

REQUIREMENTS SPECIFICATIONS

<P-XX:<UNI - BUBBLE>

<TEAM MEMBER NAMES & IDS>

STUDENT ID	NAME
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1. Introduction

The project is aimed at universities and colleges. Through this web application users will be able to search for locations inside of their college such as classrooms, offices and eateries among others. Users will be able to access their location within the college and get directions to their desired location.

Furthermore the application will provide an interface for students to connect with their instructors by viewing instructor profiles, and to check if a certain instructor is currently available. Instructors will in turn be able to share their current status on the app along with other details.

The application will allow users to rate eateries/ restaurants within the college and share their reviews on a university blog. This blog will be visible to all the student who have been registered with the university in the application.

It will allow visitors to the university campus to find their way around and search for locations as well.

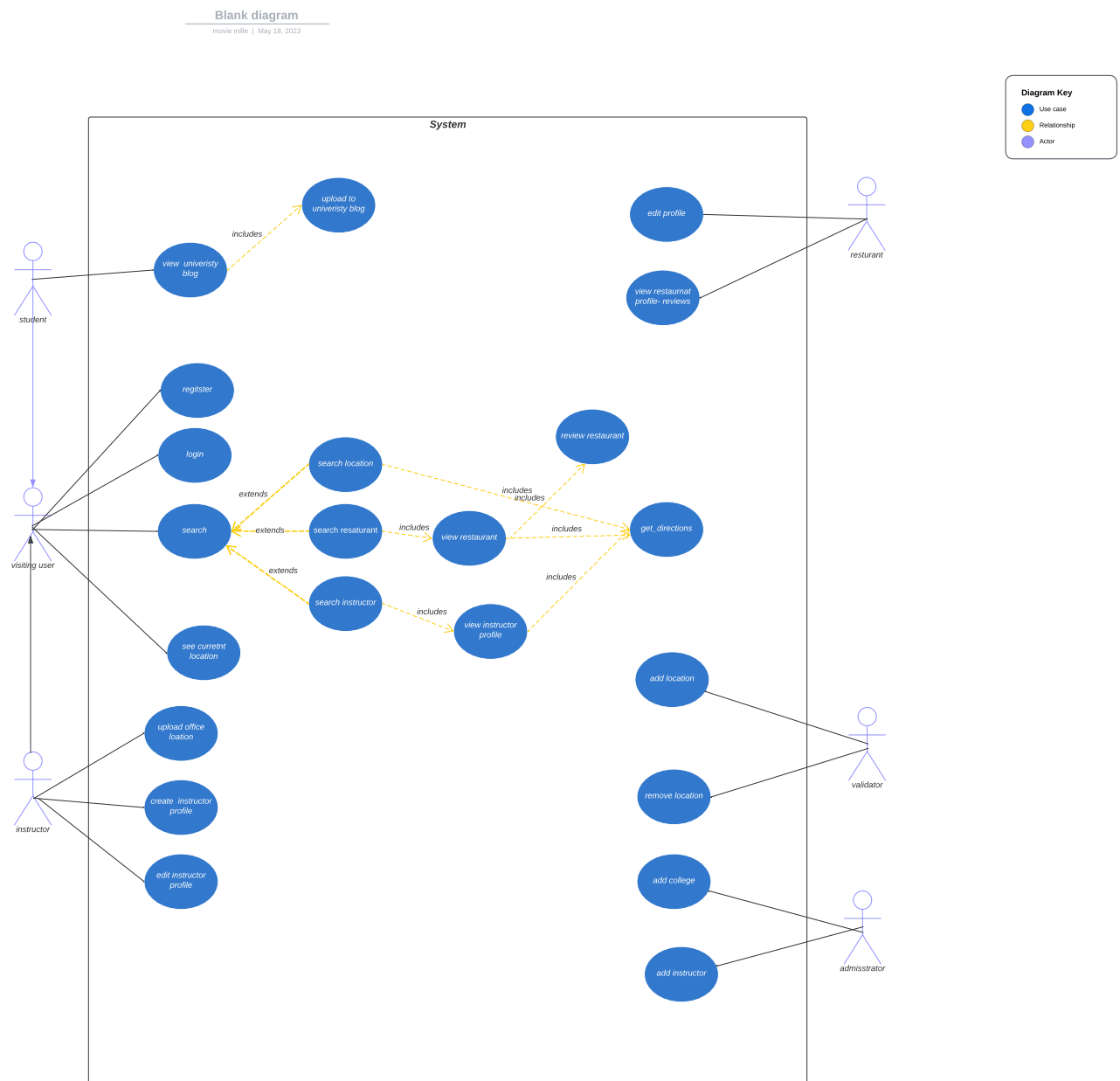
The potential users of the application are enrolled university students, instructors, vendors, campus visitors such as families, friends, delegates from other universities etc.

2.System Actors

Actor Name	Description
Student	Students currently enrolled in the college in question
Instructor	Verified Instructors in the college
Administrator	College specific administrator who can add and verify instructors to the system
Validator	Verifies and validates locations that are uploaded on the system
Vendor	Vendors which sell foods and other items on campus
Visiting user	Users who are visiting campus

3. Use Cases

3.1. Use Case Diagrams



3.2. Description of Use Cases

3.2.1. Log in

Identifier	UC-001
Purpose	the user signs up to the platform
Pre-conditions	The user must be registered
Post-conditions	The user is logged in to the system
Step #	Typical Course of Action
1	The user selects the login button on the homepage
2	The user sees a list of types of users
3	The user selects the user type
4	The user enters their login and password
5	The user is logged into the system
Step #	Alternate Courses of Action

Step #	Exception Paths
	In step 4 if the login and password are not authenticated then an error message appears and step 4 is repeated

3.2.2 register

Identifier	UC-002
Purpose	The user registers with the system
Pre-conditions	-
Post-conditions	The users profile is created with the system
Step #	Typical Course of Action
1	The user selects the register option on the homepage
2	The user sees a list of types of users
3	The user selects the type of user they want to register as
4	The user enters all the information required
5	the user inputs a username
6	The user enters two passwords
7	The user presses the register button
Step #	Alternate Courses of Action
Step #	Exception Paths

Identifier	UC-004
Purpose	Search location
Pre-conditions	The user must be logged in
Post-conditions	The user sees search results
Step #	Typical Course of Action
1	Select the search button
2	Different options are displayed
3	Select the search location option
4	A search box is displayed and a button for advanced search
5	User enters name of location in the search box
6	User sees a list of all locations with matching names to the name entered
Step #	Alternate Courses of Action
5	user selects the advanced search option
6	User chooses from drop down menu of location types
7	User selects distance from himself
8	User sees a list of matches
Step #	Exception Paths
6/ 8	If no matches found print relevant message
	If the username already exists in the system then ask for a different username go back to step #5
	If the passwords do not match ask for the password again

3.2.3 search

Identifier	UC-003
Purpose	Search
Pre-conditions	The user is logged in to the system and on the homepage
Post-conditions	The user sees search options and list of previous searches
Step #	Typical Course of Action
1	The user presses the search button
2	A new page is loaded
3	The user sees search options and lists previous searches
4	
5	
Step #	Alternate Courses of Action
Step #	Exception Paths

3.2.4 search locations

3.2.5 search instructor

Identifier	UC-005
Purpose	Search instructor
Pre-conditions	The user must be logged in
Post-conditions	The user sees search results
Step #	Typical Course of Action
1	Select the search button
2	Different options are displayed
3	Select the search instructor option
4	A search box is displayed and a button for advanced search
5	User enters name of instructor in the search box
6	User sees a list of all instructors with matching names to the name entered
Step #	Alternate Courses of Action
5	user selects the advanced search option
6	User chooses from drop down menu of departments
7	User selects distance from himself
8	User sees a list of matches
Step #	Exception Paths
6/ 8	If no matches found print relevant message

3.2.6 search vendor

Identifier	UC-006
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Purpose	Search vendor
Pre-conditions	The user must be logged in
Post-conditions	The user sees search results
Step #	Typical Course of Action
1	Select the search button
2	Different options are displayed
3	Select the search vendor option
4	A search box is displayed and a button for advanced search
5	User enters name of vendor in the search box
6	User sees a list of all vendors with matching names to the name entered
Step #	Alternate Courses of Action
5	user selects the advanced search option
6	User chooses from drop down menu of vendor types
7	User selects distance from himself

3.2.7 view instructor profile

Identifier	UC-007
Purpose	View instructor profile
Pre-conditions	The user must be logged in
Post-conditions	The user views instructor profile

Step #	Typical Course of Action
1	The user searches for instructor and sees a list off options
2	The user chooses an instructor from list
3	New page is opened which shows the instructors profile
4	
5	
Step #	Alternate Courses of Action
Step #	Exception Paths

3.2.8 view vendor page

Identifier	UC-008
Purpose	View vendor page
Pre-conditions	The user must be logged in
Post-conditions	The user views instructor profile
Step #	Typical Course of Action
1	The user searches for vendors and sees a list off options
2	The user chooses a vendor from list
3	New page is opened which shows the public information about the vendor

Step #	Alternate Courses of Action
Step #	Exception Paths

3.2.9. review vendor

Identifier	UC-009
Purpose	Review vendor
Pre-conditions	The user must be logged in and vendor must have a page
Post-conditions	The user review is submitted to the system
Step #	Typical Course of Action
1	The user searches for vendor and views the vendor page
2	The user clicks on the rate/review button
3	A small window with a rating scale and a comments box is shown
4	The user selects a rating within the specified range
5	The user enters comments in the box
6	The user presses submit
7	The review is submitted
Step #	Alternate Courses of Action
	The user may press the cancel button at any time and the window is closed with no review submitted
Step #	Exception Paths

7	If no rating was selected then print error message and go back to step 3
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3.2.10 see current location

Identifier	UC-010
Purpose	See current location
Pre-conditions	The user must be logged in
Post-conditions	The user views their current location
Step #	Typical Course of Action
1	The user presses the map option
2	The user selects “see current location”
3	The users location is displayed on a map
Step #	Alternate Courses of Action
Step #	Exception Paths
3	If location not accessible, appropriate message is displayed

3.2.11 upload location

Identifier	UC-011
Purpose	Upload office location

Pre-conditions	The user must be logged in as an instructor
Post-conditions	The location is stored in the system
Step #	Typical Course of Action
1	The user selects the profile option
2	The users profile is displayed
3	The user selects the upload/edit location option
4	A map is displayed with a marker placed at the users current location
5	The user moves the marker to the desired location
6	The user selects the submit/save button
7	The users location is saved to the system
Step #	Alternate Courses of Action
Step #	Exception Paths

3.2.12 create profile

Identifier	UC-012
Purpose	Create instructor profile
Pre-conditions	The user must be logged in as an instructor
Post-conditions	The profile is created/added

Step #	Typical Course of Action
1	An instructor logs in to the system for the first time
2	The user enters their personal information and credentials
3	The user enters their office hours
4	The user uploads their location
5	The user presses submit
Step #	Alternate Courses of Action
	The user may press the “setup later” option at any step and they will be directed to the homepage
Step #	Exception Paths

3.2.13 update instructor status

Identifier	UC-013
Purpose	Automatically update instructor status
Pre-conditions	The user must be logged in as instructor,
Post-conditions	
Step #	Typical Course of Action
1	The instructor goes to profile page
2	The instructor selects the settings option
3	The instructor clicks on the “automatically update status” option

4	The users office hours are displayed along with a confirm button
5	The user selects the confirm option
6	The instructors status is updated according to these office hours
Step #	Alternate Courses of Action
Step #	Exception Paths
4	If no office hours present the user must input their office hours then go to step 4

3.2.14 edit profile

Identifier	UC-014
Purpose	Edit instructor profile
Pre-conditions	The user must be logged in as instructor
Post-conditions	The profile is edited
Step #	Typical Course of Action
1	The user selects the profile option
2	The users profile information is displayed along with several other options
3	The user selects the edit option
4	The user makes the required changes
5	The user selects the submit option
Step #	Alternate Courses of Action

	The user can select the cancel option at any point and be redirected back to the profile page
Step #	Exception Paths

3.2.15 get directions

Identifier	UC-015
Purpose	Get directions
Pre-conditions	The user must be logged in
Post-conditions	
Step #	Typical Course of Action
1	The user selects the map option
2	The user selects the directions option
3	The users sees two boxes “to” , “from”
4	The “from” box has the users current location by default
5	The user may edit both boxes as he wishes
6	Both boxes perform the search location functionality
6	The user presses the get directions button
7	Multiple options are displayed to the user along with respective times and distances
8	The user selects an option
9	The route is displayed on a map
Step #	Alternate Courses of Action

	The user is directed towards the direction page from another page, the to and from boxes are already filled and the process continues from step #7
	The user can select the “change route” option and be directed to step # 7
	The user can press the cancel option and be directed to step # 3
Step #	Exception Paths

3.2.16 add location

Identifier	UC-016
Purpose	Add location
Pre-conditions	The user must be logged in as validator or administrator
Post-conditions	Location is added to system
Step #	Typical Course of Action
1	Select the locations option
2	Select the add location option
3	The user types the name of location
4	The user selects the type of location from a dropdown list
5	The user selects the continue button
6	A map is displayed with a marker placed at the users current location
7	The user moves the marker to the desired location
8	The user selects the submit/save button
Step #	Alternate Courses of Action

Step #	Exception Paths

3.2.17 remove location

Identifier	UC-017
Purpose	Remove location
Pre-conditions	The user must be logged in as validator
Post-conditions	The location is removed from system
Step #	Typical Course of Action
1	The user selects the locations option
2	The user selects the “remove location” option
3	The user sees a list of locations which were recently added and a search button
4	The user selects a location
5	The user presses the remove option
6	The user presses “confirm removal” option
Step #	Alternate Courses of Action
	The user selects the search button and can search for locations, Continue to step #4
Step #	Exception Paths

3.2.18 add college

Identifier	UC-018
Purpose	Add college
Pre-conditions	The user must be logged in as administrator
Post-conditions	The college is added to the system
Step #	Typical Course of Action
1	The user selects the add college option
2	The user enters details of college
3	The user presses submit
4	
5	
Step #	Alternate Courses of Action
Step #	Exception Paths

3.2.19 verify /add instructor

Identifier	UC-019
Purpose	Add instructor
Pre-conditions	The user must be logged in as administrator
Post-conditions	The instructor is verified

Step #	Typical Course of Action
1	The user selects the add instructor option
2	The user sees a list of unverified instructors in their respective college
3	The user selects an instructor
4	The user presses the verify/add button
Step #	Alternate Courses of Action
Step #	Exception Paths

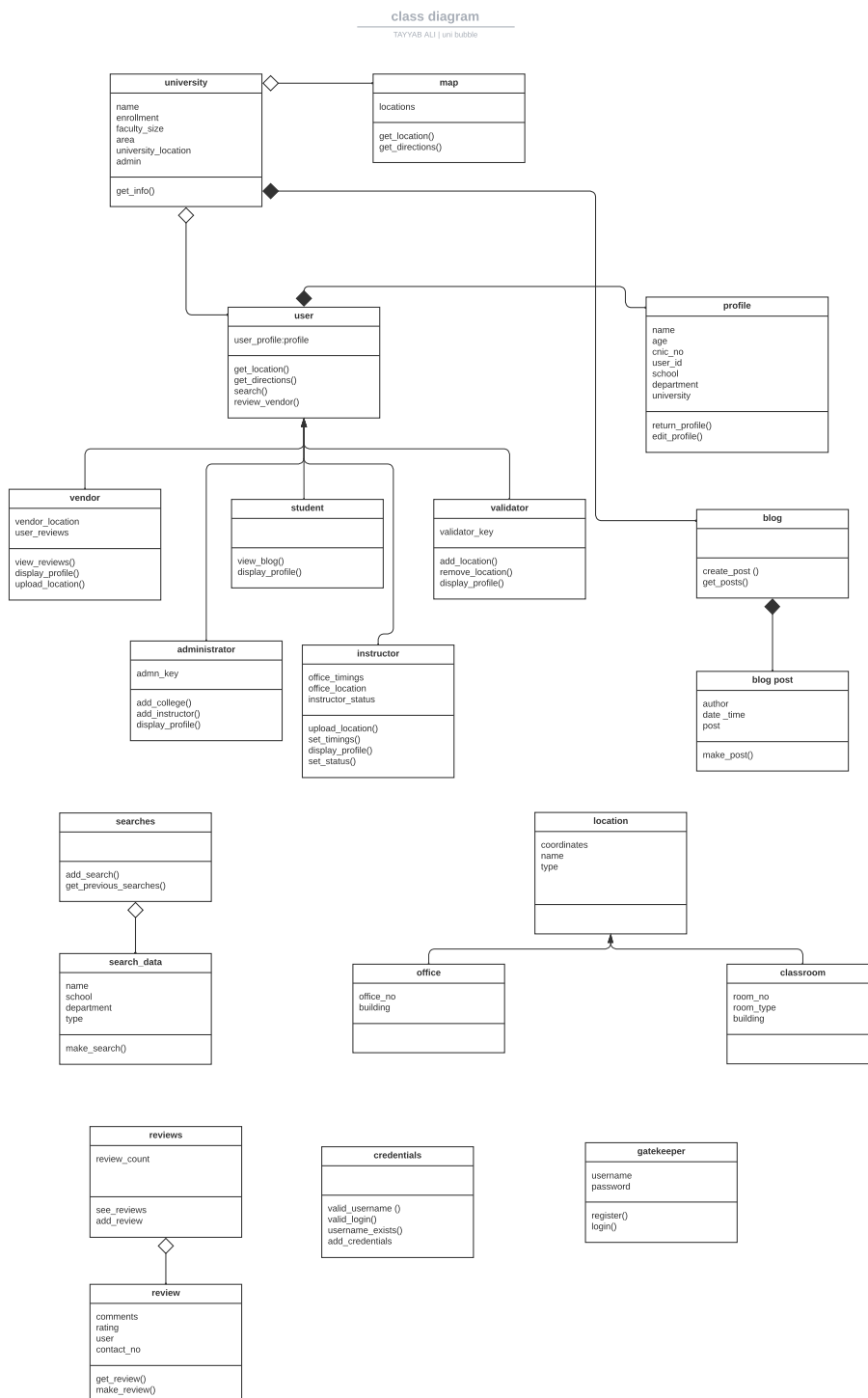
3.2.20 view university blog

Identifier	UC-020
Purpose	View university blog
Pre-conditions	The user must be logged in
Post-conditions	
Step #	Typical Course of Action
1	The user selects the “blog” option
2	The university blog is displayed
3	

4	
5	
Step #	Alternate Courses of Action
Step #	Exception Paths

4. Class Diagram

4.1. Diagram



4.2. Description

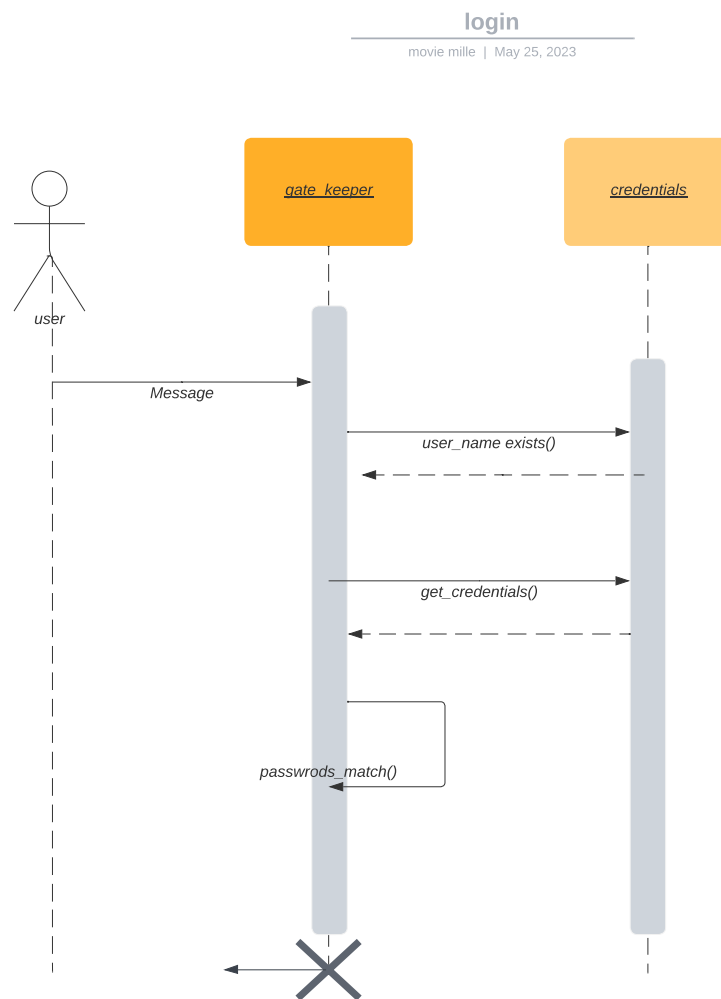
University:

Map :

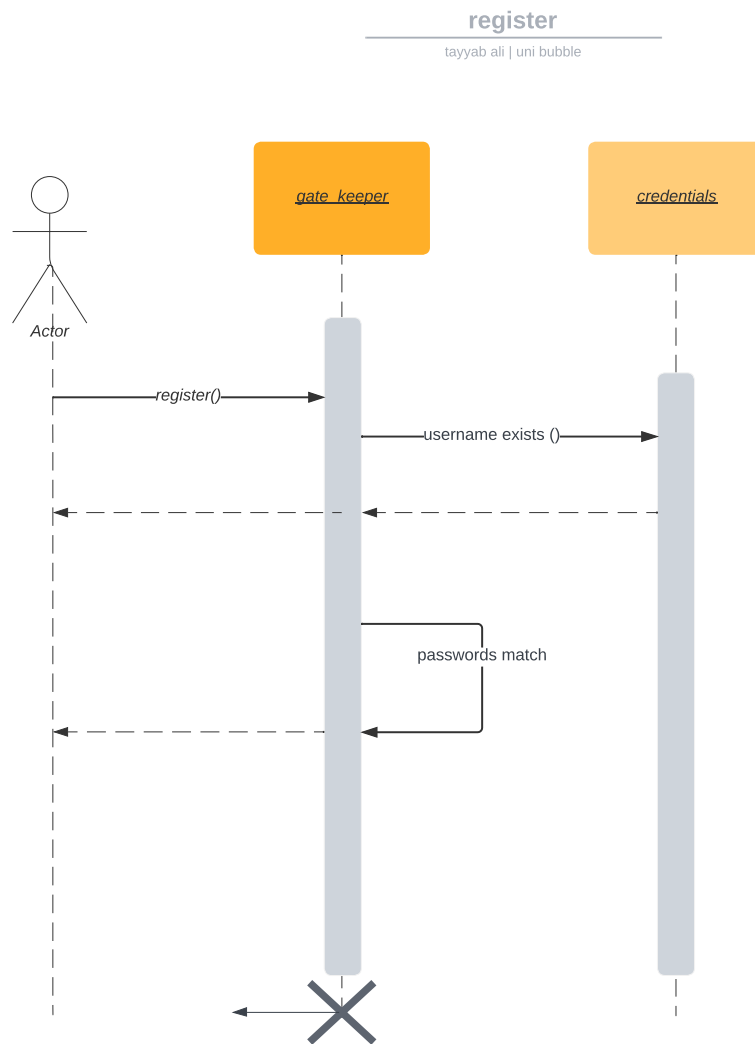
User :

5. Sequence Diagrams

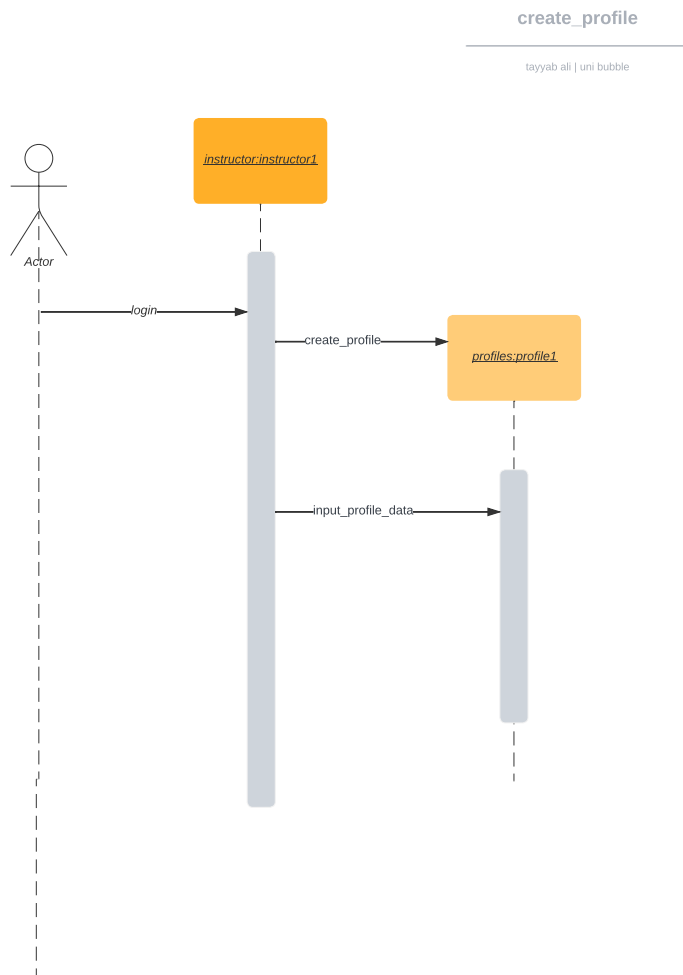
5.1. Login



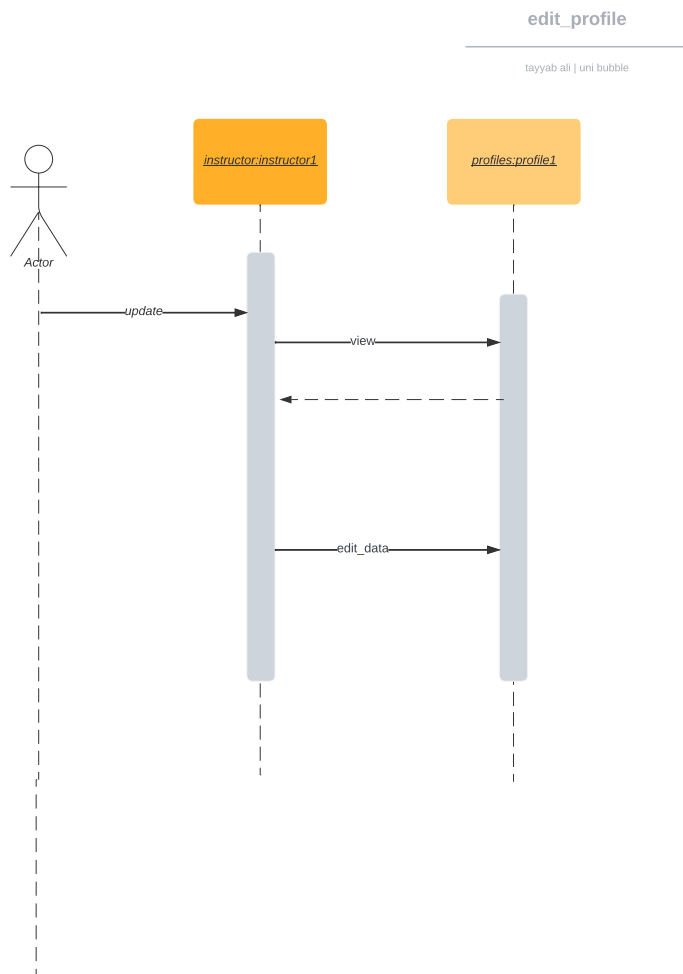
5.2 register



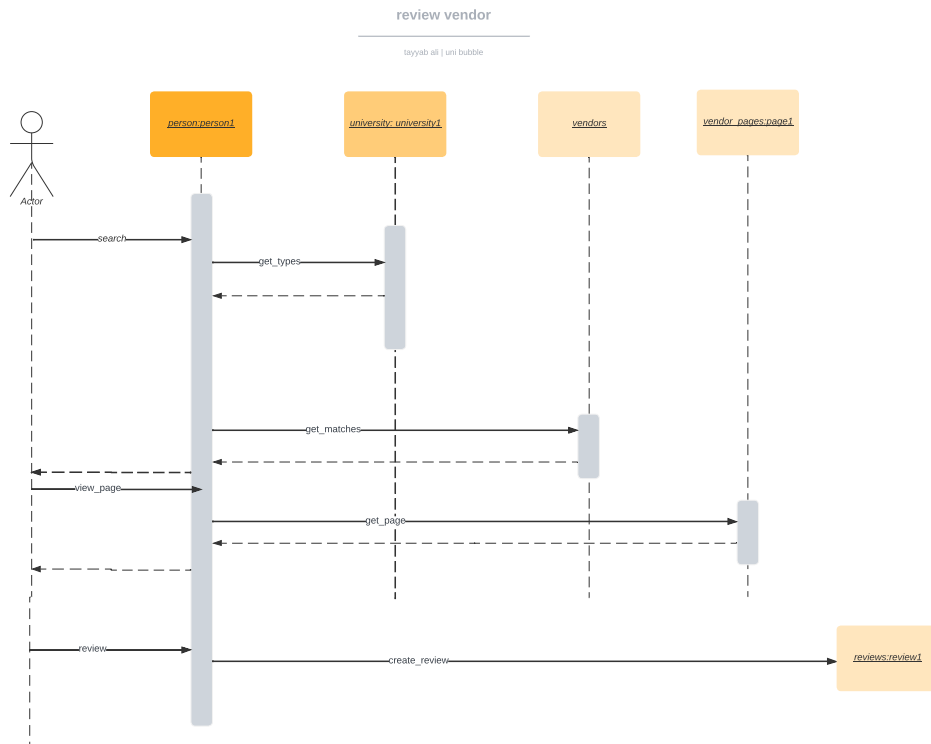
5.3 create profile



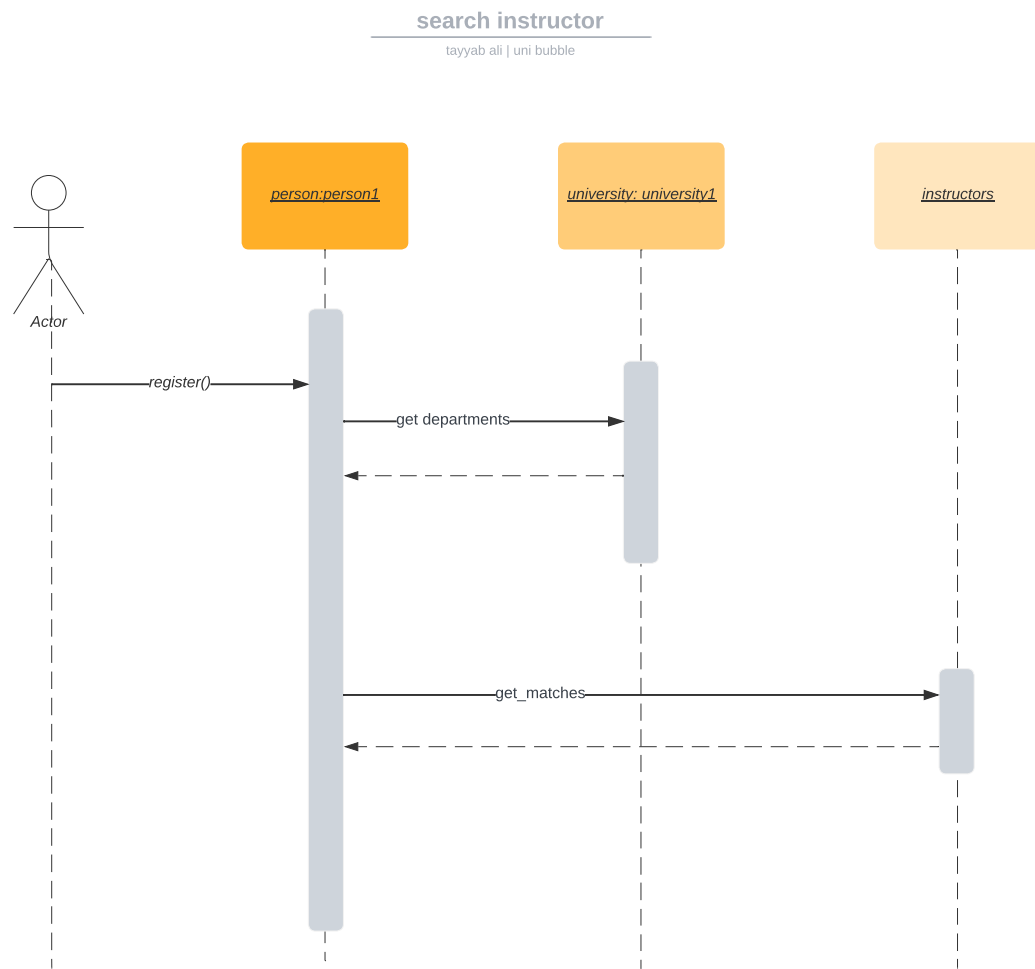
5.4 edit profile



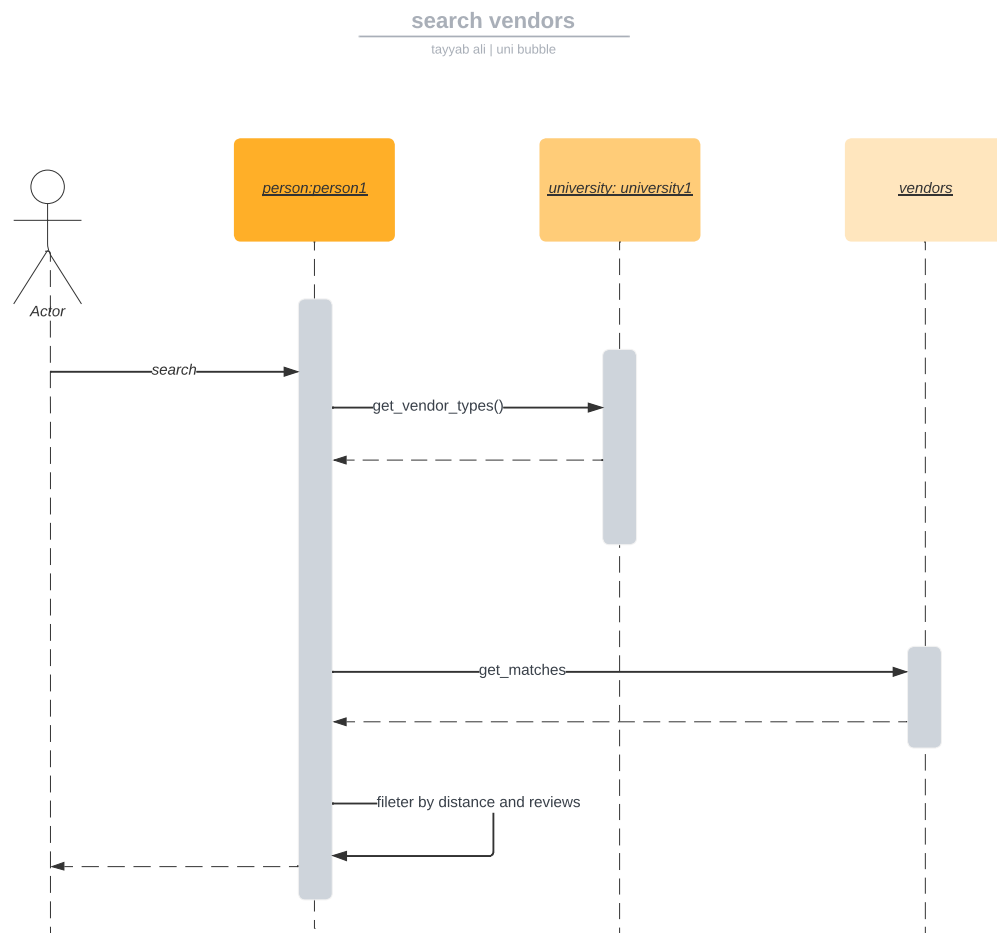
5.5 review_vendor



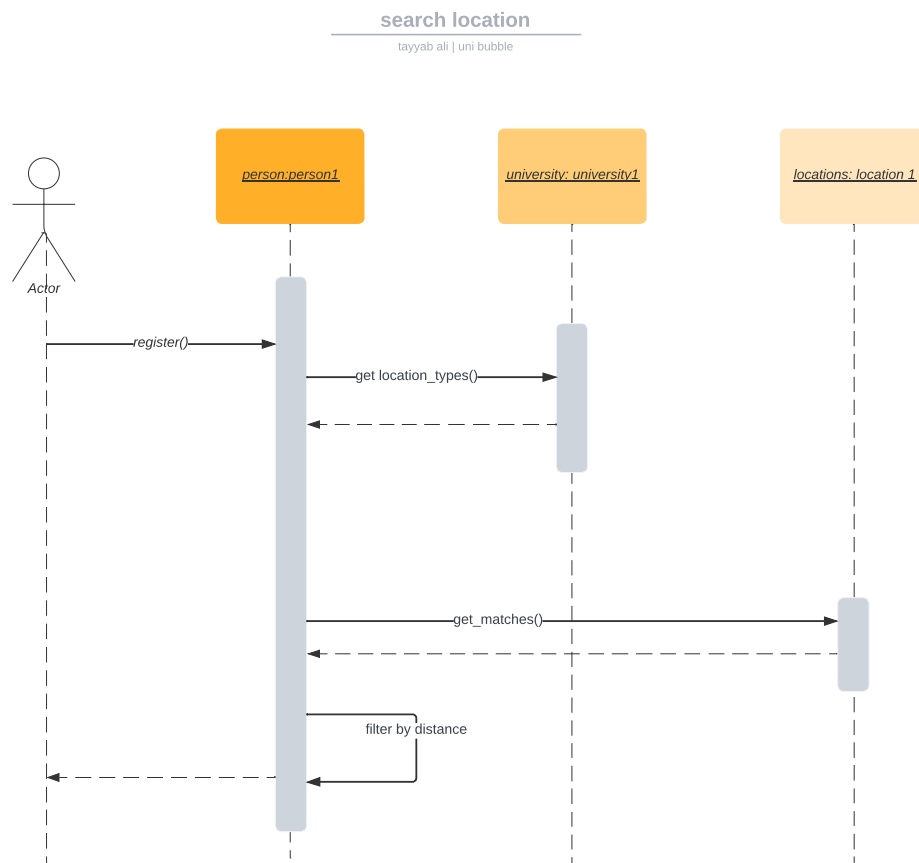
5.6 search_instructor



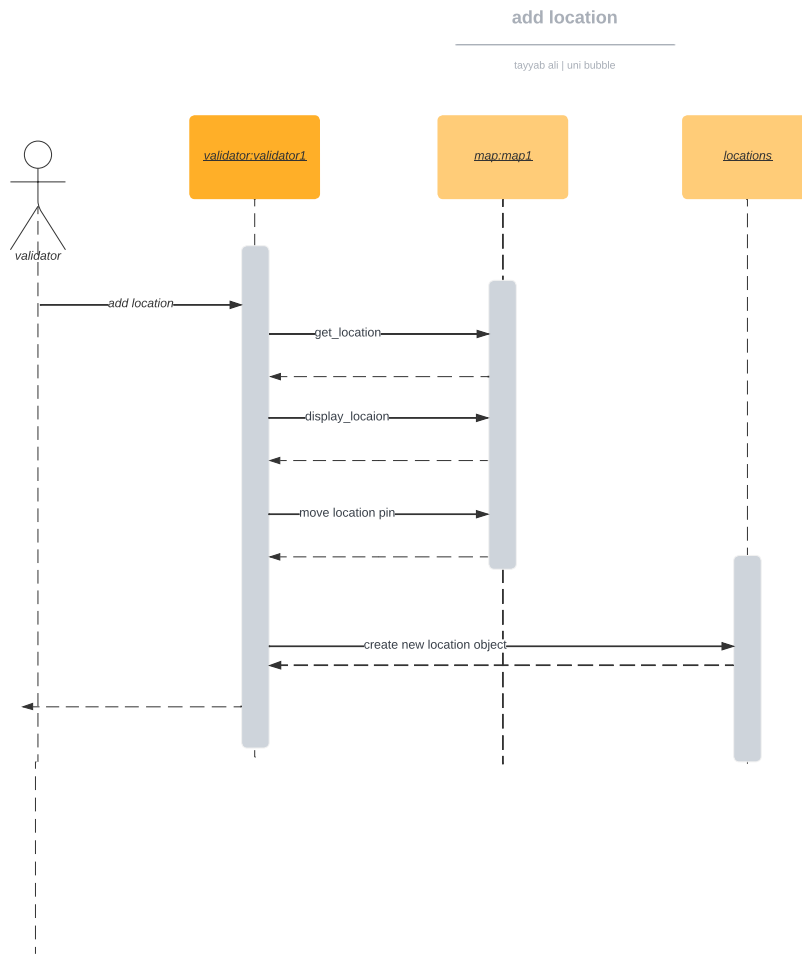
5.7 search_vendor



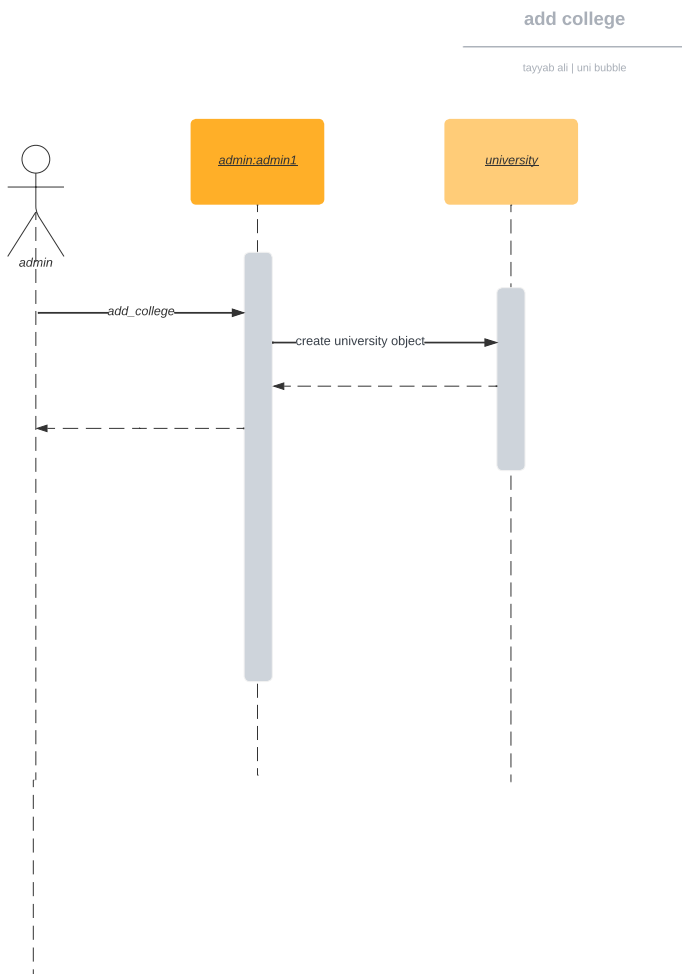
5.8 search_location



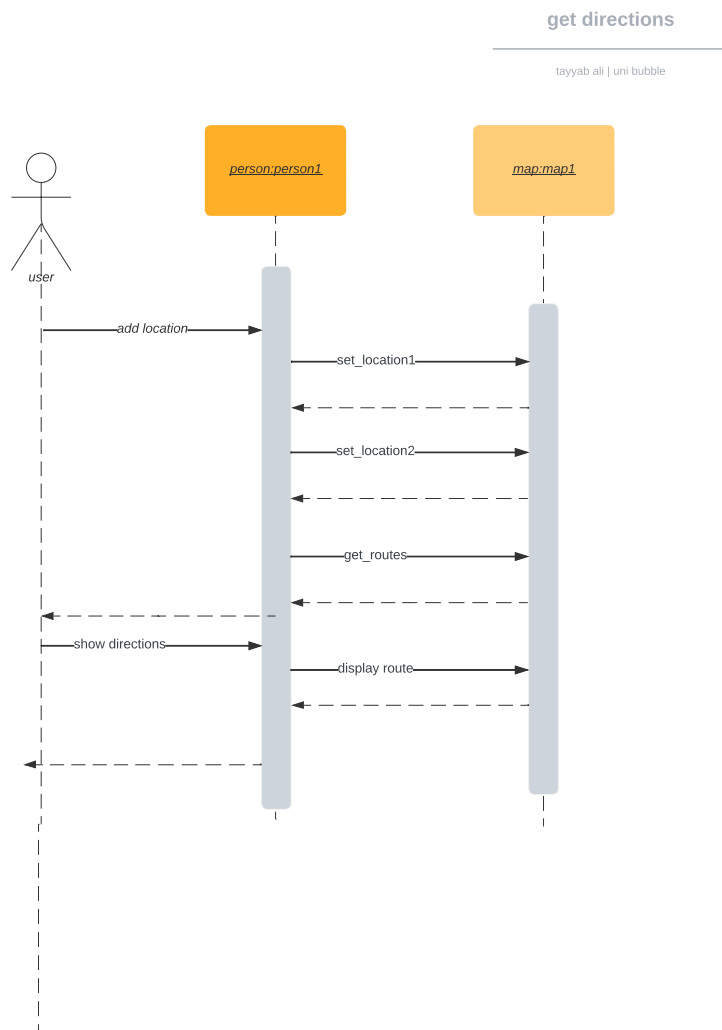
5.9 add location



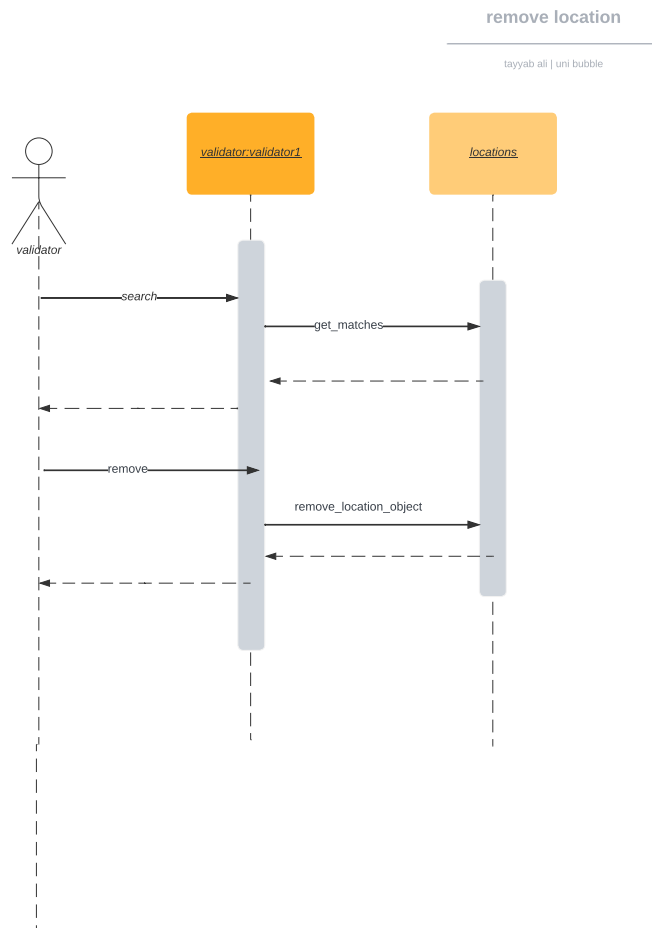
5.10 add college



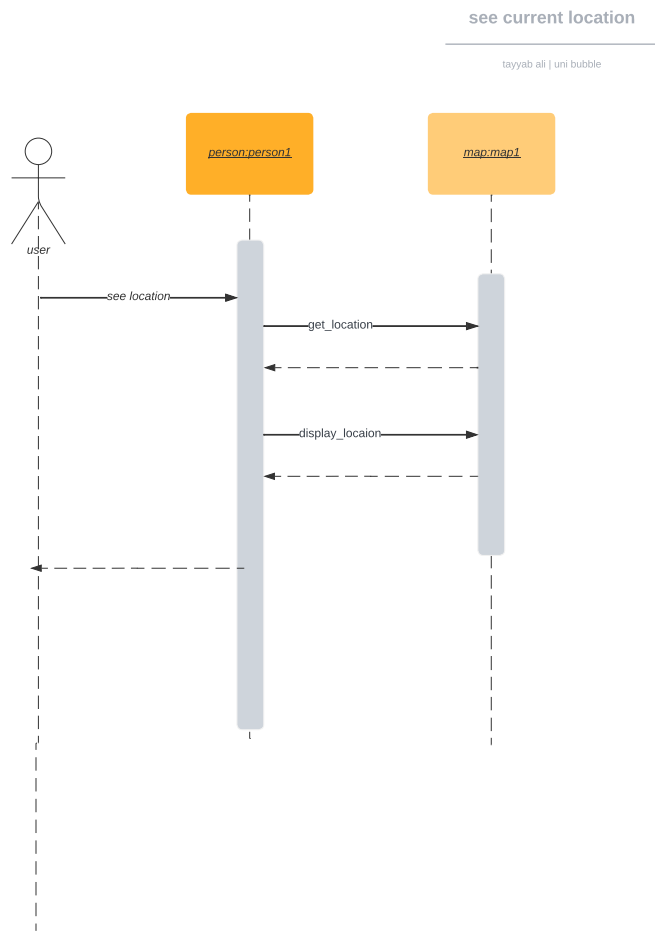
5.11 get_directions



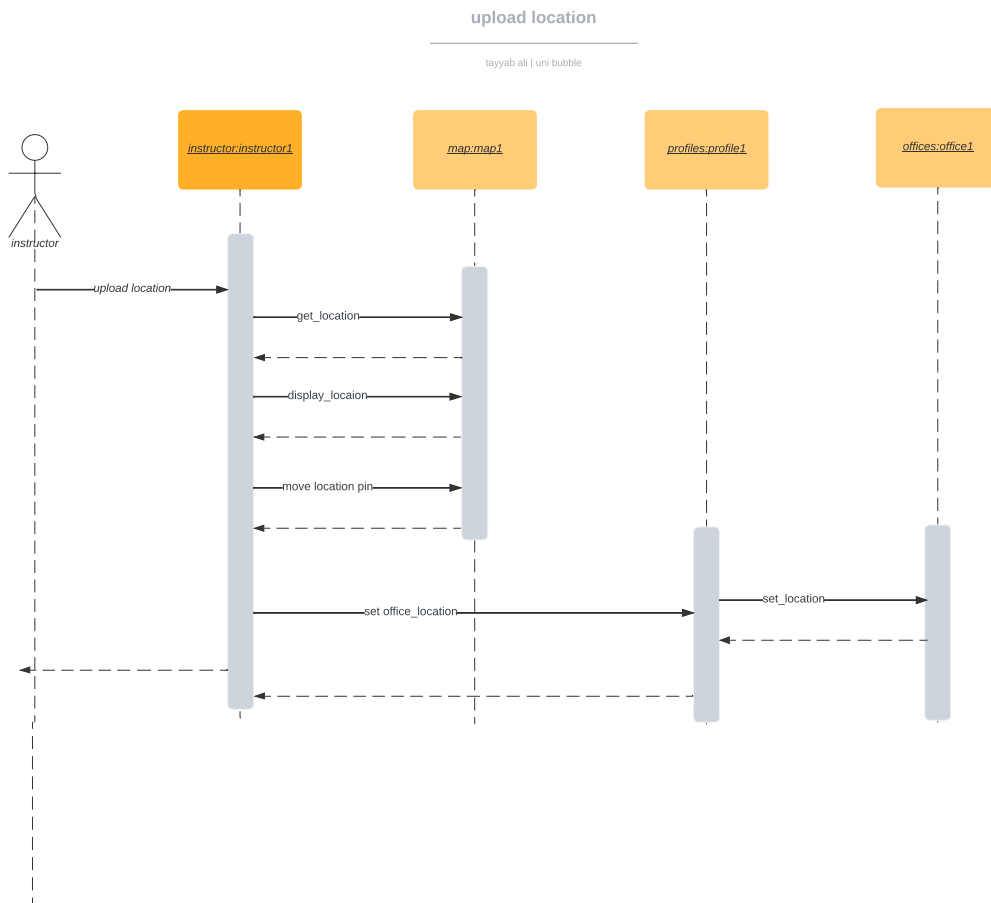
5.12 remove location



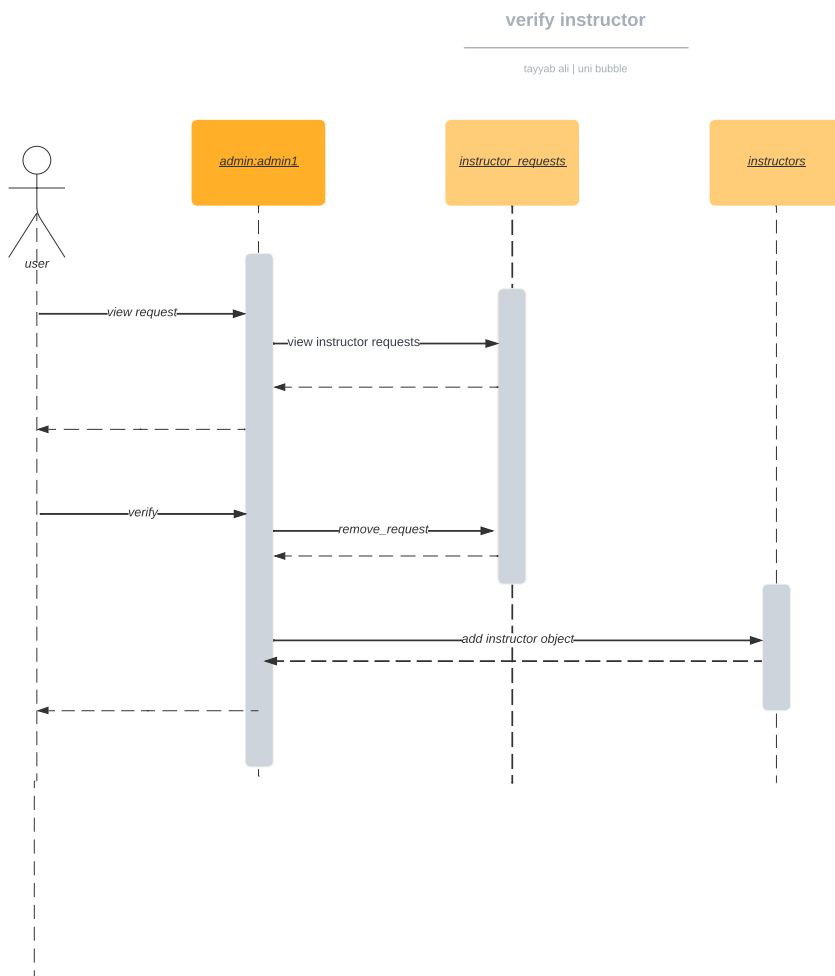
5.13 see current location



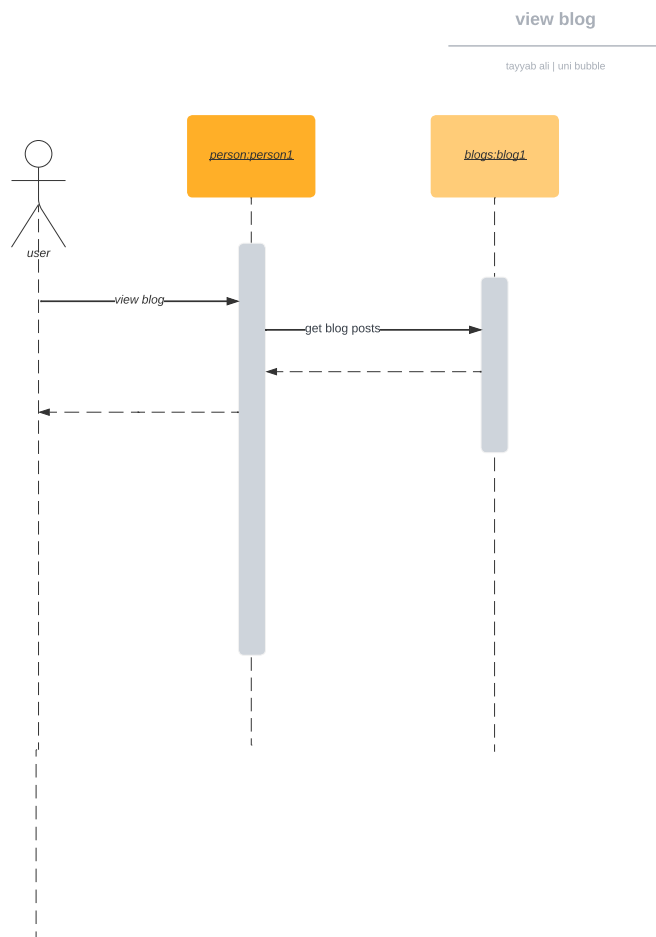
5.14 upload location



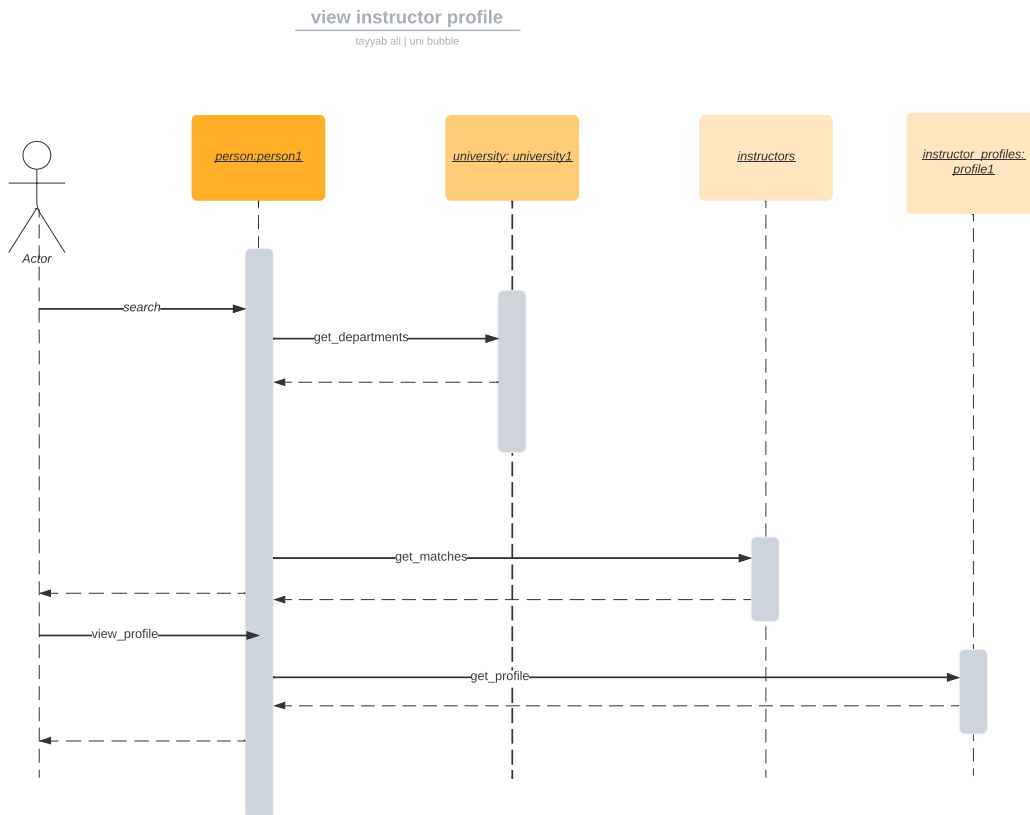
5.15 verify instructor



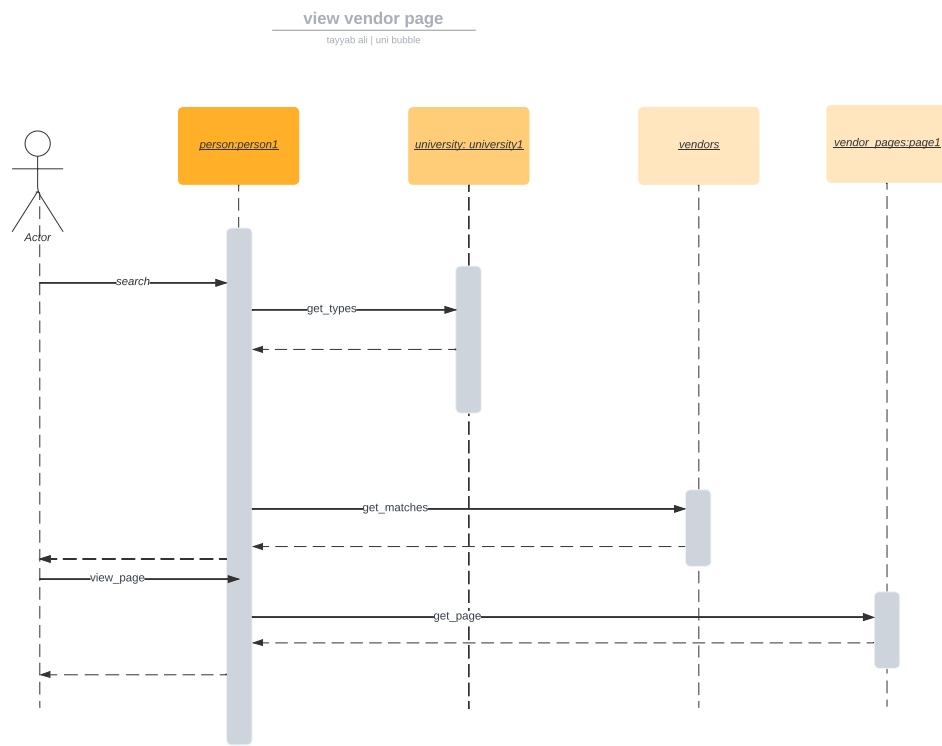
5.16 view blog



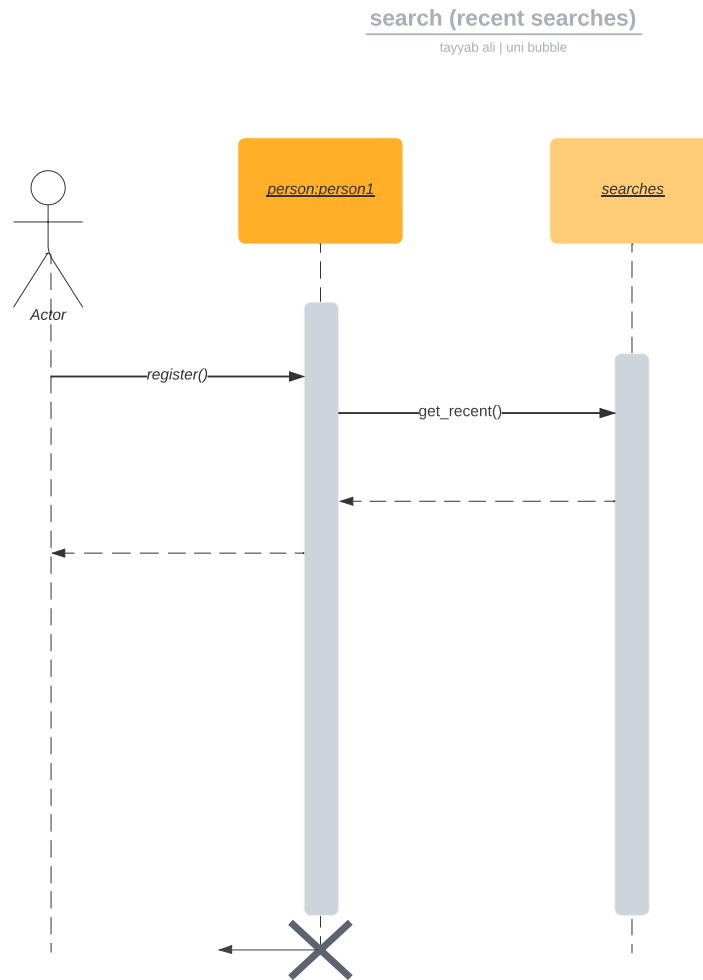
5.17 view instructor profile



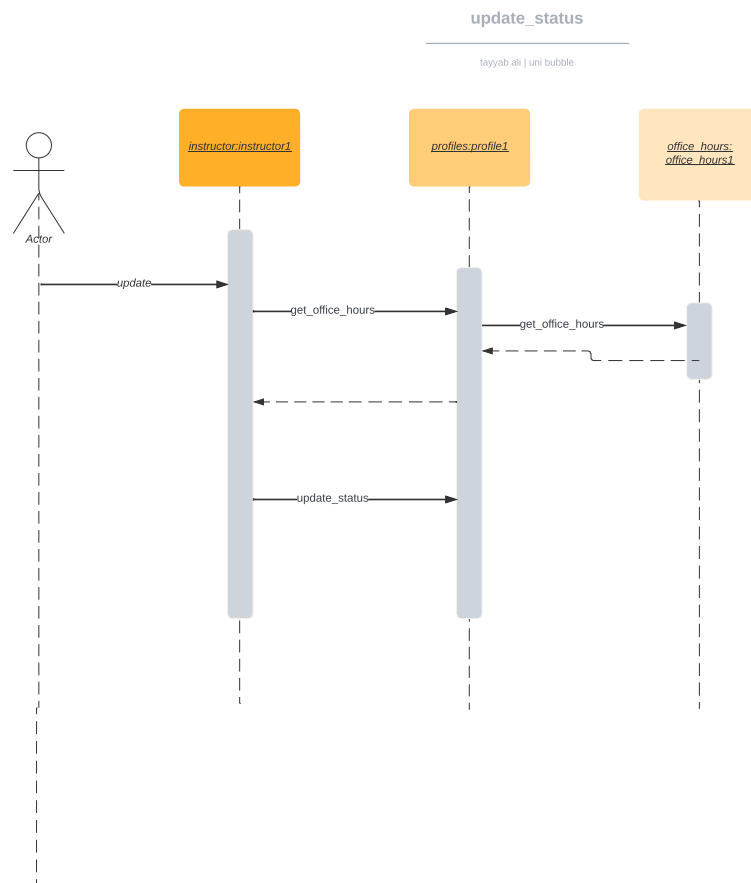
5.18 view vendor page



5.19 view past searches



5.20 update status

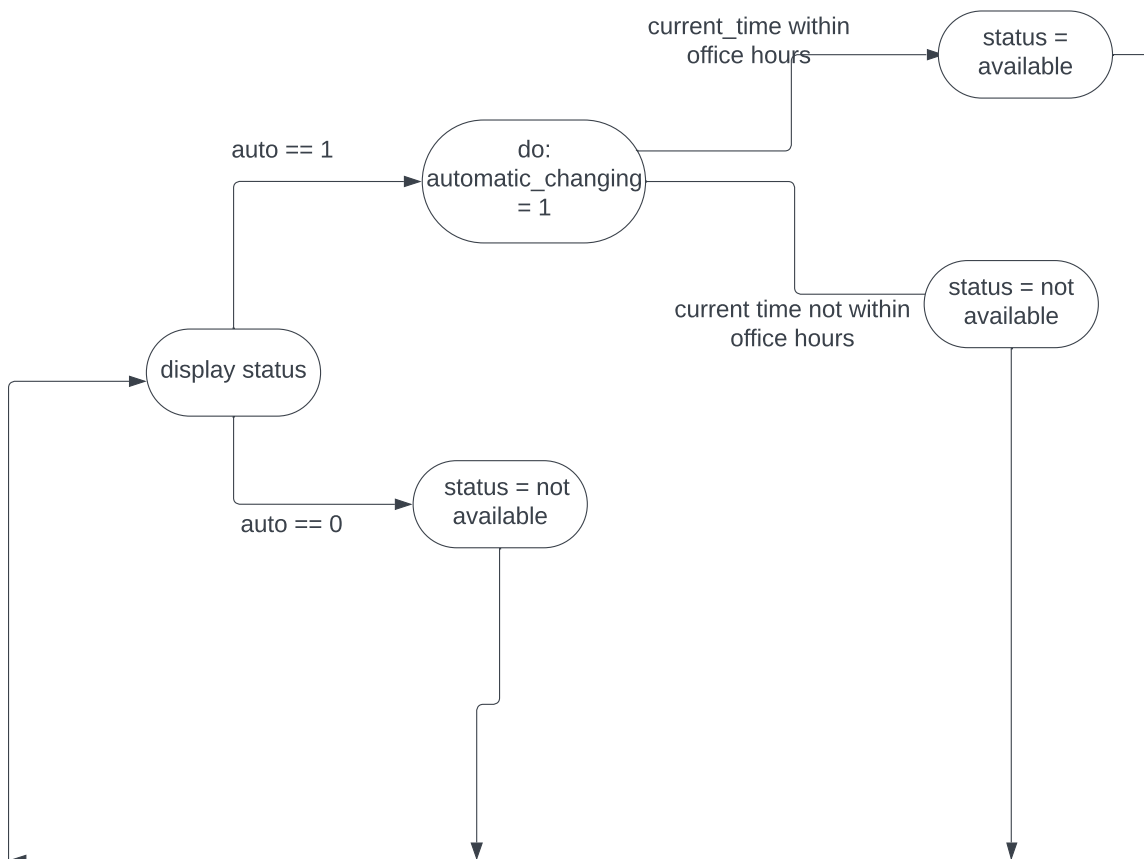


6. State Diagrams

6.1. Diagram details

Instructor object state change

6.2. Diagram



7. Non-functional Requirements / Quality Attributes

Sr#	Requirements
1	The system shall have a planned downtime of no more than 1 hour per month for maintenance.
2	The system should be able to support 100 concurrent users without significant performance degradation
3	The system's user interface shall be easy to navigate, with an average user satisfaction score of at least 8 out of 10 in usability testing.
4	The system shall respond to user actions within 2 seconds under normal load conditions.
5	The system shall provide meaningful error messages to users when unexpected situations occur.
6	Code changes and enhancements shall be completed within a maximum of 3 days after receiving the requirements.
7	It should be compatible with web browsers on desktop and mobile

8. Who Did What?

Name of the Team Member	Tasks done
Tayyab Ali	All tasks

9. Review checklist

Before submission of this deliverable, the team must perform an internal review. Each team member will review one or more sections of the deliverable.

Section Title	Reviewer Name(s)
All sections	Tayyab Ali