The Student will change the information in the fields they need to update.
- The student will hit save

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Delete Donor

325. Use-Case Name
Delete Donor

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325.1 Brief Description

To keep Donor accounts from taking up more space than necessary on the SONAR system, advisors will have the ability to delete them from the system after a certain period of inactivity in a mass delete.

326. Flow of Events

326.1 Basic Flow

- The Advisor will browse to the Student Page, where they will run a multi student query for Donors. When the Donor is selected, a delete button will appear to the left of the area that will display the student's information
- The Donors will be listed in order by date created with the date created listed along with the Donor's name.
- The advisor will then be able to select all of the accounts they wish to delete
- The advisor will click delete button

326.2 Alternative Flows

- #### 326.2.1 *Cancel Delete*
- The Advisor will browse from their home page to the Manage Users tab
 - Next the Advisor will be presented with a list box on the left side of the screen, which contains all of the users currently in the system. There will be search bar to the right of the list box which allows the admin to search through the list of users, and a button beneath the search bar labeled Create Users
 - The advisor enter the first name, last name, email, or employeeID/Student ID they wish to update and hit enter.
 - Next the advisor will double click the user in the listbox they wish to edit. This will open up a page that displays the user's information.
 - The advisor will hit Cancel to stop delete.

327. Special Requirements

327.1 Connectivity

Must have internet connection

328. Pre-conditions

328.1 User Type

The use of the system must be and Advisor

328.2 Logged In

The Advisor must be successfully logged into the system.

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329. Post-conditions

329.1 ‘Deleted’ Users

The user the advisor deleted will no longer be able to log in. The information regarding that specific user will be maintained for referential purposes only.

330. Extension Points

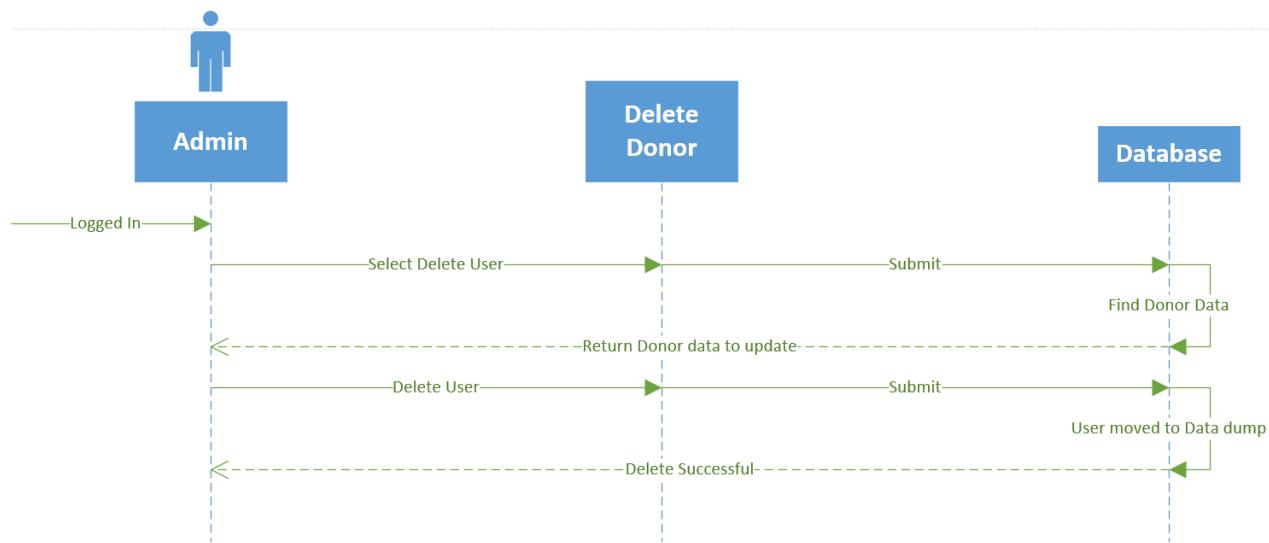
330.1 Deleted Wrong User(s)

If a user is wrongfully deleted, they will still be searchable in the list as the rest of the users. An administrator would have to go through and re-add the Donors that need accounts reinstated.

Use case 68:

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- The Advisor will browse to the Student Page, where they will run a multi student query for Donors. When the Donor is selected, a delete button will appear to the left of the area that will display the student's information
- The Donors will be listed in order by date created with the date created listed along with the Donor's name.
- The advisor will then be able to select all of the accounts they wish to delete
- The advisor will click delete button



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331. Track Received Applications

331.1 Brief Description

For use by anyone looking to make donation to the school of nursing. Users will be able to make monetary contribution to the school of nursing.

332. Flow of Events

332.1 Basic Flow

User will be able to create an account or log in to an existing one to make a donation to school of nursing with a method of their choosing. They will be directed to the university of Louisville foundation page to complete donation.

332.2 Alternative Flows

332.2.1 Incomplete information

Page would return errors to notify the user that information entered is incomplete such as the check number, the card number, and/or address.

332.2.2 Redirect page unavailable

System will show a backup page that will track user info in case the page is unavailable. Information would be used later to contact user to complete the donation process.

333. Special Requirements

333.1 System Requirements

- Windows Server 2012
- Access SQL 2016
- Access to university of Louisville foundation page.

333.2 Legal Requirements

System must be compliant with FERPA regulations.

334. Pre-conditions

334.1 Access to system

User must be logged in to the system or can create a new account.

334.2 Access to valid payment methods

User must have a valid form of payment method such as a check or major credit card available.

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335. Post-conditions

335.1 Donation completed

Donation is processed with payment forwarded to University of Louisville Foundation. The system will also return a unique identifier for the donation that will be linked to donors account for tracking purposes.

335.2 Make another donation

System would then allow the user to make another donation if they'd like to the school of nursing or a different school.

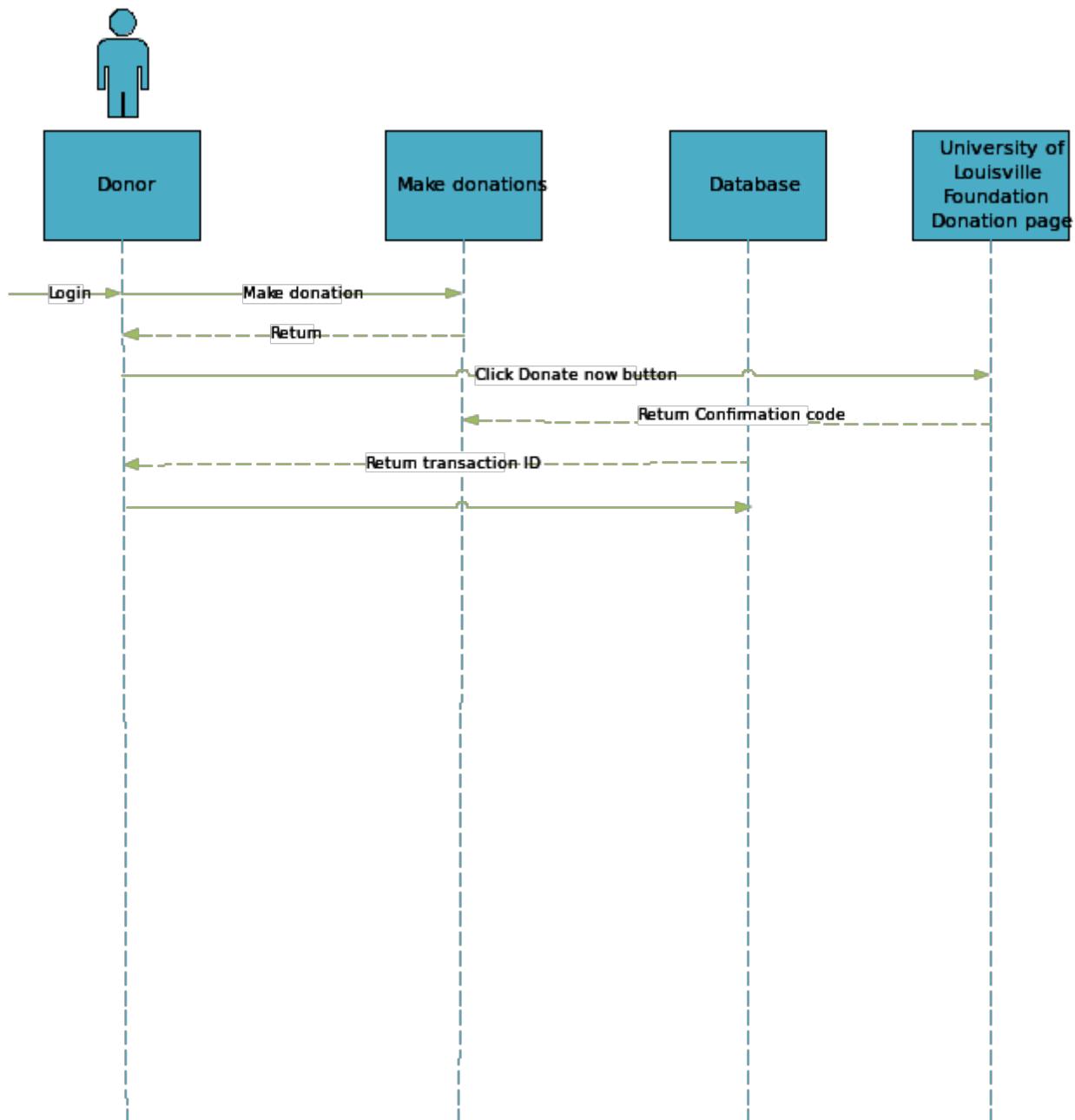
336. Extension Points

336.1 Invalid input

System would provide an error along with a notification when a valid input isn't entered or selection isn't made.

- Invalid format
- Invalid length
- Invalid characters

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337. Use-Case Name

Security

337.1 Brief Description

We will secure the SONAR system through the following:

- Encrypting backups of the SONAR system information
- Antivirus automatically deployed by University
- Layered firewall approach implemented by the university

338. Flow of Events

338.1 Basic Flow

- Place server behind university firewalls on university network, essentially, just plug the box in if it's a physical box, or create the virtual machine if it is to be a virtual machine.
- University installs antivirus software through auto-deployment
- Ensure all OS software is up to date, as well as virus definitions
- Install SQL Server, encrypt backups using

339. Special Requirements

339.1 User Type

User must be an administrator

340. Pre-conditions

340.1 Logged onto server

User must be logged directly on to server

341. Post-conditions

341.1 Hardened Security

University AV software will now scan the system regularly.

341.2 Firewall Protection

SONAR system will be protected by University Firewalls.

341.3 Encrypted Backups

All backups created by the SONAR system will now be encrypted.

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342. Extension Points

342.1 System Compromised

Should the system become compromised, the database will still be password protected, that combined with encrypted backups should make actually getting data out of the system very difficult for persons with malicious intent who successfully gain access to the server itself.

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Backup

343. Use-Case Name

Backup

343.1 Brief Description

In order to prevent data loss, the SONAR system will include a feature that allows the administrator to create backups when necessary, as well as schedule regular partial and full backups when needed. These backups will be stored on the server hosting the SONAR system.

The University also runs automatic backups through the IBM Spectrum Protect product. These backups run on a nightly basis between 10PM and 6AM, and are not stored on the SONAR server, they are stored on IBM servers off-site.

344. Flow of Events

344.1 Basic Flow

- Administrator will log in to SONAR system
- Administrator will browse to the Backup/Recovery page from their home screen
- Administrator will then select the Backups tab located on the Backup/Recovery page
- The user will now come to a screen that allows them to select from three options: Differential (partial) Backups, Full Backup, or Automated backups
- The user will select the Differential Backup option.
- There will now be a form displayed that allows the user to select an immediate backup, or schedule one at a later time and date. The user will select immediate backup and hit Continue.
- SONAR will begin the process of backing up the system, and run until completion.

344.2 Alternative Flows

344.2.1 *Differential, Scheduled*

- Administrator will log in to SONAR system
- Administrator will browse to the Backup/Recovery page from their home screen
- Administrator will then select the Backups tab located on the Backup/Recovery page
- The user will now come to a screen that allows them to select from three options: Differential (partial) Backups, Full Backup, or Automated backups
- The user will select the Differential Backup option.

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- The user will select a time and date for the backup rather than an immediate backup, then hit Continue.
- SONAR will begin the process of backing up the system, and run until completion.
 - 344.2.2 Full, Immediate*
 - Administrator will log in to SONAR system
 - Administrator will browse to the Backup/Recovery page from their home screen
 - Administrator will then select the Backups tab located on the Backup/Recovery page
 - The user will now come to a screen that allows them to select from three options: Differential (partial) Backups, Full Backup, or Automated backups
 - The user will select Full Backup option
 - Next the user will select the Immediate Backup option that appears and hit Continue
 - SONAR will begin the process of backing up the system, and run until completion.
- 344.2.3 Full, Scheduled*
 - Administrator will log in to SONAR system
 - Administrator will browse to the Backup/Recovery page from their home screen
 - Administrator will then select the Backups tab located on the Backup/Recovery page
 - The user will now come to a screen that allows them to select from three options: Differential (partial) Backups, Full Backup, or Automated backups
 - The user will select Full Backup, when the full backup form appears, the user will enter a time and date they wish to create a full back up and hit Continue.
 - SONAR will begin the process of backing up the system, and run until completion.
- 344.2.4 Cancel Manual Backups*
 - Administrator will log in to SONAR system
 - Administrator will browse to the Backup/Recovery page from their home screen
 - Administrator will then select the Backups tab located on the Backup/Recovery page
 - The user will now come to a screen that allows them to select from three options: Differential (partial) Backups, Full Backup, or Scheduled Backups
 - The user will select Scheduled Backups
 - When the form appears, users will be able cancel any previously scheduled backups, whether they be partial or full, that were manually created.

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- Once the user has selected the backups they wish to cancel, they will hit the Next button
- A message box will appear asking if the user is sure they wish to cancel the scheduled backups, should the user hit OK, the backups selected will be disabled.

345. Special Requirements

345.1 User Type

To perform restore operations to the system, the user **MUST** be an administrator.

346. Pre-conditions

346.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

346.2 Logged In

The Administrator must be successfully logged into the system.

347. Post-conditions

347.1 Successful Backup

The user will receive an email when the backup has completed for scheduled backups, or a message box stating the backup was successful for immediate backups.

348. Extension Points

348.1 Storage Capacity Reached

The user will receive an email stating the backup failed for scheduled backups, or a message box stating the backup was unsuccessful for immediate backups. This message/email will inform the admin that the max storage capacity for the offsite storage has been reached, and either more storage must be added, or old backups must be deleted.

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Recovery

349. Use-Case Name

Recovery

349.1 Brief Description

In the event of a system error that results in the removal of needed data, or should some sort of catastrophic failure or natural disaster wipe out the SONAR system, the backup data saved on the NAS (network attached storage device, essentially just a computer used to store data) will need to be retrieved for use. The Administrator of the SONAR system will be able to restore the database to its previous state.

350. Flow of Events

350.1 Basic Flow

- Administrator will log in to SONAR system
- Administrator will browse to the Backup/Recovery page from their home screen
- Administrator will then select the Recovery tab located on the Backup/Recovery page
- The administrator will now select the backup they wish to use (these will be named by the time and date they were created). Some backups will be marked differential, meaning they contain only the changes made since

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the last backup. Others will be full backups, which will contain a backup of ALL data in the database. The admin will select a full back up from which to restore and hit Next.

- Administrators will then be presented with a message box confirming the recovery operation to take place. It will begin when they click OK, or cancel should they choose Cancel.

350.2 Alternative Flows

350.2.1 *Restore a Differential Backup*

- Administrator will log in to SONAR system
- Administrator will browse to the Backup/Recovery page from their home screen
- Administrator will then select the Recovery tab located on the Backup/Recovery page
- The administrator will then select the Differential (partial) backup they wish to restore to the SONAR system. Once the administrator has selected the appropriate backup, they will hit Next.
- Administrators will then be presented with a message box confirming the recovery operation to take place. It will begin when they click OK, or cancel should they choose Cancel.

351. Special Requirements

351.1 User Type

To perform restore operations to the system, the user MUST be an administrator.

352. Pre-conditions

352.1 Connectivity

Must be connected to School of Nursing network or connected through virtual Lab.

352.2 Logged In

The Administrator must be successfully logged into the system.

353. Post-conditions

353.1 Successful Restoration

The user will have successfully restored either a full or partial backup to the SONAR system

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354. Extension Points

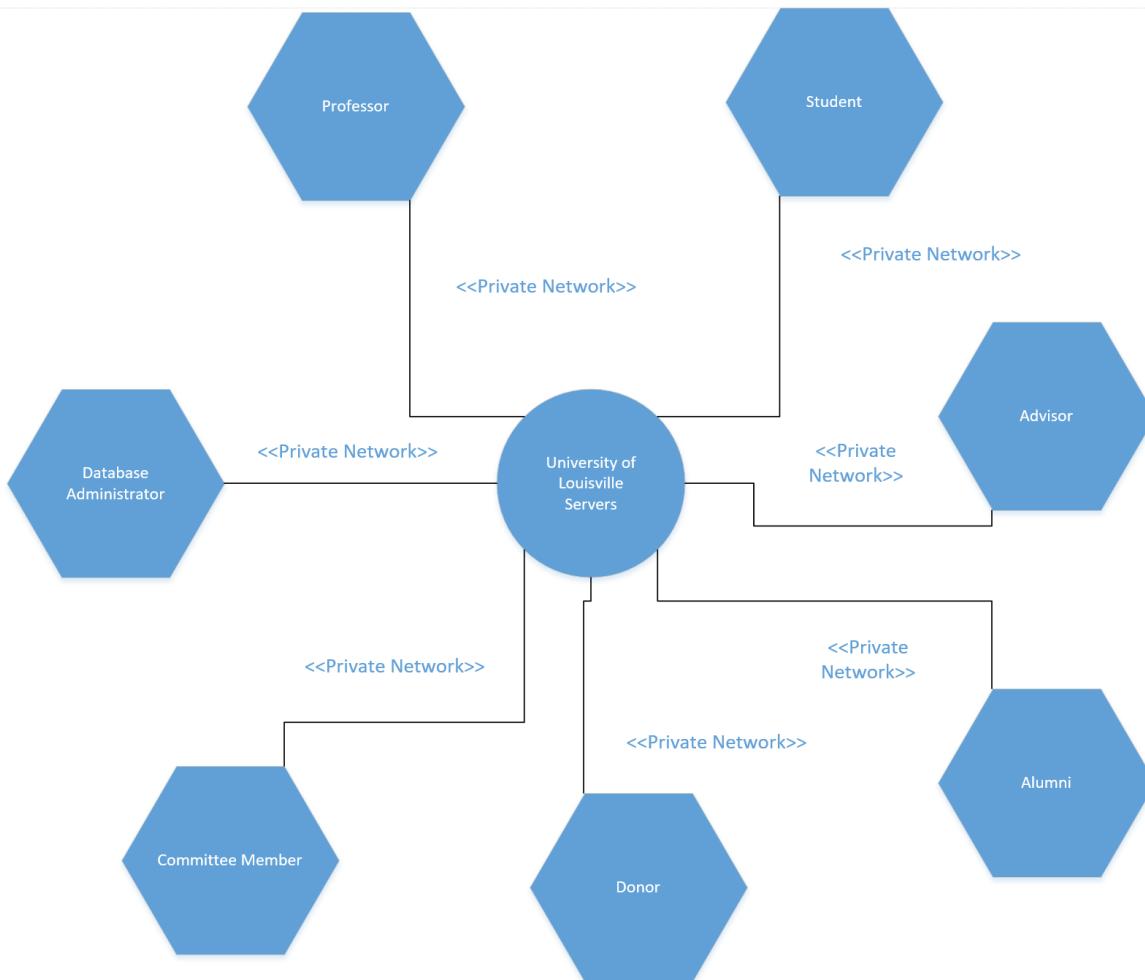
354.1 Failed Restore

If the backup attempt fails, a message box suggesting a reboot of the system, then trying to restore the same backup. If the backup fails after a reboot, the user should try another restore point in case the one they attempted to restore from is corrupt.

Physical Architecture Network Deployment Diagram

The network deployment diagram shows all users that are connected to the University of Louisville servers. Each user will be able to login with credentials assigned when their profiles are created. The users will be able to access this system from any computer with internet capabilities. They will login through a screen on the University of Nursing's webpage that will allow each of the users to have access to materials and capabilities based on their user type. After entering their credentials they will directly communicating with the server our system is stored on.

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Design Procedures for Security Concerns and Non-Functional Requirements

Security: Securing the system is necessary so as not to allow malicious third parties access to the sensitive information housed within the SONAR system. Securing the system will contain the following:

- Antivirus: the University IT was not specific in which antivirus software they would deploy to the server, however such enterprise level antivirus will help secure the Microsoft server we'll be using from most attacks,

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- including any zero day attacks the AV provider is made aware of. University will handle this when the server is setup.
- Firewalls: The server will sit behind University firewalls. This will ensure fewer ports are vulnerable on our server to outside infiltration attempts. University will handle this when the server is setup.
 - Operating System updates: As with any system it is critical that we keep the operating system as up to date as possible. Windows provides a way to run updates automatically. We will run these on setup and allow the admin to choose when to install updates going forward. This will have to be done by logging directly on the server, rather than the SONAR system itself.
 - We will also encrypt backups made locally on the SONAR system so as not to leave backup data vulnerable to infiltration attempts. We will do this using the SQL 2016 server manager. The backups will be encrypted using AES_256. These encrypted backups will be compressed so as to save room on the SONAR system.

Backup (University): Backups run locally are described in the Use Case above. Backups that are run locally on the server will be stored on the server. The university also provides a backup service called IBM Spectrum Protect. This service will run backups on the server as a whole in case the server hosting SONAR were to fail for some reason. These backups are run every night in a window that ranges from 10PM to AM. This is important functionality, as it mitigates data loss in the event of catastrophic server failure.

Restore (University): Should the SONAR server fail, the school will need to get in contact with U of L IT in order to restore the server itself. From there, backups that of the SONAR database that were house within University off-site backups can be restored. This two tiered approach allows admins of the system the ability to restore local backups (without involving University IT) which allows the system more agility in returning to a working state should the issue be contained in the database. If the issue is larger, the school will lose less data, as University IT will be able to supply the school with a backup of the system from the previous night.