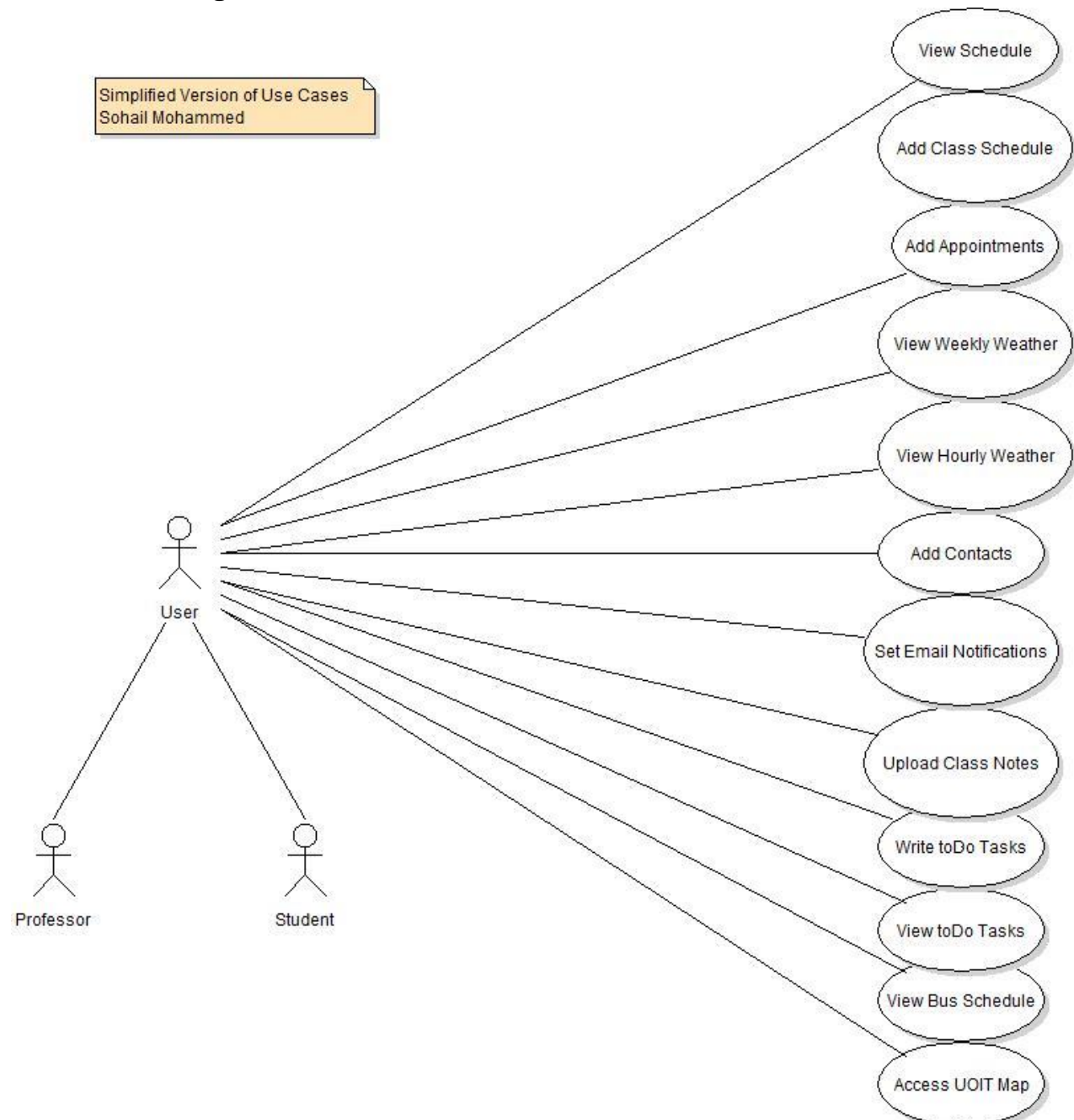
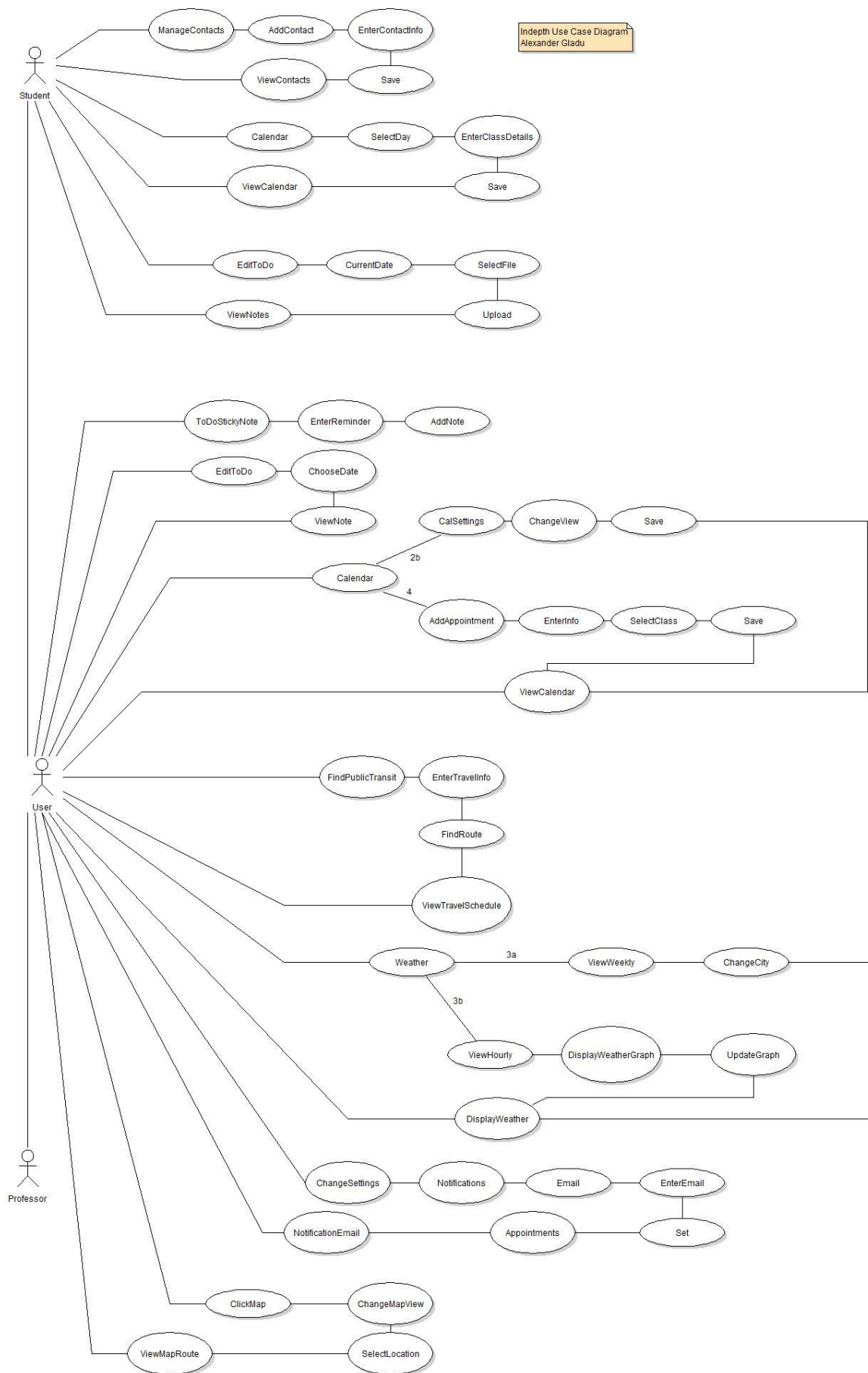


Course: CSCI 2040U: Software Design and Analysis
Assignment: Final Group Project
Names: Alexander Gladu, Sohail Mohammed, Bradley Hamilton, Bau Tran Nguyen

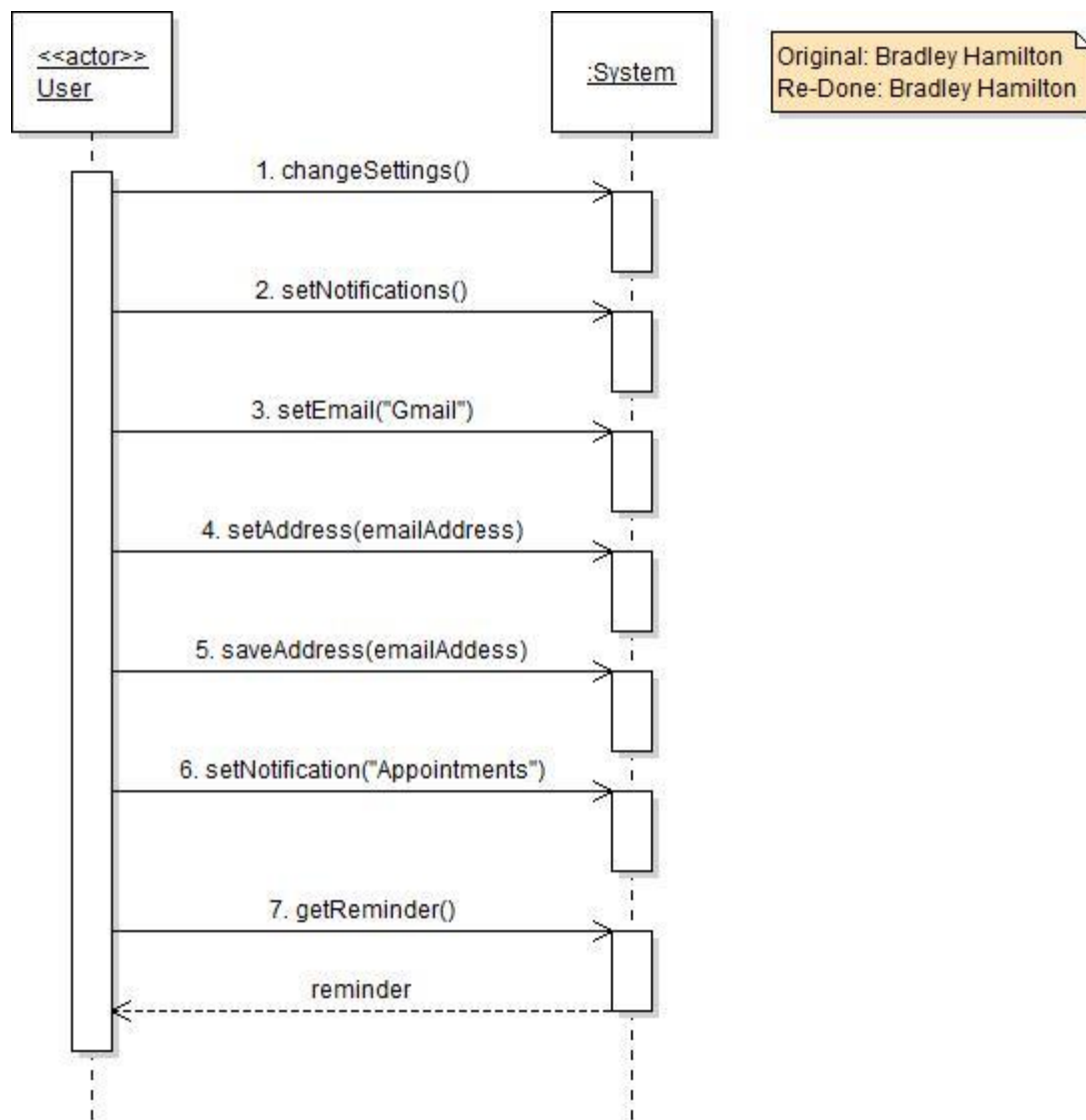
Use Case Diagram





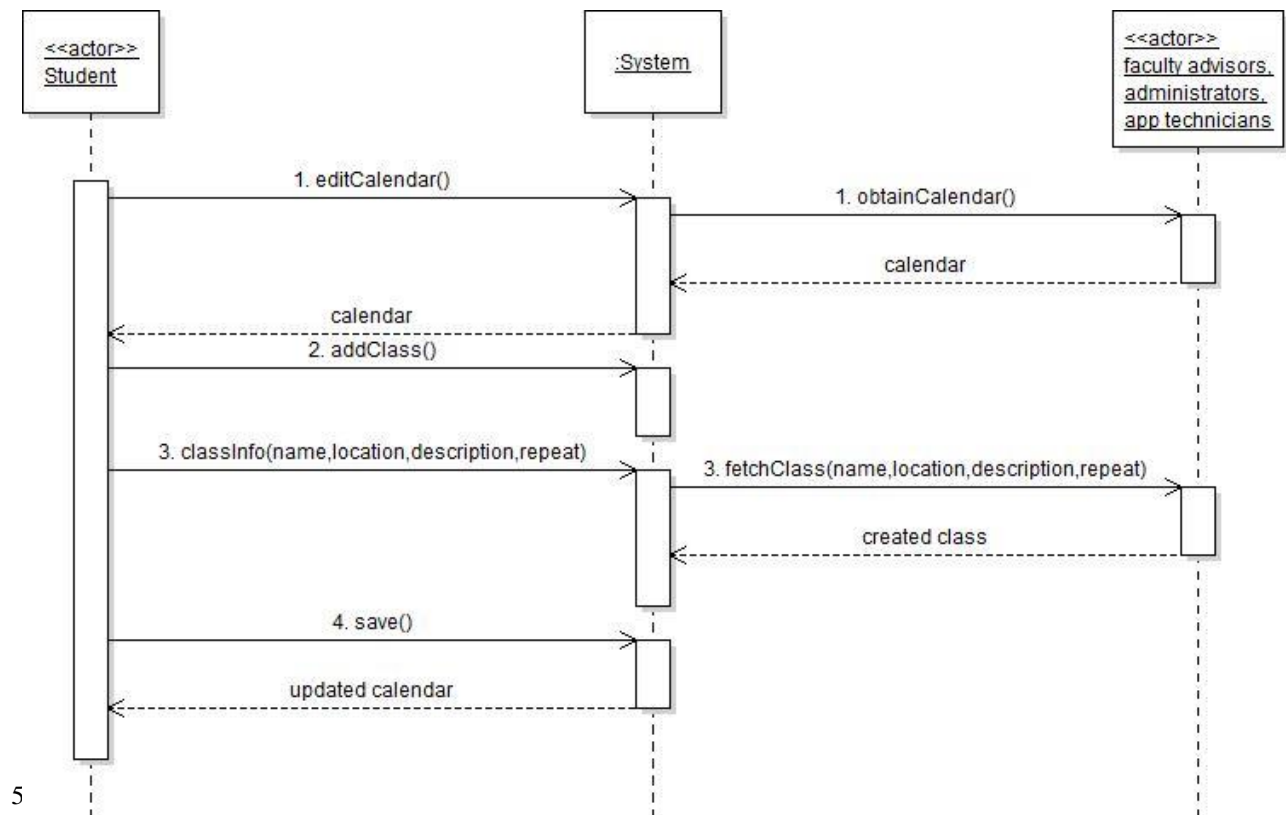
1a. Sohail (Writer), Alexander (Editor)

Use Case:	Set Email Notifications
Primary Actor:	UOIT Students, UOIT Professors
Secondary Actors:	
Stakeholders and Interests:	<p>Students – students would like email reminders of important events listed on the University Student Planner. The students may not always be on USP so it will be good to know if they have forgotten to complete something important, like an assignment, while not checking USP.</p> <p>Professors – professors would appreciate email reminders so that they do not have to visit USP every time. Professors unlike the students do not like wasting their time opening up applications and clicking buttons to find an event, so email notifications will meet their needs by informing them of key events.</p> <p>Frequency of Occurrence: Often, as daily routine requires student/Professors to keep up with their work</p>
Main Success Scenario:	
	<ol style="list-style-type: none">1. Student/Professor finds and clicks the link Change Settings2. Student/Professor selects the Notifications tab along the vertical pane3. The student/Professor is directed to a page with the emails supported (ex. Gmail, Hotmail, Yahoo) and selects Gmail.4. A text field appears beside the email option selected, the student/Professor types in a valid Gmail email address5. The student/Professor then selects Set and is directed to a window containing options for notifying6. The student/Professor selects the option for Appointments and selects Enough button7. The student/Professor receives a notification via email of an upcoming Appointment of that day
Alternative Flows:	
	<ol style="list-style-type: none">4. Student/Professor does not enter in a valid email id, so the text field will be verified and will not continue on to the next step re-prompting student/Professor to type in the id until correct.
Technical Issues:	



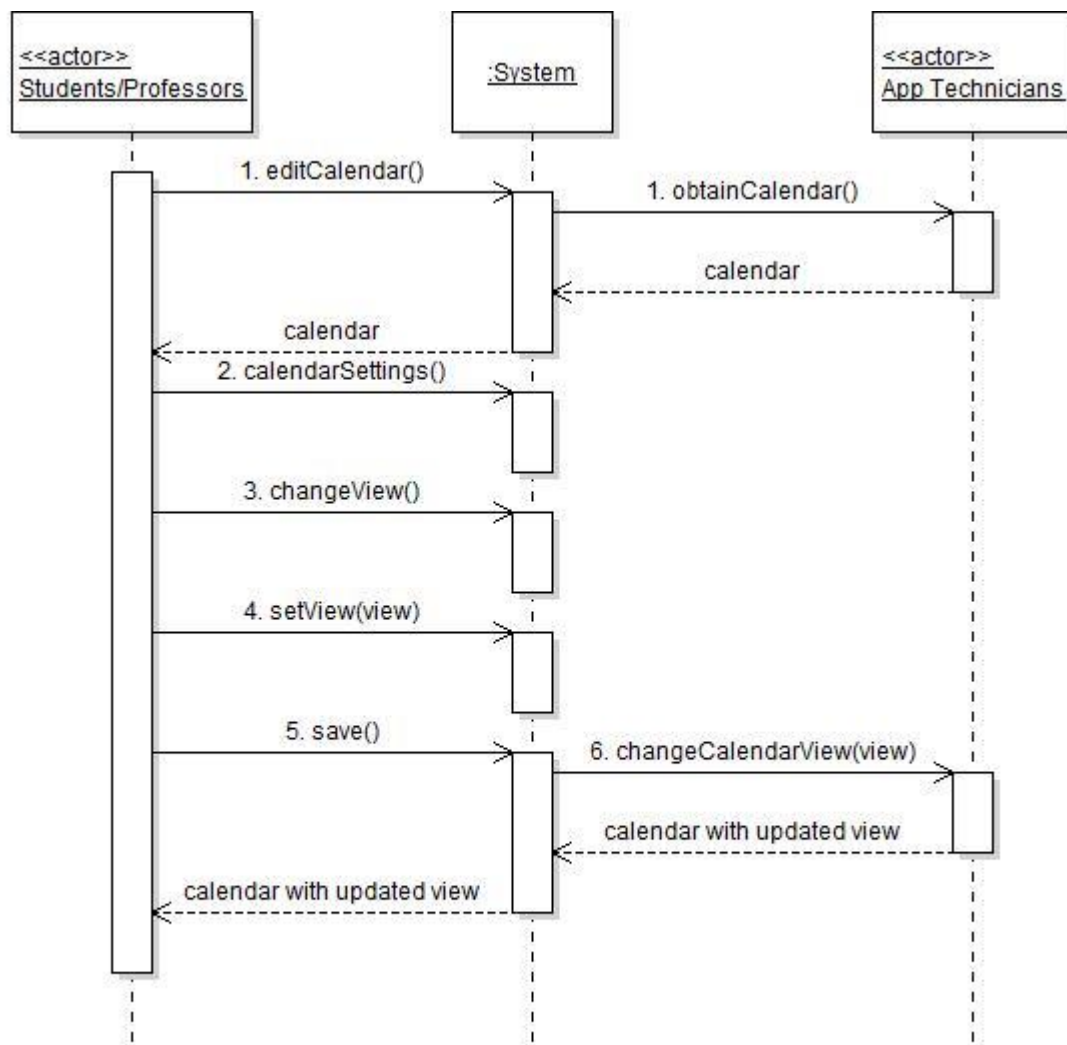
2a. Sohail (Writer), Alexander (Editor)

Use Case:	Add Contacts
Primary Actor:	UOIT students
Secondary Actors:	
Stakeholders and Interests:	Students - students can add friends, use friends phone information to make calls. Students will want to store contact networks and communicate with their friends even when away from class/university environment to keep up with the student social life
Frequency of Occurrence:	often because of the need to add friends or want to organize contacts, ex. friends or family, work
Main Success Scenario:	<ol style="list-style-type: none"> 1. Student selects the manage contacts option from the tools menu 2. Student views the contacts listed and wants to add a contact so he/she clicks the Add button 3(*). Student fills out a form of text fields entering contact information ex. Name, relation, phone number, email, etc 4. The student clicks the save button and a new contact is created 5. The student clicks on the contact's name under manage contacts and can view the contact information to call or email
Alternative Flows:	<ol style="list-style-type: none"> 3a. Student does not fill out any of the required fields, so the application does not add the contact 4a. The student does not click on the save button and exits the window, the application will prompt with "do you want to close without saving".
Technical Issues:	



2b. Sohail (Writer), Alexander (Editor)

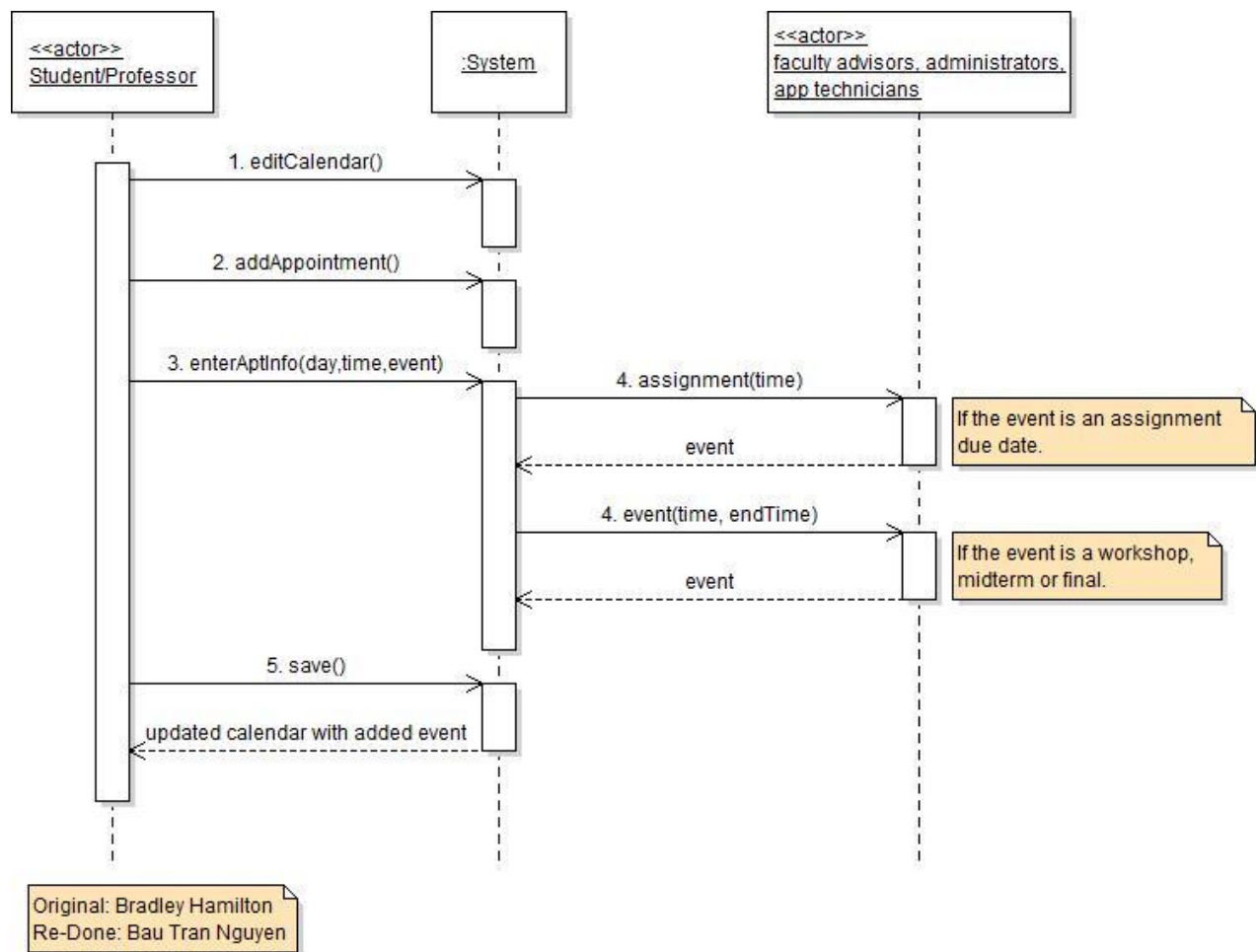
Use Case:	View Schedule in Various Formats
Primary Actor:	UOIT Students, UOIT Professors
Secondary Actors:	
Stakeholders and Interests:	<p>Students – students may want to view their schedule in an organized manner to retrieve more relevant information from the schedule in a quick manner. Students find that certain views may be good and appealing to them.</p> <p>Professors – Professors may feel that they need to view their schedule in a more compact manner or they would like to see things as a list depending on each Professor's preference. They would appreciate a view that is organized and ascetically laid out. In addition they too would like to be able to find their scheduled meetings, lecture times and events in a quick manner.</p> <p>Frequency of Occurrence: two times a month, not often, depending on the student/Professor's viewing habits</p>
Main Success Scenario:	
	<ol style="list-style-type: none">1. Student/Professor clicks on the edit Calendar link and is taken to an expanded view of the Calendar2. Here the student/Professor finds a tab called Calendar Settings and clicks it3. The student/Professor navigates to the Change View section listed on the right side.4. The student/Professor has to choose a settings change from about five options with their previews and descriptions5. The student/Professor selects a view and clicks the save button at the bottom of the page6. The student/Professor is able to view the Calendar in their chosen view and is satisfied
Alternative Flows:	
	<ol style="list-style-type: none">4a. Student does not select an option, so the program does not change the view settings5a. The student does not click on the save button and exits the window, the application will not change the calendar view settings
Technical Issues:	



Original: Bradley Hamilton
Re-Done: Bau Tran Nguyen

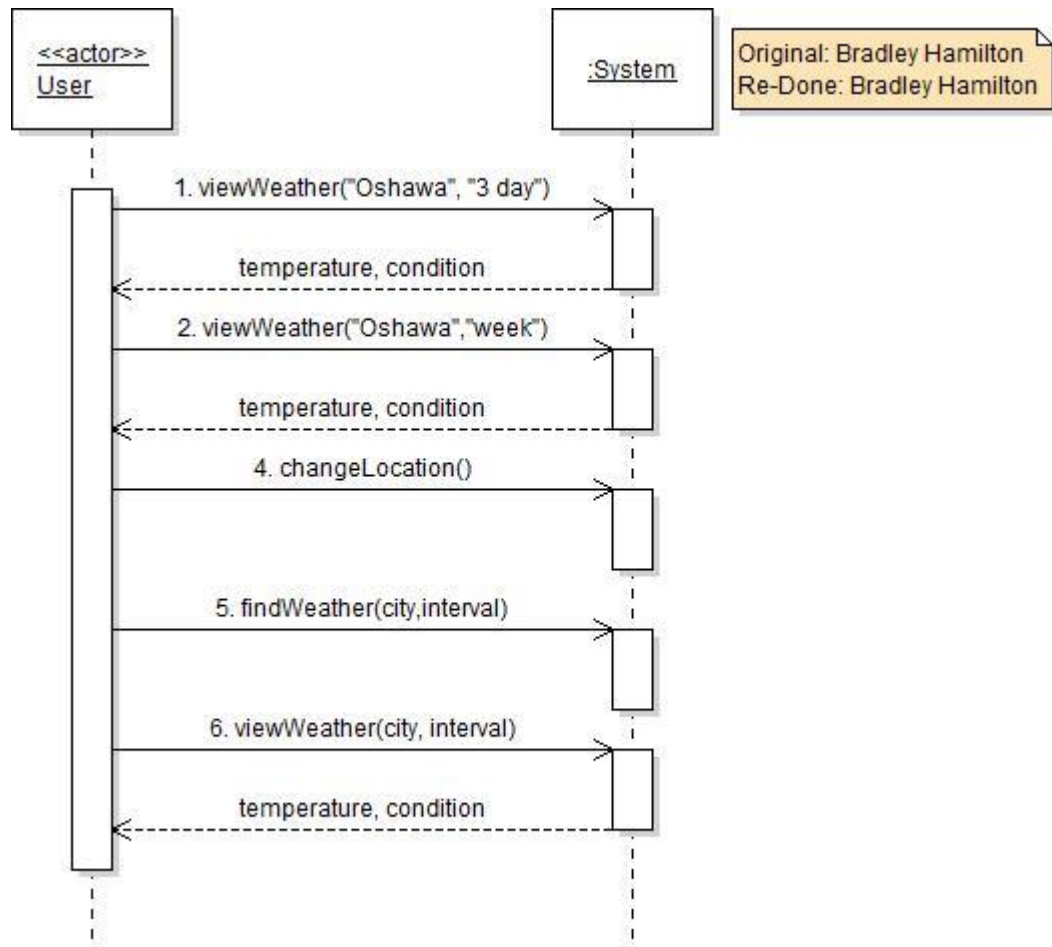
2d Bradley (Writer), Alexander (Editor)

Use Case:	Add Appointment to Calendar
Primary Actor: UOIT Students, UOIT Professors	
Secondary Actors:	
Stakeholders and Interests: Students – students would like to get notifications of appointments throughout the semester (i.e. assignment due dates, midterms, final exams, workshops, etc.) so they do not forget about them until last minute. They would also like to know which class the important time is intended for. This would allow for students to manage their time carefully. Professors – professors would want to keep track of their faculty meetings, keep reminders of when to write up midterms for their classes, when due dates are for their papers, etc. Professors appreciate keeping an organized schedule where they do not have to worry about remembering all their various appointments they need to attend to.	
Frequency of Occurrence: Often throughout the semester.	
Main Success Scenario:	
<ol style="list-style-type: none">1. The student clicks on the Edit Calendar link and is taken to an expanded view of the calendar.2. The student clicks on the Add Appointment link and is taken to a text field where he/she will write their inputs.3. The student is prompted to select a specific day and time that a certain event is to take place. The student must also indicate what is happening at that time.4. If an assignment is due, they only need to input the time that it is due. If the intention is for a midterm, final or workshop, the start and end times must be inputted. In addition, the student must indicate which class this event is for.5. The student clicks Save, and the event is created. The event is then added to the class schedule for that specific day only.6. The student can now view the event in the class schedule, as well as in the appointments module in the home page.	
Alternative Flows:	
<ol style="list-style-type: none">3a. The student fails to fill in the required fields. He/she is then redirected to the text field and is prompted to fill in any required fields.3b. The student enters a course not present in their schedule. Much like 3a, he/she is prompted to enter a course that is present in the schedule.4a. The student fails to click Save when exiting. He/she is then asked “Would you like to leave without saving?”	
Technical Issues:	



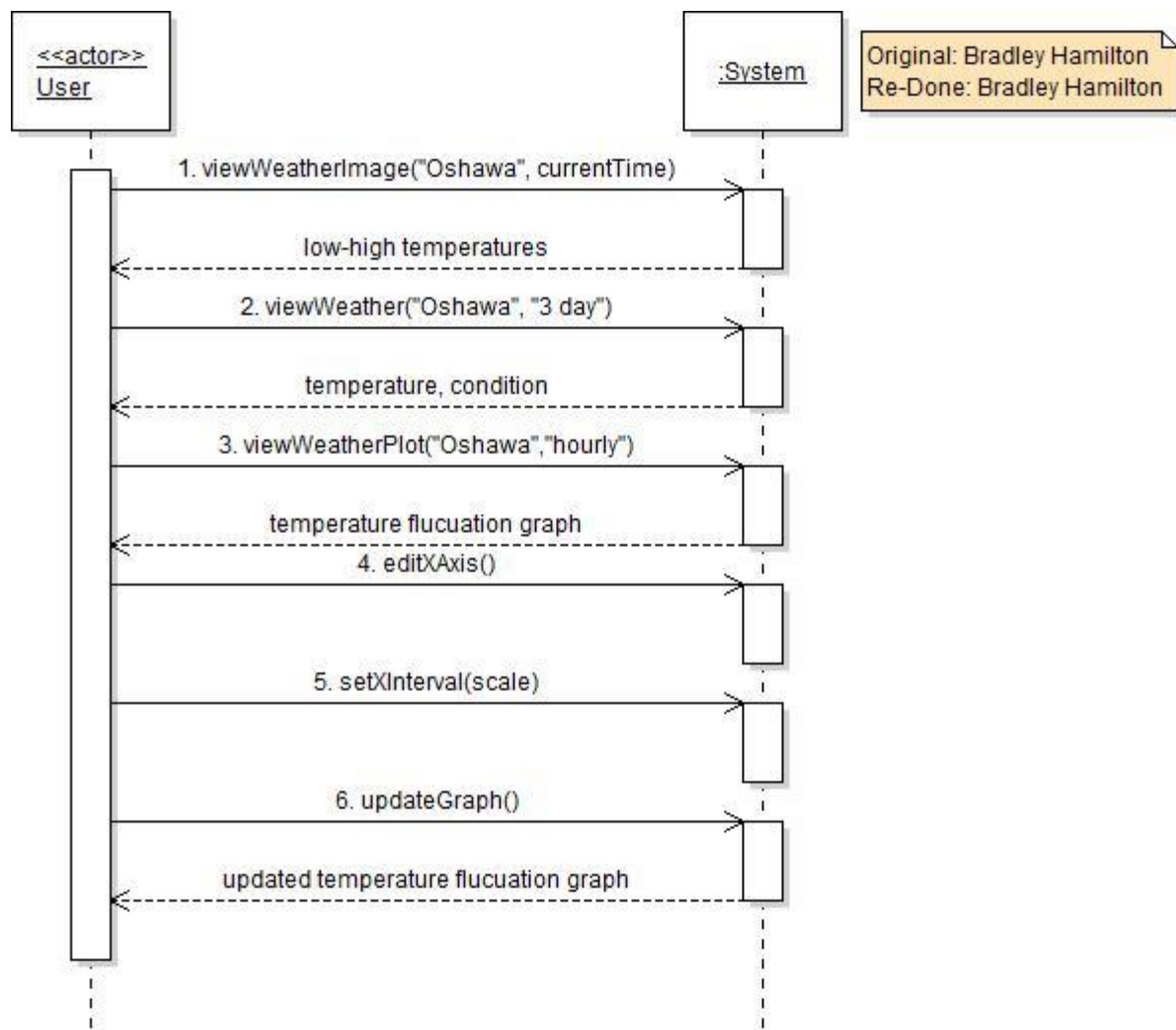
3a Bradley (Writer), Alexander (Editor)

Use Case: View Weekly Weather
Primary Actors: Student/ Professor Secondary Actors:
Stakeholders and Interests: Students/Professors - would like to know what is to expect in terms of the general weather for the coming week or month, although subject to change as certain days near. Based on that information, they can be able to plan ahead in terms of transportation for the week/month, especially useful during winter Frequency of Occurrence: very often as they use transportation to/from campus every day.
Main Success Scenario:
<ol style="list-style-type: none">1. User clicks on the Weather image on the main page of the Planner2. A default view of Oshawa's weather for a three day period is displayed, student/Professor will select the tab to View Weekly3. The student/Professor will view Oshawa's weather for the current week, and are satisfied by the default city4. Change city5. The student/Professor will click Change Location from the default weather page6. The student/Professor is directed to a text field. They are then prompted to input what city they live in as well as how they want to view the weather.7. The student/Professor is directed to a page that displays the general weather information (including temperature and general condition such as sunny, rain, cloudy, etc.) for the current week
Alternative Flows:
2a. User fails to enter the required input. He/she is then redirected and reminded to fill in the required information.
Technical Issues:



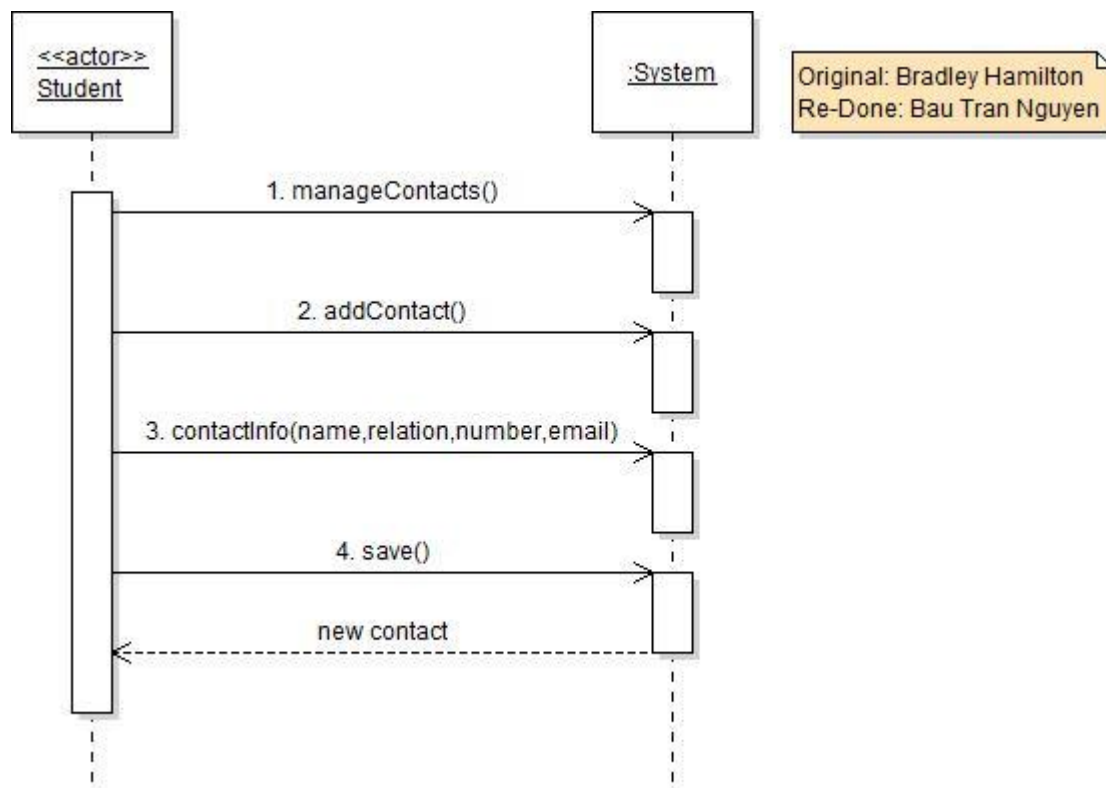
3b Bradley (Writer), Alexander (Editor)

Use Case: View Current Day's Hourly Weather
Primary Actors: UOIT Students, UOIT Teachers Secondary Actors: Stakeholders and Interests: Students/Professors –would like to know what is to expect in terms of the specific weather for a certain day. Based on that information, they are able to leave to/from campus earlier and avoid transportation problems such as traffic due to inclement weather. Frequency of Occurrence: very often as they use transportation to/from campus every day.
Main Success Scenario: 1. Student/Professor browses to the Weather image which shows low-high temperatures for current time (updating every 20 minutes), and is satisfied with the default values, where the city is Oshawa 2(*). Viewing particular time in current day 3. Student/Professor clicks on the Weather image from the main page of the Planner 4(*). A default view of Oshawa's weather for a three day period is displayed, student/Professor will select the tab to View Hourly 5. A graph of the temperature fluctuation throughout the day is displayed for Oshawa, student/Professor will select the x-axis scale (showing the time) 6. A window pops up, student/Professor select from a menu their desired scale (whether it be in morning, afternoon, evening; or show every 3 hour interval, or show 4 hour interval default, or show 6 hour interval) 7. Then the student/Professor clicks on the graph and the graphs updates itself in accordance with the menu option chosen, the student/Professor is satisfied.
Alternative Flows: 2a. User fails to enter the required input. He/she is then redirected and reminded to fill in the required information. 4a. The student/Professor will click Change Location and select Toronto out of 5 options from a menu.
Technical Issues:



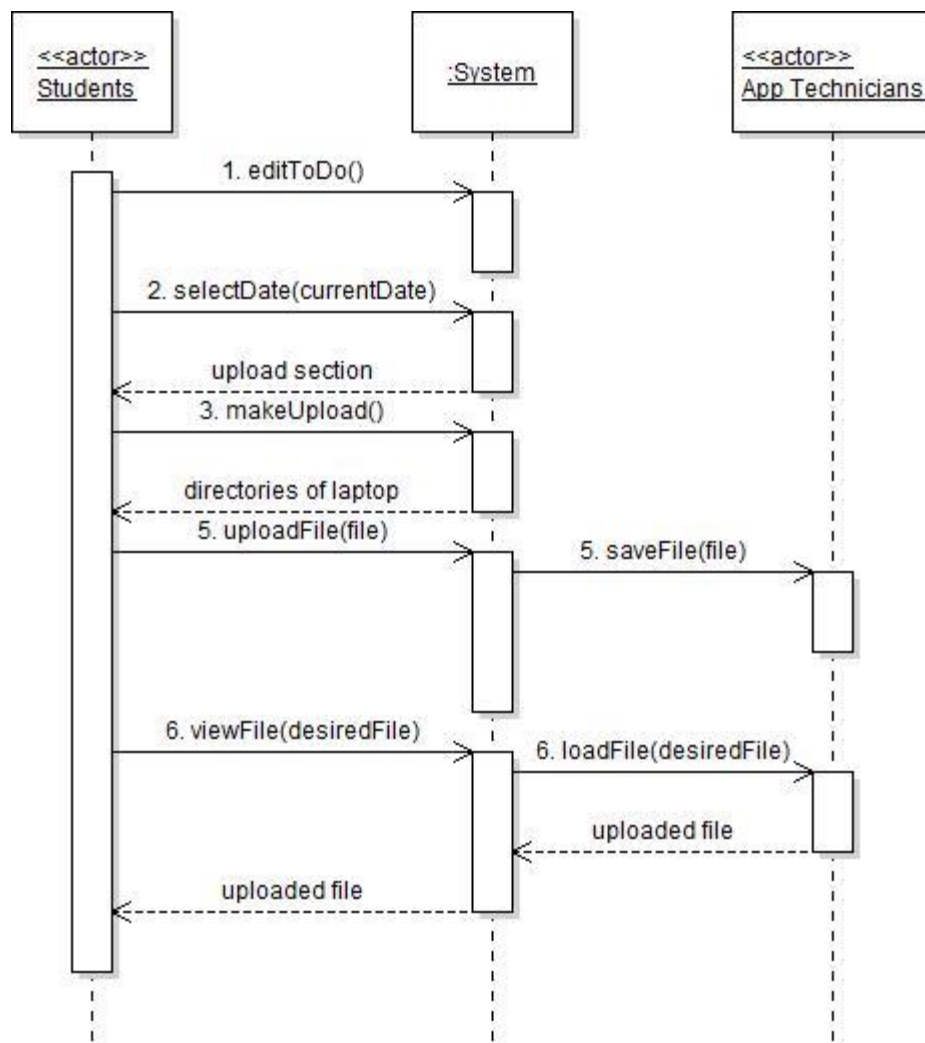
4. Sohail (Writer), Alexander (Editor)

Use Case:	Create Class Schedule in Calendar
Primary Actor:	UOIT Students
Secondary Actors:	
Stakeholders and Interests:	Students - students would want to get notifications of class timings, and keep a repetitive schedule for weeks or months they won't forget. Also they will want to have class descriptions and the class location ex. UA3220, so they can remember. In addition schedule will allow students to prepare and plan out their week.
Frequency of Occurrence:	not often - once at the beginning of semester or when an additional class is added/dropped during semester
Main Success Scenario:	<ol style="list-style-type: none"> 1. Student clicks on the edit Calendar link and is taken to an expanded view of the Calendar 2. Student picks a day to add class and selects the empty region under that day's column 3. Student fills out a page of text fields entering in the class name, where the class is, class description, and whether it repeats weekly. 4. The student clicks the save button, the data is saved and a new class event is created 5. The student is able to view the class schedule on their home page of the University Student Planner
Alternative Flows:	<ol style="list-style-type: none"> 3a. Student does not fill out any of the required fields, so the application does not add a class event 4a. The student does not click on the save button and exits the window, the application will prompt with "do you want to close without saving".
Technical Issues:	



#5. Sohail (Writer), Alexander (Editor)

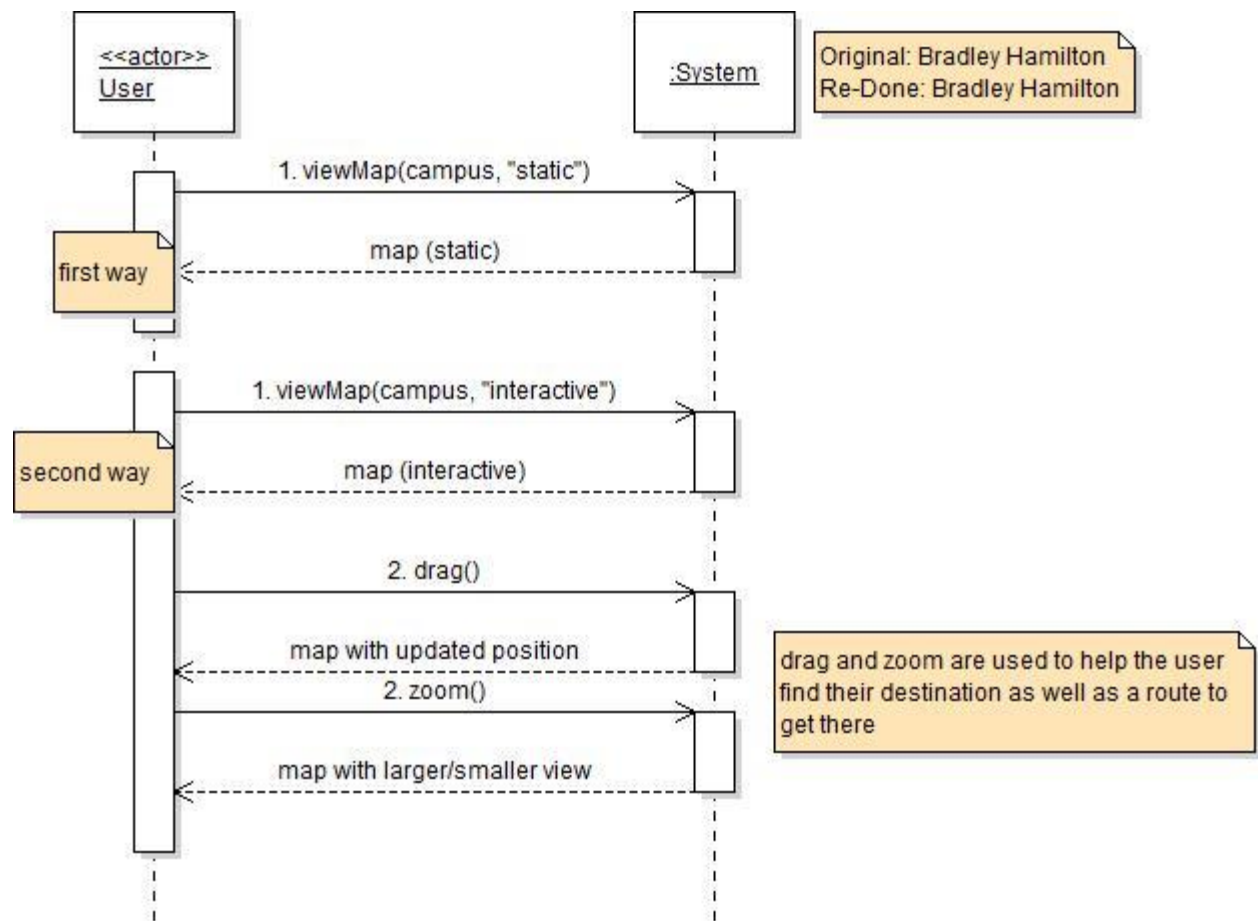
Use Case:	Upload Lecture Notes
Primary Actor:	UOIT Students
Secondary Actors:	
Stakeholders and Interests:	Students – students may want to upload their lecture notes onto the application, providing a backup storage facility. In addition once these notes are uploaded they will be notified by email and can view the notes on any device with wifi enabled. Students may want to view their class notes on their smartphones or a tablet instead of having to fire up their laptop on everywhere
Frequency of Occurrence:	often, every day for their courses
Main Success Scenario:	<ol style="list-style-type: none">1. Student clicks on the Edit toDo link under the toDo tasks section2. The student will see dates in a sequential manner and will click on the current date3. Student will be taken to a page that displays an uploads section with a button, and clicks on the button4. Student will see another window pop up showing the directories of their home folder on the laptop, they will have to navigate through folders clicking on the specific folders5. The student will find the file they want to upload select it, note the file can be in .doc., .ppt, .txt, .pdf, .jpg6(*). The student can now see the uploaded file in uploads section under the particular date and the file is saved under this section. The student is satisfied.
Alternative Flows:	
	6a. The student is not satisfied and wants to upload another file, so the student is able to click on the uploads button again from the section and is directed to repeat steps 4 and 5
Technical Issues:	



Original: Bradley Hamilton
Re-Done: Bau Tran Nguyen

#6. Sohail (Writer), Alexander (Editor)

Use Case:	Access UOIT Maps
Primary Actor:	UOIT Students, UOIT Professors
Secondary Actors:	
Stakeholders and Interests:	<p>Students – students who forget/ or have forgotten where their class is located can easily access the UOIT maps to look up where they need to go for their class. First year students will find it especially handy as they try to find their way in a new school and a large campus connected with Durham College.</p> <p>Professors – Professors in their first year to the University will find it useful in locating their lectures halls. They may have to move from building to building not knowing which building to go to.</p> <p>UOIT personnel – may find it useful when a room number that is listed that they never heard of. Also as the University is expanding both in the North Campus and Downtown area it will be nice to have an easily reference able map to look up any new locations.</p> <p>Frequency of Occurrence: not often, just at beginning of semester or term for Professors and whenever a unseen room number is listed</p>
Main Success Scenario:	<ol style="list-style-type: none">1. The primary actor scrolls down the main page of the University Student Planner where a static map of UOIT is visible (the static map only shows one view with standard zoom so some buildings may not be visible, also note it only shows the North campus)2. If the actor finds this view of the North campus UOIT map to be good then they will be pleased <p>Second way of viewing Map</p> <ol style="list-style-type: none">3. The primary actor will click on the map of the North campus, and be directed to an expandable interactive map of the campus4. The actor is able to drag and use the zoom feature on the North campus map to move around5. The actor finds the location they are looking for and a route on how to get there from dragging and zooming on the streets and buildings. They are satisfied
Alternative Flows:	
	<p>1a. Primary actor wants to view a map of the downtown campus, so the actor will have the option of choosing the downtown option from a drop down menu below the static map and expandable map</p>
Technical Issues:	



7 Bradley (Writer), Alexander (Editor)

Use Case: View Bus Schedule

Primary Actor: Student/Professor

Secondary Actors:

Stakeholders and Interests: Student/Professor – would like to find out the nearest time to get public transit to/from UOIT. They also want to find out how long it will take them to get to their intended destination.

Frequency of Occurrence: Regularly, they take public transit to/from UOIT every day throughout the semester.

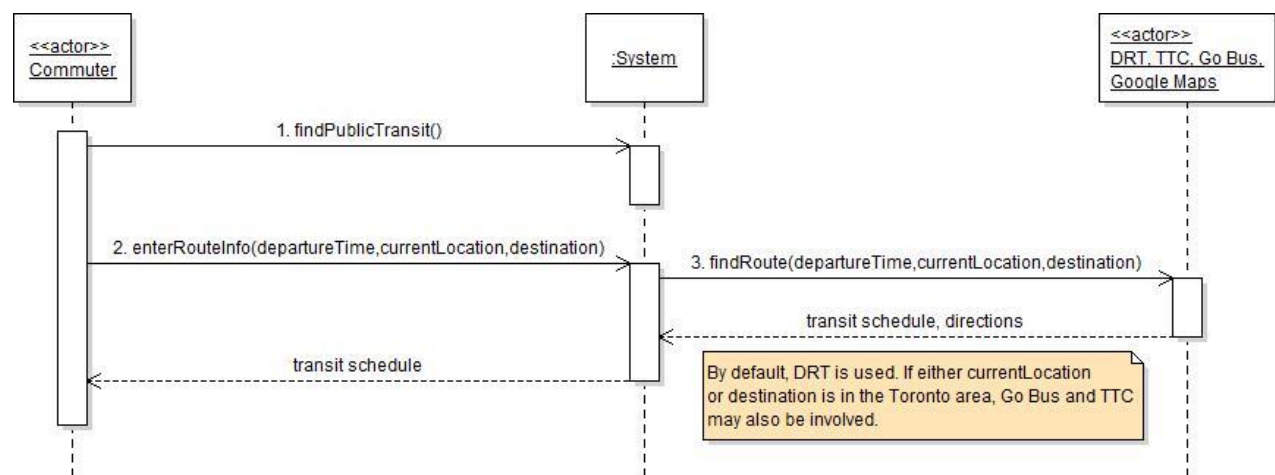
Main Success Scenario:

1. Student/Professor clicks on the Find Public Transit link, above the UOIT Map
2. Student/Professor is prompted to enter their current location as well as their intended destination in a page of text fields. They will also indicate what time they would like to head over to their destination.
3. Student/Professor clicks the find button to detect the next available DRT route. The information is applied in Google maps, which returns the necessary directions to the destination.
4. Student/Professor is redirected to the DRT schedule, with the destination highlighted as well as the departure and arrival times.

Alternative Flows:

- 3a. If they fail to fill in any of the required fields, the necessary schedules will not be displayed. Instead, the commuter will be redirected to the text field and is prompted to fill in any unfilled fields. In addition, the information (if any) that was inputted will not be applied to Google Maps.
- 4a. If their intended destination is in the Toronto area (i.e. Scarborough), Go Bus and the TTC may also be involved. Their schedules will also be displayed with the destinations and times highlighted.

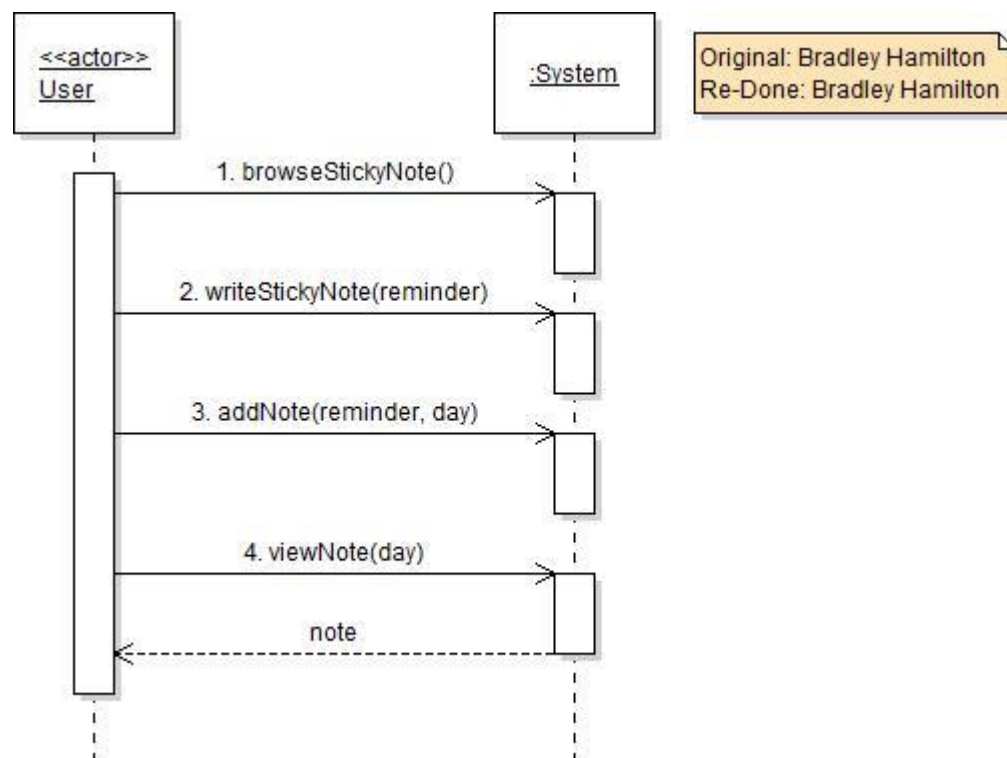
Technical Issues:



Original: Bradley Hamilton
Re-Done: Bau Tran Nguyen

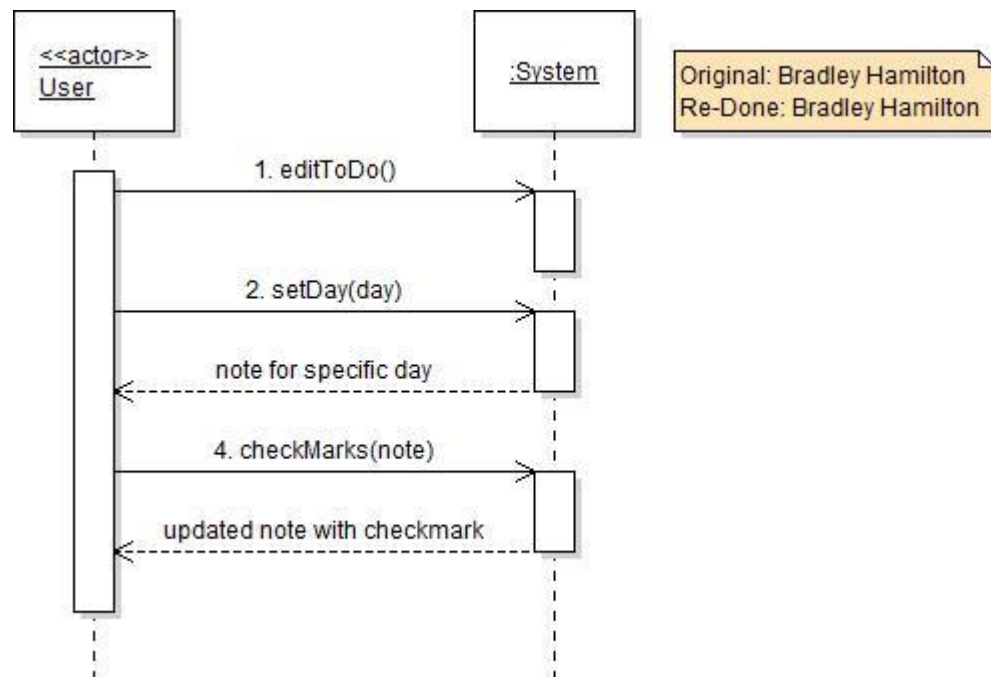
#9a. Sohail (Writer), Alexander (Editor)

Use Case:	Write toDo Tasks
Primary Actor:	UOIT Students, UOIT Professors
Secondary Actors:	
Stakeholders and Interests:	Students – students will want any planner to have a place where they are able to add reminders and/or notes to remember key details of the day and what to do on the next day or during the week. Professors – would want to add notes of unfinished work and include reminders. It will be helpful to note any reminders from the various classes the Professor may have, so they get back straight to the point the next day.
Frequency of Occurrence:	often, every day after class or end of class period
Main Success Scenario:	Write a note 1. Student/Professor browses to the toDo Sticky Note on the right side of the main home page 2. The student/Professor types in a reminder on the Sticky Note coloured text field 3. The student/Professor then clicks on the Add Note button, where the note will be saved as the specific date, in addition will include empty circles for checkmarks when task is completed 4. The student/Professor will be able to view the note of the current day on the home page, and is satisfied.
Alternative Flows:	
Technical Issues:	

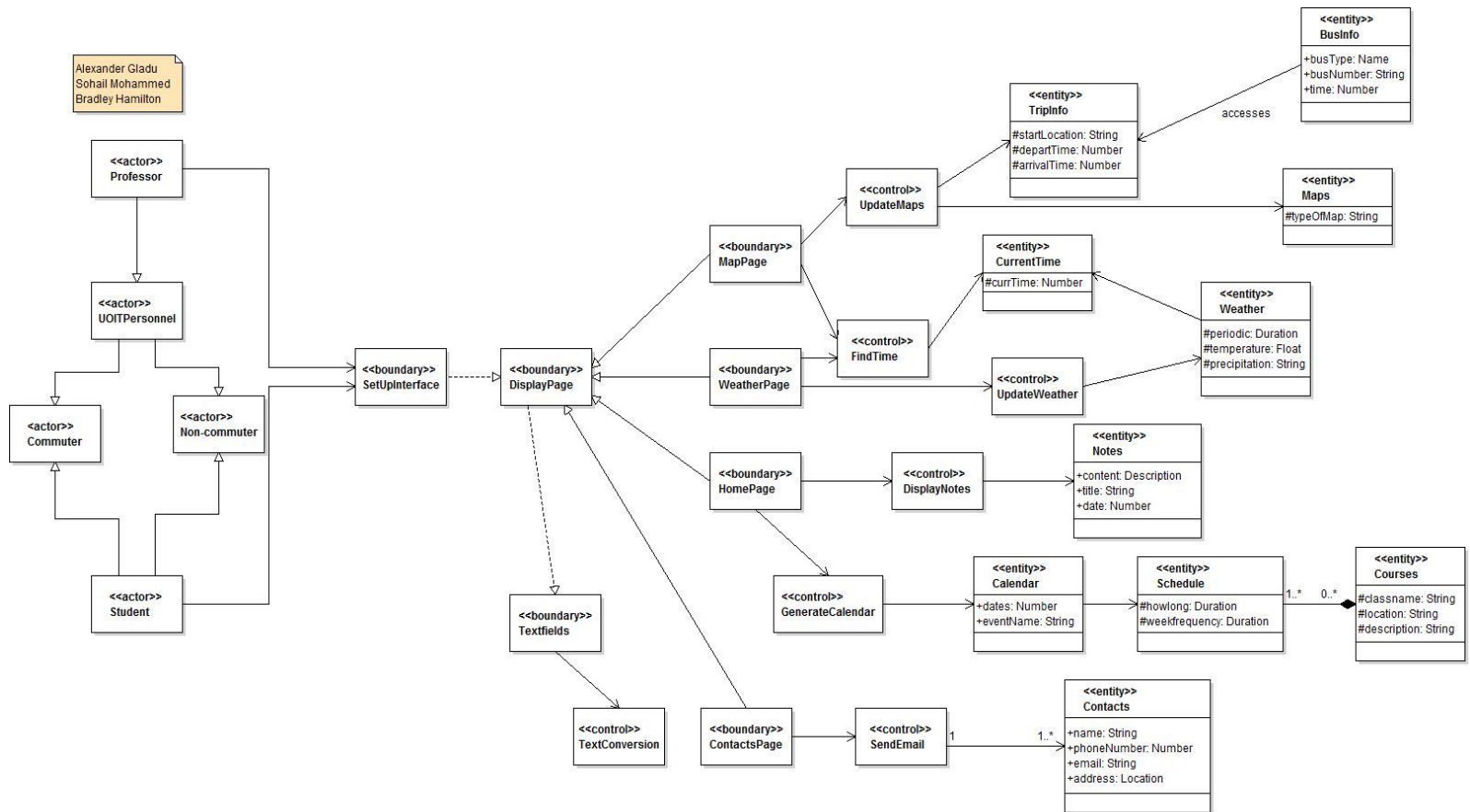


#9b. Sohail (Writer), Alexander (Editor)

Use Case:	View toDo Tasks
Primary Actor:	UOIT Students, UOIT Professors
Secondary Actors:	
Stakeholders and Interests:	Students – students would want to view previous tasks if they are not completed or if the task is a continuous so that they do not have to write it up again on their current day's task. Professors – professors would want to view previous tasks if not completed or want to refer back for some planning purposes such as preparing for lectures or answering overdue emails, etc.
Frequency of Occurrence:	often, twice weekly
Main Success Scenario:	To View Note 1. The student/Professor will click on the Edit toDo link 2. The student/Professor will be directed to a page listing dates in sequential order, and will choose a desired date to view Note 3. The student/Professor will then be taken to a page that has a text box that shows the specific date's note (in addition to containing an upload section). 4. The student/Professor views the specific date's Note with the empty circles and check marks and is satisfied.
Alternative Flows:	
Technical Issues:	



Domain Model



Architecture

MVC Architecture

Model

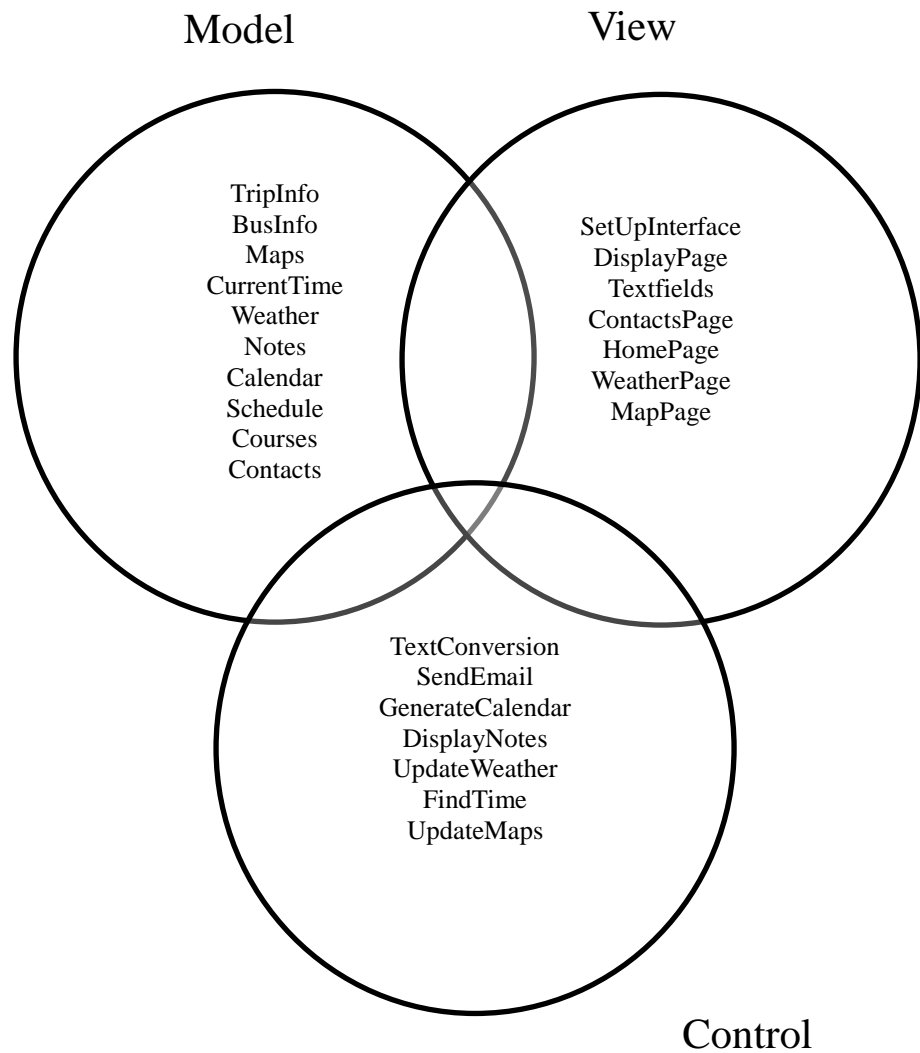
- TripInfo
- BusInfo
- Maps
- CurrentTime
- Weather
- Notes
- Calendar
- Schedule
- Courses
- Contacts

View

- SetUpInterface
- DisplayPage
- Textfields
- ContactsPage
- HomePage
- WeatherPage
- MapPage

Control

- TextConversion
- SendEmail
- GenerateCalendar
- DisplayNotes
- UpdateWeather
- FindTime
- UpdateMaps



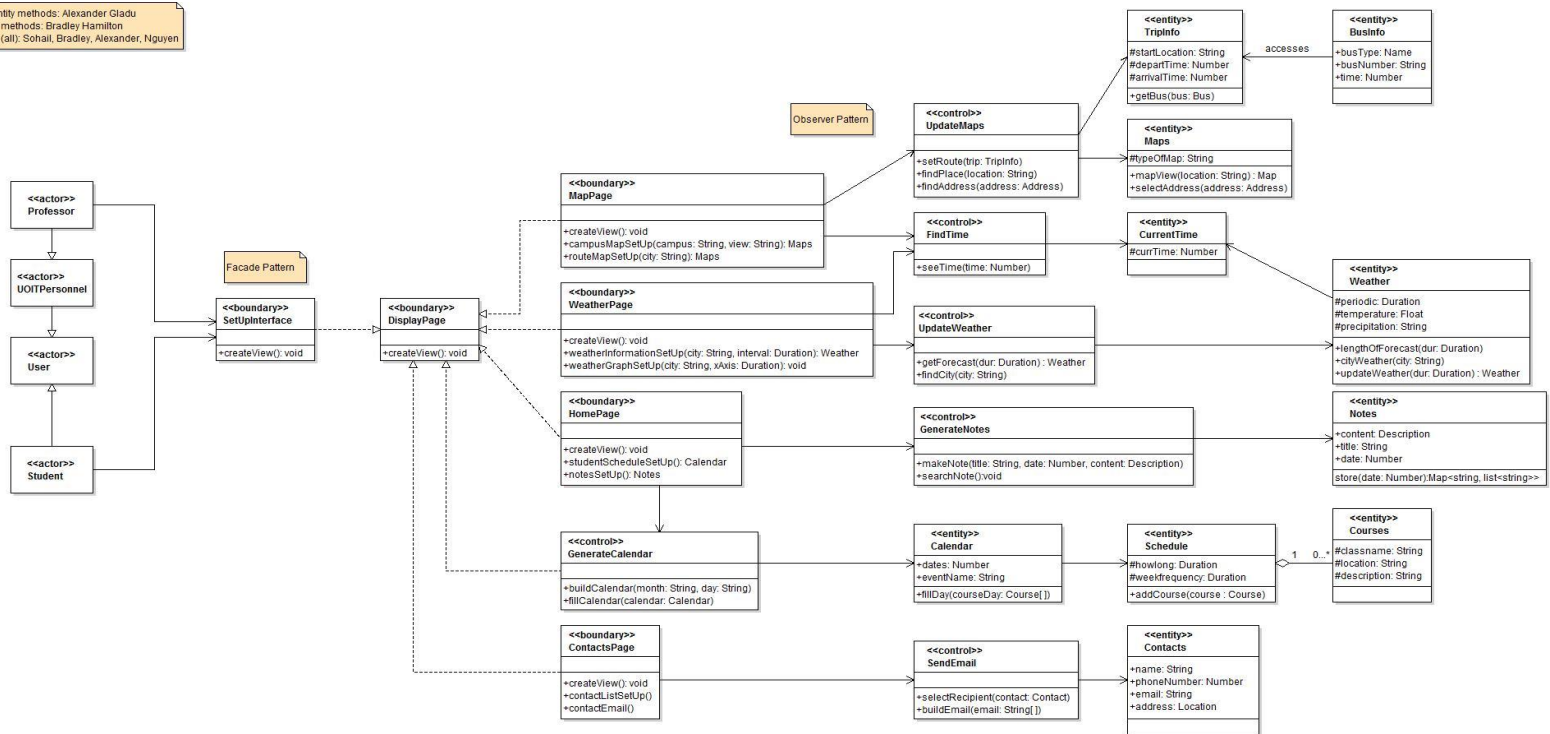
Sohail Mohammed (Main)

Bau Tran Nguyen

Based off the Domain Model class diagram

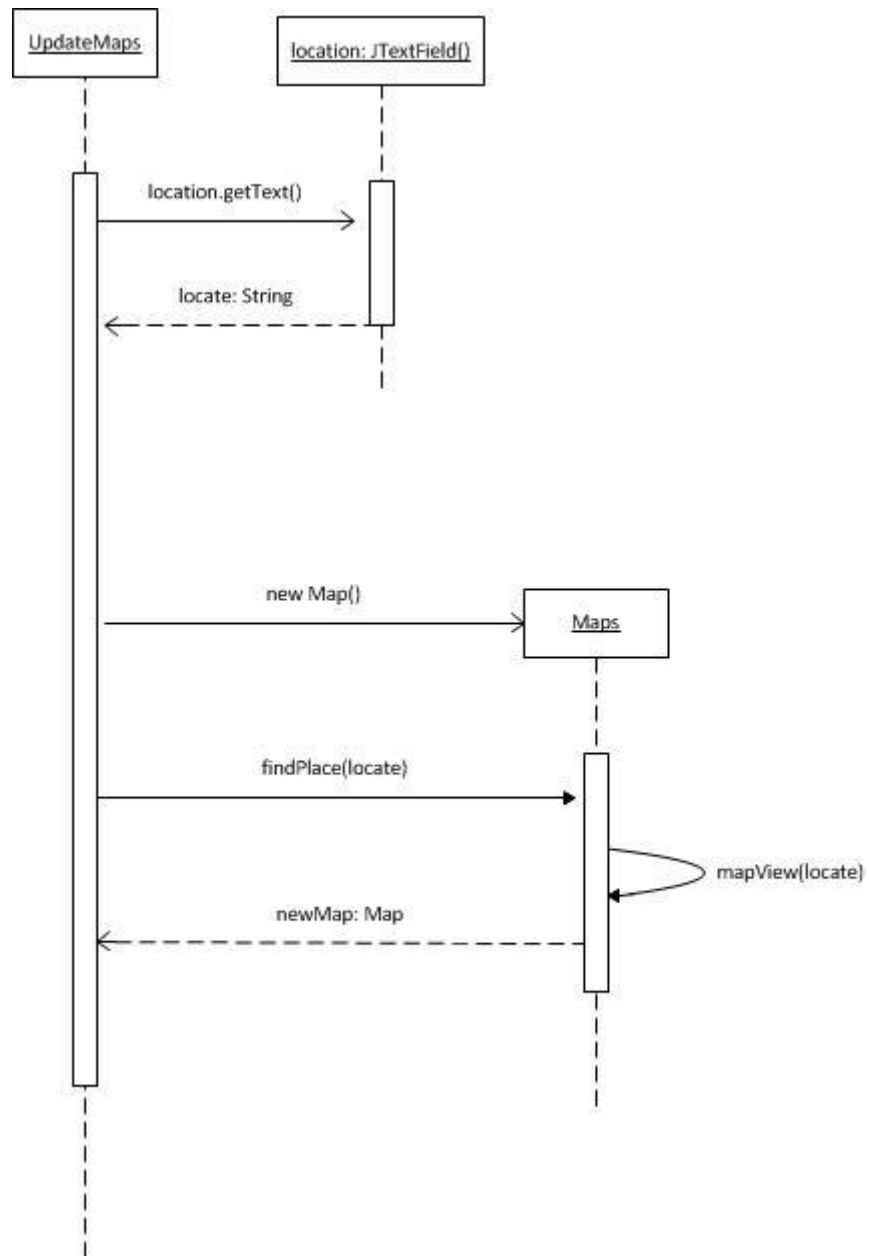
Design Model

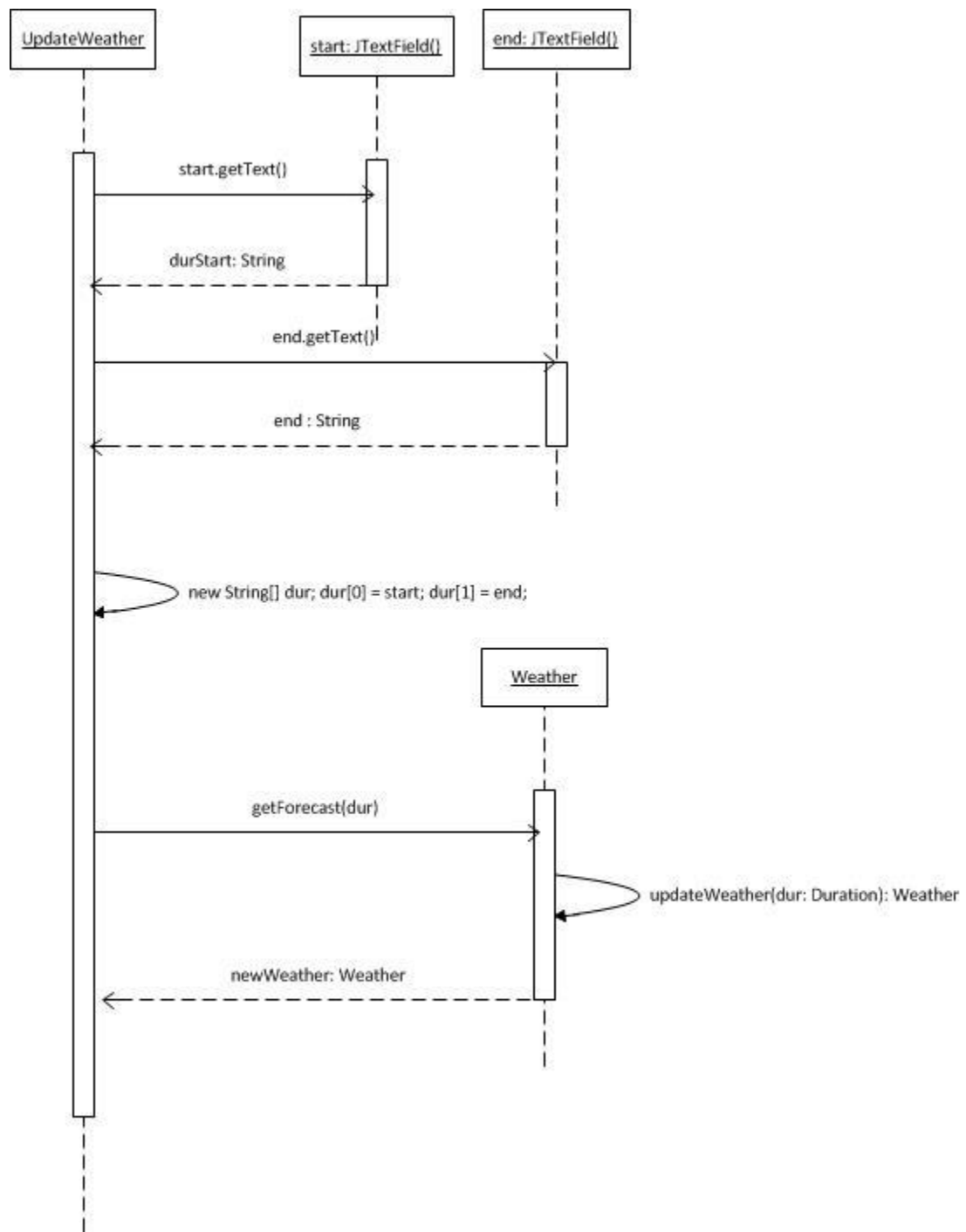
Control/Entity methods: Alexander Gladu
Boundary methods: Bradley Hamilton
Variables (all): Sohail, Bradley, Alexander, Nguyen



Sequence Diagrams

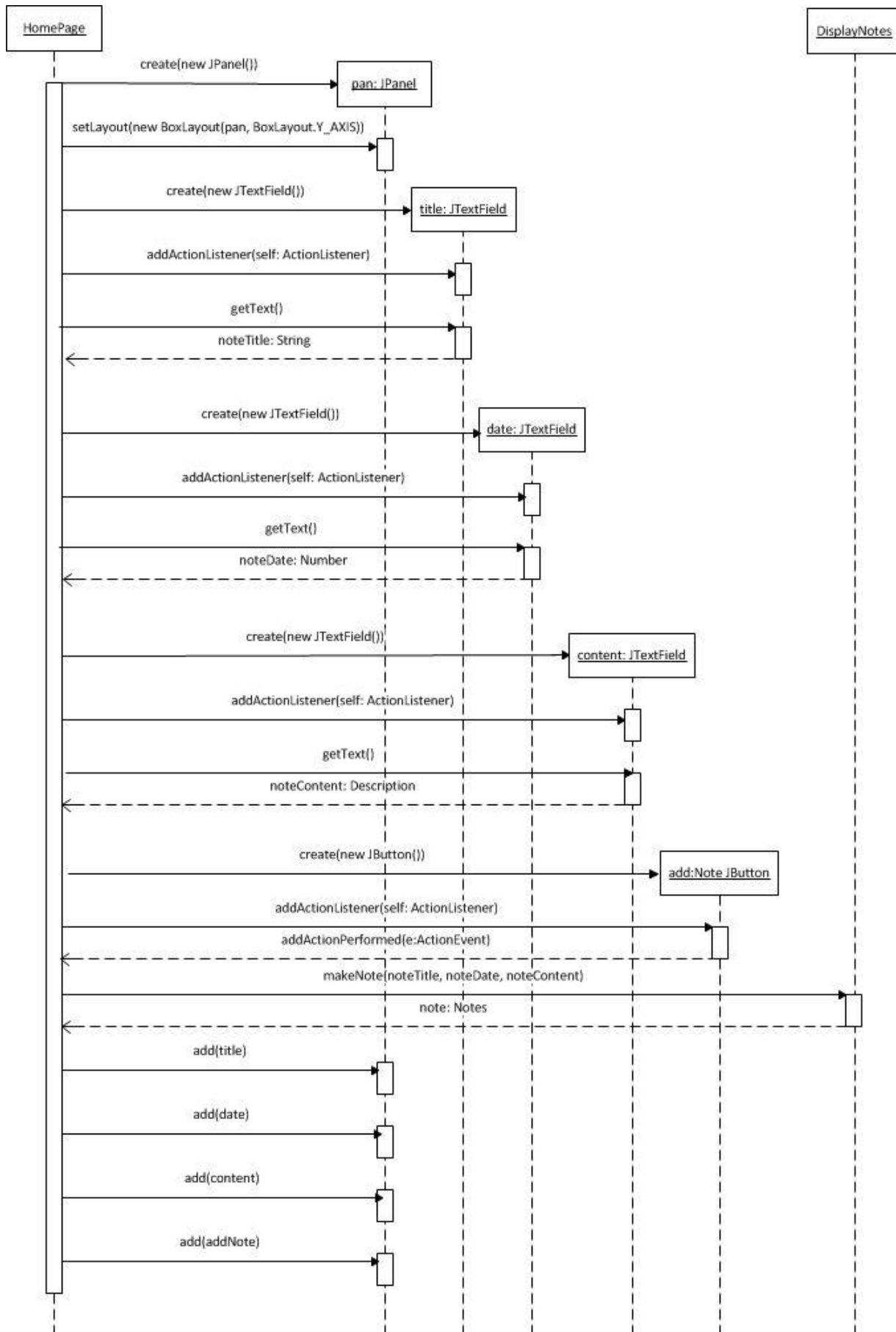
Alexander Gladu: (In Order: findPlace(), getForecast(), contactEmail())

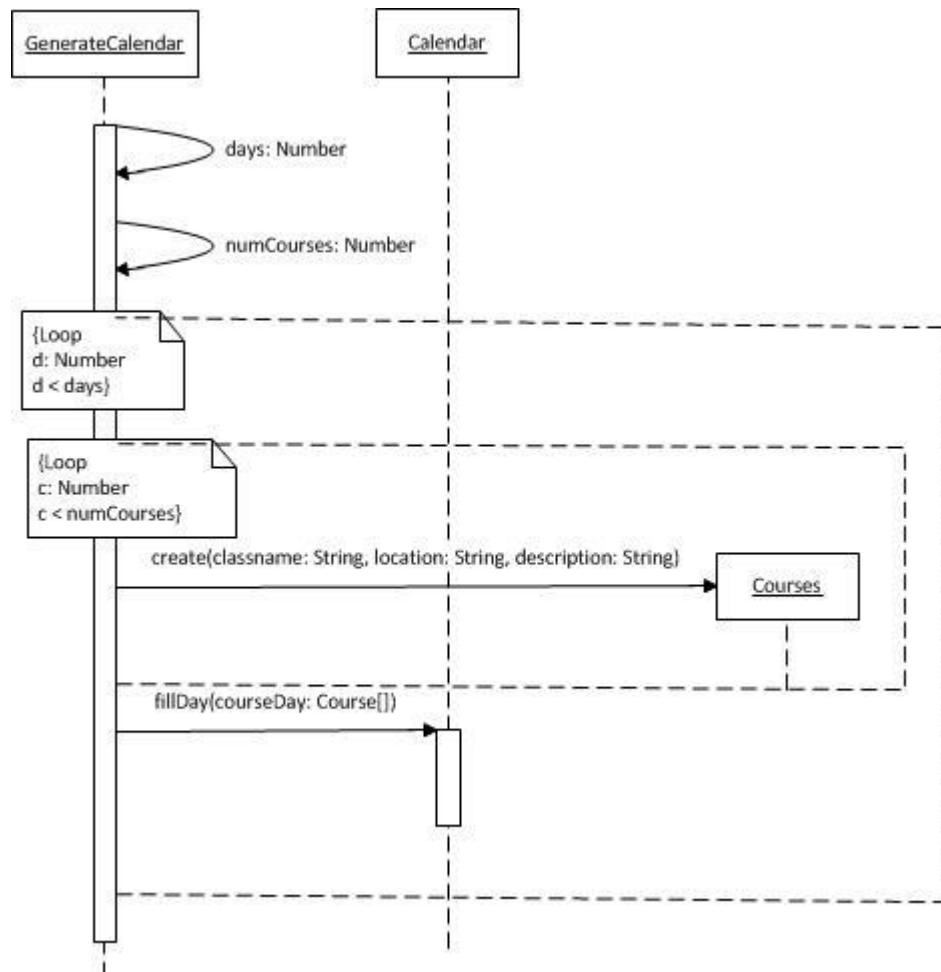
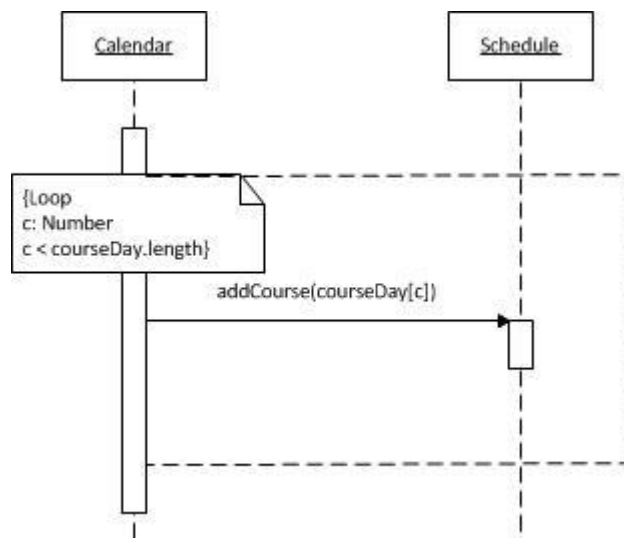




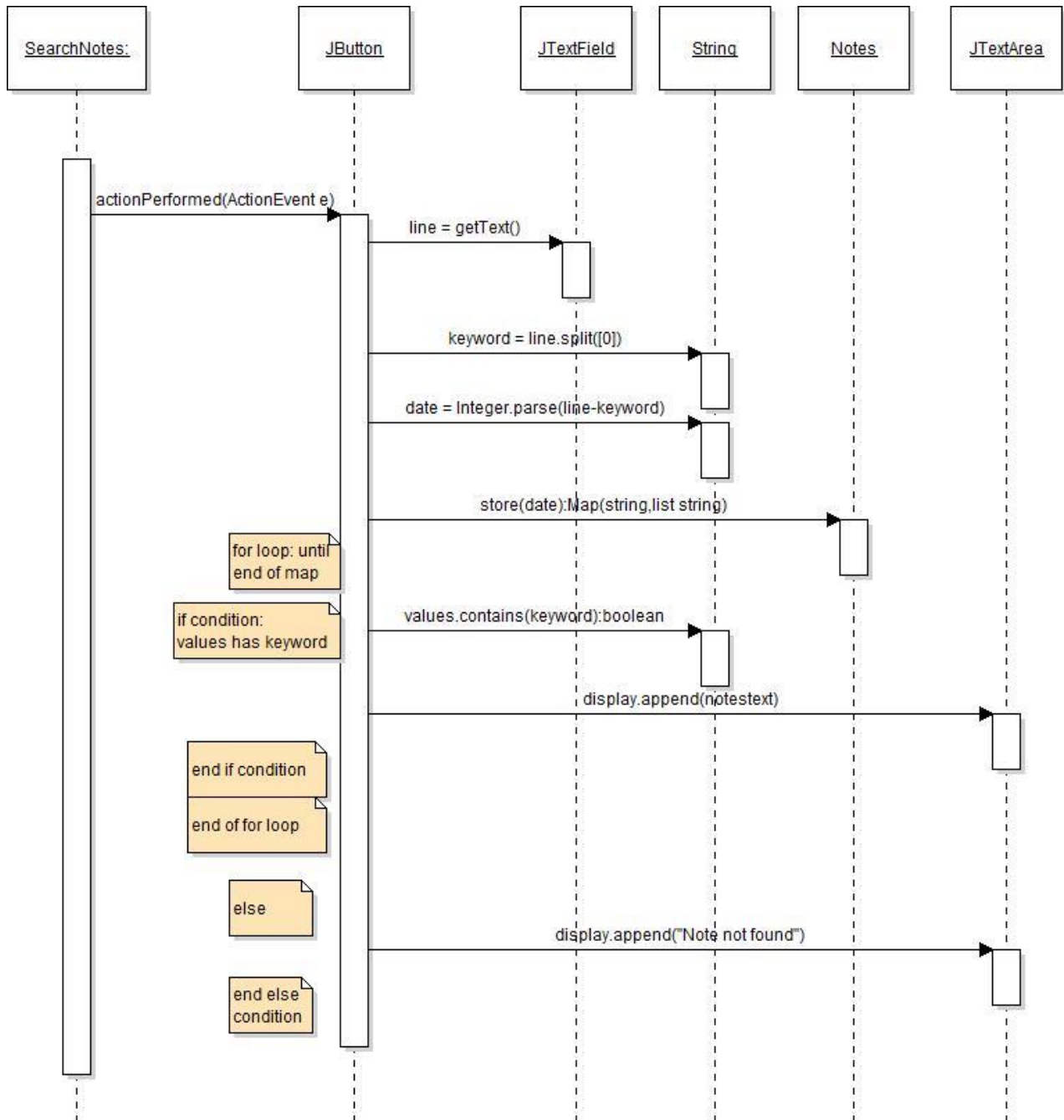


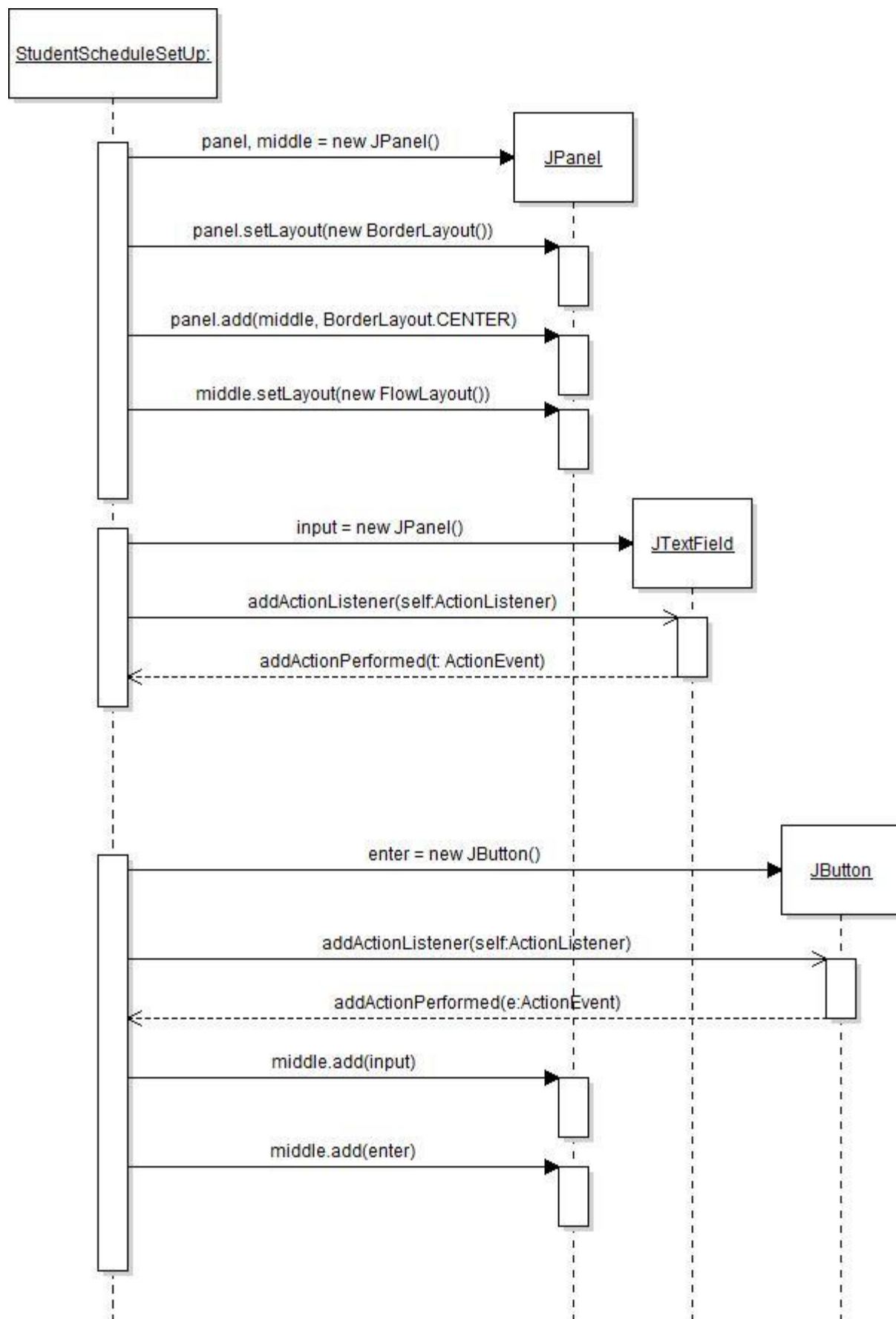
Bradley Hamilton: (In Order: notesSetUp(): Notes, fillDay(courseDay: Course[], fillCalendar(calendar: Calendar))

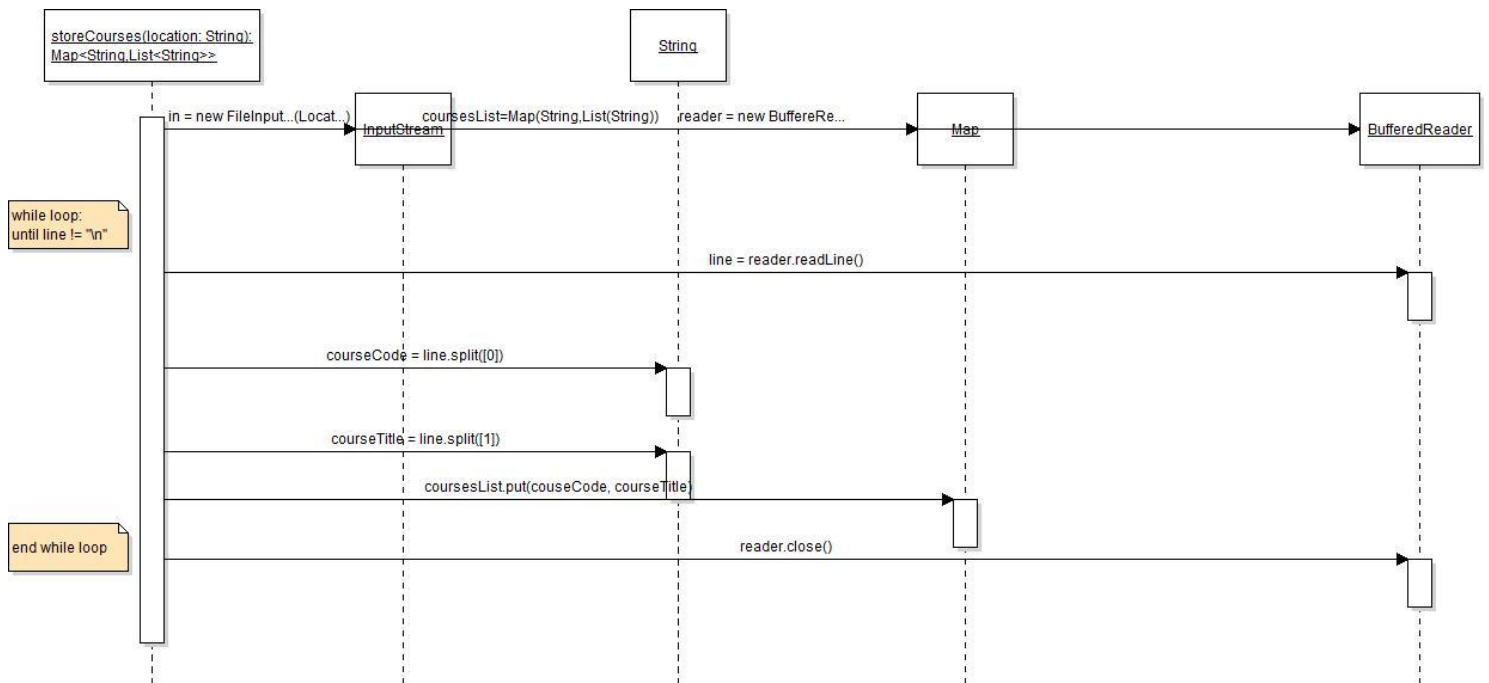




Sohail Mohammed: (In Order: searchNotes(), studentScheduleSetUp(), storeCourses())







*Implementation: Other Folder