

SC2006 - Software Engineering LAB 2 Deliverable

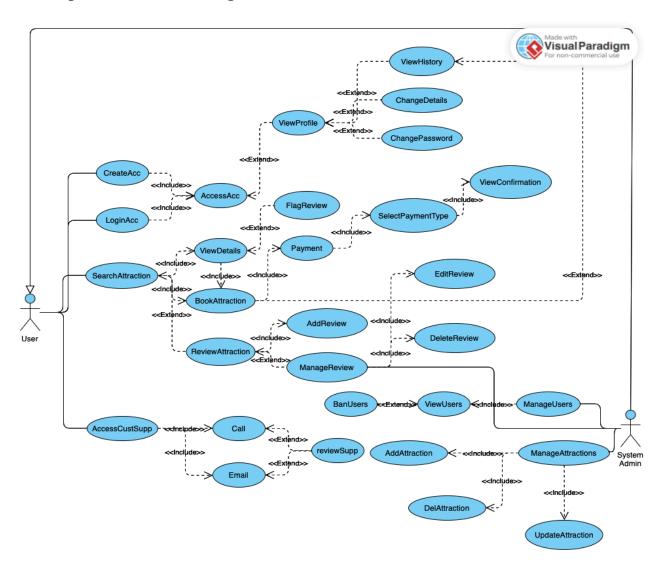
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Team	SingScape	
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	Darren Jong Jet Ren	
Members	Jacob Tong Wai Hong	
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I. Completed Use Case Diagram:



II. Use Case Descriptions

1.1 CreateAcc

Use Case ID	1.1
Use Case Name	CreateAcc
Created By	Savanur Akash
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	Allows a person to create an account on SingScape to become a user
Preconditions	None
Postconditions	An account with a specific role (Admin or User) will be created for the user
Priority	High
Frequency of use	High
Flow of events Alternative Flows	 The system prompts the User to create an account by entering their full name, email and password The User enters the required information and clicks the 'Create Account' button to submit the inputs. The system prompts the User to verify their email by entering an OTP sent to the entered email. An account with a specific role (Admin or User) will be created for the user If the User selects the back navigation icon, the system
Alternative Flows	will navigate the User to the login page.
Exceptions	If any required information is missing or invalid, an error message is displayed.
Includes	None
Special Requirements	System needs to validate user input data.
Assumptions	None
Notes and Uses	None

1.2 LoginAcc

Use Case ID	1.2
Use Case Name	LoginAcc
Created By	Savanur Akash
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	Allows a person to login to their account on SingScape using their email and password
Preconditions	None
Postconditions	User is logged into SingScape and is navigated to the home screen of the application
Priority	High
Frequency of use	High
Flow of events	 The system prompts the User to login to their account by entering their email and password The User enters his/her email and password. The password is masked as dots, but the User can choose to unmask it by clicking on the eye icon. The User selects the "Login" button.
Alternative Flows	 If the user does not have a registered account, he/she will click on the 'Create Account' button to navigate to the account creation page If the user has forgotten their password, he/she can click on 'Forgot Password' button. The system will send an OTP to the user's email which the user can enter to login.
Exceptions	 If any required information is missing or invalid, an error message is displayed. If email and password do not match when the User tries to login in Step 4, SingScape shall display "Email and password do not match" to the user.
Includes	None
Special Requirements	System needs to validate user input data.
Assumptions	User has a registered account
Notes and Uses	None

1.3 AccessAcc

Use Case ID	1.3
Use Case Name	AccessAcc
Created By	Savanur Akash
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system redirects the user to the homepage after
	authentication and lets them access their account
Preconditions	The user either has to create an account or login
Postconditions	The user has access to edit their profiles or making
	bookings
Priority	High
Frequency of use	High
Flow of events	1. The system validates the register or login request
	2. After validation, the system redirects them to the home
	page
Alternative Flows	None
Exceptions	None
Includes	User logs in
Special Requirements	None
Assumptions	User has a registered account
Notes and Uses	None

1.4 ViewProfile

Use Case ID	1.4
Use Case Name	ViewProfile
Created By	Savanur Akash
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	Allows a User to view to their profile details on SingScape
Preconditions	The user has to be logged in successfully
Postconditions	The user has authority to edit their profile
Priority	High
Frequency of use	Low
Flow of events	The system displays the User's account details including name, email, phone number and booking history
Alternative Flows	2. The User is navigated to the home page if the back navigation button is clicked.
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

1.5 EditProfile

Use Case ID	1.5
Use Case Name	EditProfile
Created By	Savanur Akash
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	Allows a User to view to their profile details on
	SingScape
Preconditions	The user has access to their account
Postconditions	The user is able to edit personal information or change
	password
Priority	High
Frequency of use	Low
Flow of events	1. The system allows the User to change their account
	details
	2. The User selects the either email, name or phone
	number to be edited
	3. The chosen attribute will be updated
Alternative Flows	1. The User selects the 'Change Password' button and
	enters their new password
	2. The account password will be updated once the User
	enters the OTP sent to their email
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

2.1 SearchAttraction

Use Case ID	2.1
Use Case Name	SearchAttraction
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	Allows the User to search for attractions
Preconditions	None
Postconditions	User is allowed to make bookings or read reviews
Priority	High
Frequency of use	High
Flow of events	 The system shall display a search bar that Users can use to search for attractions based on location, type, and availability. The system shall provide filters for users to narrow their search results based on attraction type, price range, and user ratings. The system shall display a list of available attractions that match the search criteria in an easy-to-read format. The system shall allow users to sort search results by price, rating, and location. The system shall allow users to view details, book and/or review a selected attraction.
Alternative Flows	None
Exceptions	If the search is invalid, the system will display the particular exception.
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

2.2 ViewDetails

Use Case ID	2.2
Use Case Name	ViewDetails
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system will display the details of the attraction chosen
Preconditions	The User has selected a particular attraction
Postconditions	The User is allowed to flag reviews if necessary
Priority	High
Frequency of use	High
Flow of events	1. The system shall display a detailed page with the attraction's description, images, pricing information, timings and reviews/ratings, etc.
Alternative Flows	1. The User is navigated back to the search listings if he/she clicks the back navigation button.
Exceptions	None
Includes	Searching for an attraction
Special Requirements	None
Assumptions	None
Notes and Uses	None

2.3 BookAttraction

Use Case ID	2.4
Use Case Name	BookAttraction
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system will display the details of the attraction chosen
Preconditions	The User has selected a particular attraction
Postconditions	The User is allowed to make payment
Priority	High
Frequency of use	High
Flow of events	 The system will display available dates and time slots for booking. The User will indicate the number of tickets required The system shall prompt users to confirm their selection before proceeding with payment. The User is redirected to the payment portal after clicking 'Confirm Booking' button.
Alternative Flows	None
Exceptions	None
Includes	Searching for an attraction
Special Requirements	None
Assumptions	None
Notes and Uses	None

3.1 Payment

Use Case ID	3.1
Use Case Name	Payment
Created By	Darren Jong Jet Ren
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User	
Descriptions	Allows the user to start making payment for the	
	booking made	
Preconditions	User has made a booking	
Postconditions	Users have the option to choose the type of payment method of payment.	
Priority	High	
Frequency of use	High	
Flow of events	The user is prompted different options to choose the type of payment method.	
	2. The user is prompted for confirmation of payment after payment is made.	
Alternative Flows	 The user changes their mind and is prompted a confirmation. 	
	2. The user is redirected back to the booking page.	
Exceptions	None	
Includes	Booking of attraction	
Special Requirements	None	
Assumptions	The user does not change their mind	
Notes and Uses	None	

3.2 SelectPaymentType

Use Case ID	3.2
Use Case Name	SelectPaymentType
Created By	Darren Jong Jet Ren
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User	
Descriptions	The user pays the bill from either PayNow or CreditCard	
Preconditions	User should have confirmed to make payment after booking	
Postconditions	User is redirected to the confirmation or failed transaction page	
Priority	High	
Frequency of use	High	
Flow of events	 The user is asked to provide card details or scan the QR code The user is then asked to review and confirm the payment If the payment is successful, he will be redirected to the confirmation page The user will receive the booking details by email 	
Alternative Flows	If the payment fails, they will be redirected to the failed transaction page	
Exceptions	None	
Includes	Confirming to make payment	
Special Requirements	None	
Assumptions	None	
Notes and Uses	None	

4.1 ReviewAttraction

Use Case ID	4.1
Use Case Name	Review Attraction
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system shall prompt and allow users to leave a
	review
Preconditions	The User has selected a particular attraction
Postconditions	The User is allowed to add or manage reviews made
Priority	Medium
Frequency of use	Medium
Flow of events	 Users will be prompted to submit a review for the attraction they have searched for.
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

4.2 AddReview

Use Case ID	4.2
Use Case Name	AddReview
Created By	Xu Junpeng
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The user has the option to add, delete, update and flag
	users.
Preconditions	User should be logged in to their account
Postconditions	None
Priority	Medium
Frequency of use	Medium
Flow of events	1. The user is allowed to add a review about an attraction
	2. The system takes the review and updates it in the
	review section of the attraction
Alternative Flows	None
Exceptions	None
Includes	User chooses to review the attraction
Special Requirements	None
Assumptions	None
Notes and Uses	None

4.3 ManageReview

Use Case ID	4.3
Use Case Name	ManageReview
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system will allow users to manage reviews already made by themselves.
Preconditions	The User has made a review
Postconditions	The User can choose to edit or delete reviews made
Priority	Low
Frequency of use	Low
Flow of events	Users will click on either "Edit review" or "Delete Review"
	 Users will be prompted a confirmation of either action. Users will be given the option to "Cancel" if the user changes their mind.
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

4.4 DeleteReview

Use Case ID	4.4
Use Case Name	DeleteReview
Created By	Xu Junpeng
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User	
Descriptions	The user can delete his review for a particular	
	attraction	
Preconditions	User should be logged in to their account	
Postconditions	None	
Priority	Medium	
Frequency of use	Medium	
Flow of events	1. The user chooses a particular review he needs to delete	
	from the reviews submitted by him	
	2. After confirmation, the system will delete the review	
	from the attractions review list	
Alternative Flows	None	
Exceptions	None	
Includes	User chooses to manage their reviews	
Special Requirements	None	
Assumptions	None	
Notes and Uses	None	

4.5 EditReview

Use Case ID	4.5
Use Case Name	EditReview
Created By	Xu Junpeng
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User	
Descriptions	The user can edit his review from a particular attraction	
Preconditions	User should be logged in to their account	
Postconditions	None	
Priority	Medium	
Frequency of use	Medium	
Flow of events	 The user chooses a particular review he needs to edit from the reviews submitted by him After confirmation, the system will edit the review from the attractions review list 	
Alternative Flows	None	
Exceptions	None	
Includes	User chooses to manage their reviews	
Special Requirements	None	
Assumptions	None	
Notes and Uses	None	

4.6 FlagReview

Use Case ID	4.6
Use Case Name	FlagReview
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The system will allow users to flag out inappropriate
	reviews
Preconditions	The User is viewing the details of the selected
	attraction
Postconditions	None
Priority	Low
Frequency of use	Low
Flow of events	1. Users shall click on the 'Flag' button next to the review
	deemed inappropriate.
	2. The system will notify the admin of flagged reviews for
	further investigation.
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

5.1 AccessCustSupp

Use Case ID	5.1
Use Case Name	AccessCustSupp
Created By	Jacob Tong Wai Hong
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor		User
Descriptions		The user can contact the admin for support whenever
		he deems required
Preconditions		User should be logged in to their account
Postconditions		User have the options to call or email for support
Priority		High
Frequency of use		Medium
Flow of events	1.	The user can access customer support from the admin
	_	either via email or phone call
	2.	If the user chooses the email option, the system will
		allow the user to type in their query and it will be sent
		to the admin's email ID.
	3.	The phone number will also be provided if the user
		wishes to call
Alternative Flows	None	
Exceptions	None	
Includes	None	
Special Requirements	None	
Assumptions	None	
Notes and Uses	None	

5.2 ReviewSupp

Use Case ID	5.2
Use Case Name	ReviewSupp
Created By	Jacob Tong Wai Hong
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	User
Descriptions	The user can leave a review or feedback regarding the
_	support provided.
Preconditions	User should have called or emailed for customer
	support
Postconditions	None
Priority	High
Frequency of use	Medium
Flow of events	1. Users are prompted an option to leave a review or
	feedback after calling or emailing the admin.
	2. User leaves a written review and chooses an option
	from 1-5 to rate the support system provided.
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.1 SelectAdminActivity

Use Case ID	1.1
Use Case Name	SelectAdminActitvity
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	Allows admin to review attractions and make necessary changes as and when required. Admin has the power to ban users based on their history of booking information. Admin also has the means to facilitate and manage the reviews posted by the customer for different attractions
Preconditions	The Admin must be logged in
Postconditions	None
Priority	High
Frequency of use	High
Flow of events	 The admin enters his credentials to login The system verifies the credentials and authenticates with an email otp The user gets to choose from the following services a. ManageAttractions b. ManageUsers c. ManagePartners If the admin chooses to ManageAttractions, he will be take to a different page where all attractions will be listed with the necessary information If the admin chooses to ManageUsers, he will be redirected to the page with all users and their information. If the admin chooses ManageReviews, he can remove content which is inappropriate for the general public. If the admin chooses ManagePartner, they can manage the partners. The admin can log out once their work is done
Alternative Flows	None
Exceptions	None

Includes	 ManageAttractions ManageUsers ManageReviews ManagePartners
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.2 ManageAttractions

Use Case ID	6.2
Use Case Name	ManageAttractions
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The admin can review and check the attractions in the system and can take necessary actions.
Preconditions	The Admin must be logged in
Postconditions	The attractions may be flagged or deleted
Priority	Medium
Frequency of use	Medium
Flow of events	 SingScape lists the attractions which can be accessed by the admin The admin selects the attraction he would like to process or alter The system gives options such as DELETE, UPDATE, ADD If the admin chooses the delete option, the attraction will be deleted for whatever the reason If the admin chooses the UPDATE, he can alter the information for the website such as price, timings etc
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.3 AddAttractions

Use Case ID	6.3
Use Case Name	AddAttractions
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The admin is able to add new attraction listings
Preconditions	The Admin must be logged in
Postconditions	None
Priority	Medium
Frequency of use	Medium
Flow of events	 The admin is provided a list of information to fill in for the attraction to be listed The admin is prompted a confirmation to add the attraction listing
Alternative Flows	 The admin chooses not to add the attraction listing The admin is redirected back to the admin activity page
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.4 DelAttractions

Use Case ID	6.3
Use Case Name	DelAttractions
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The admin is allowed to delete existing attraction listings
Preconditions	The Admin must be logged in
Postconditions	None
Priority	Medium
Frequency of use	Medium
Flow of events	 The system shall allow admins to select and remove selected attraction listing The system prompts the admin a confirmation on the removal of the selected attraction listing
Alternative Flows	 The admin chooses not to delete the select attraction listing The admin is redirected back to the admin activity page
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.5 UpdateAttractions

Use Case ID	6.4
Use Case Name	UpdateAttractions
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The admin is allowed to update attraction listings
Preconditions	The Admin must be logged in
Postconditions	None
Priority	Medium
Frequency of use	Medium
Flow of events Alternative Flows	 The system shall allow admins to review the information of existing attraction listings The system shall allow admins to make amendments to the attraction listing such as its description, location, pricing and images The system shall prompt admins a confirmation to update the selected attraction listing The admin chooses not to make an update for the
To di	selected attraction listing 2. The admin is redirected back to the admin activity page
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.6 ManageUsers

Use Case ID	6.5
Use Case Name	ManageUsers
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The Admin can manage registered users
Preconditions	The Admin must be logged in
Postconditions	The user's account will be updated accordingly
Priority	High
Frequency of use	Low
Flow of events	 Admin can view all registered users Admin can search and select users to update or ban The system shall update the selected user(s) and redirect the Admin to the user list
Alternative Flows	The Admin will be redirected to the Admin Homepage if back navigation button is clicked
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.7 BanUsers

Use Case ID	6.6
Use Case Name	BanUsers
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

Actor	Admin
Descriptions	The Admin can ban users
Preconditions	The Admin must be logged in
Postconditions	The user's account will be updated accordingly
Priority	High
Frequency of use	Low
Flow of events	 The admin will view the list of users and their activity on the website. The admin will verify the user's inappropriate actions The admin will ban the selected user based on the inappropriate actions The admin will notify the user via email that their account has been banned due to those inappropriate actions
Alternative Flows	The Admin will be redirected to the Admin Homepage if back navigation button is clicked
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.7 ManageReviews

Use Case ID	6.7
Use Case Name	ManageReviews
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 11, 2025

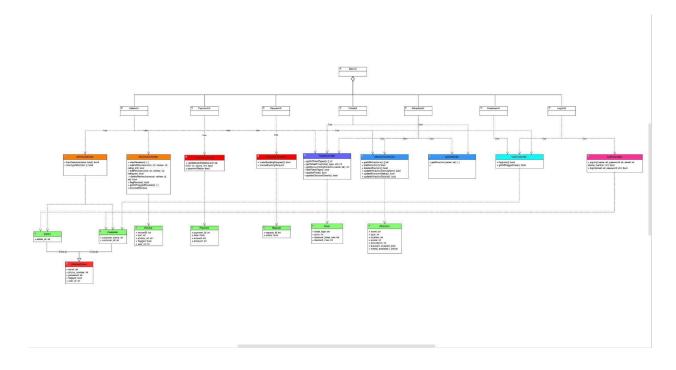
Actor	Admin
Descriptions	The admin is allowed to manage and process reviews.
Preconditions	The Admin must be logged in
Postconditions	Flagged review is deleted or ignored
Priority	Medium
Frequency of use	Medium
Flow of events Alternative Flows	 The admin enters the reviews page for the attraction after logging in He can filter the ones which are flagged and can decide whether to delete or ignore them. If the admin chooses or delete, the system will delete the review from the database If the admin chooses to ignore, the system will remove the flag from the review The system will return to the list of the remaining flagged reviews
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

6.8 ManagePartners

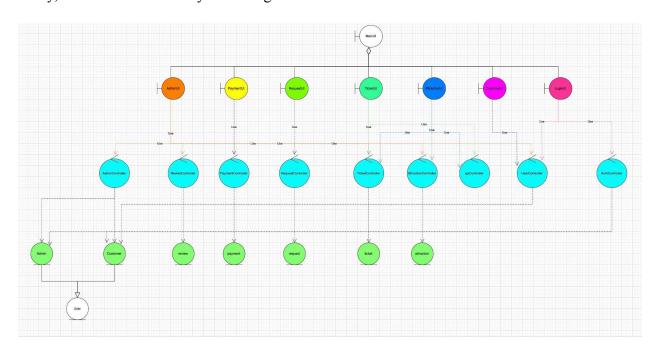
Use Case ID	6.8
Use Case Name	ManagePartners
Created By	Dhaded Aditya Mahalingeshwar
Date of creation	February 8, 2025
Date last updated	February 24, 2025

Actor	Admin
Descriptions	The admin is allowed to manage partners.
Preconditions	The Admin must be logged in
Postconditions	A new attraction partner may be added, deleted or
	updated
Priority	Medium
Frequency of use	Medium
Flow of events	1. The admin can access a list of partnered attractions.
	2. The admin can choose to add a new attraction partner
	3. The admin can choose to delete an existing partner
	4. The admin can choose to update partner details, such as
	the representative name and details
Alternative Flows	None
Exceptions	None
Includes	None
Special Requirements	None
Assumptions	None
Notes and Uses	None

Class Diagram of Entity Classes:

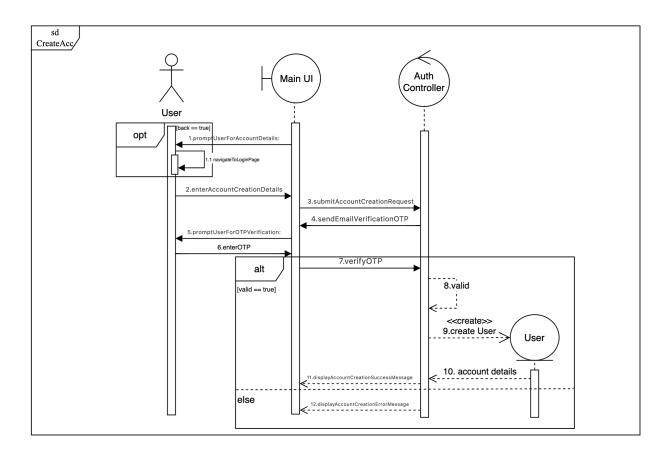


Entity, Control and Boundary class diagram:

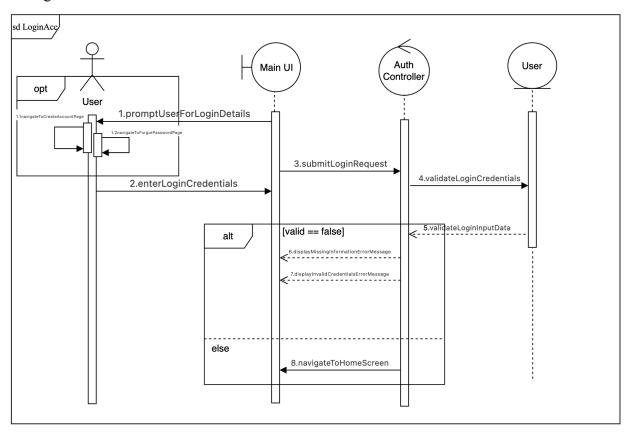


Sequence Diagrams of Use Cases:

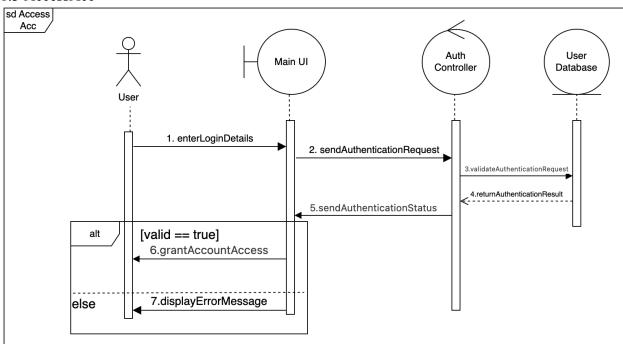
1.1 CreateAcc



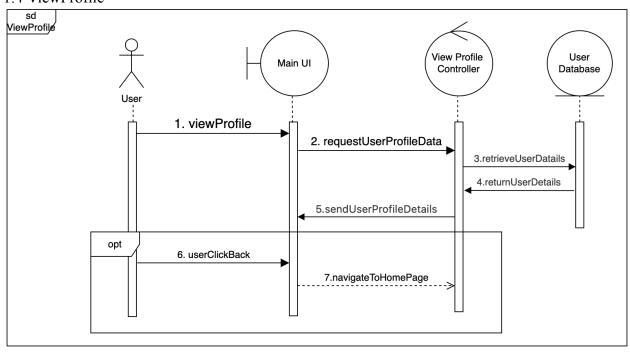
1.2 LoginAcc



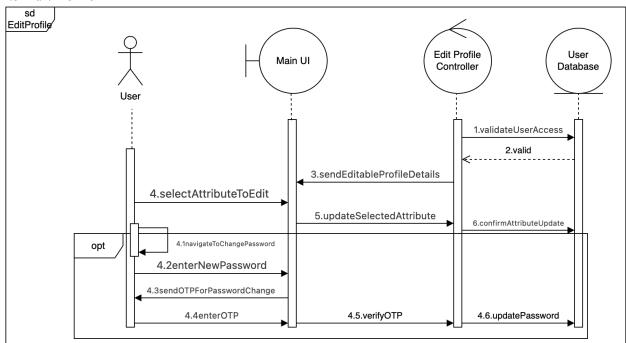
1.3 AccessAcc



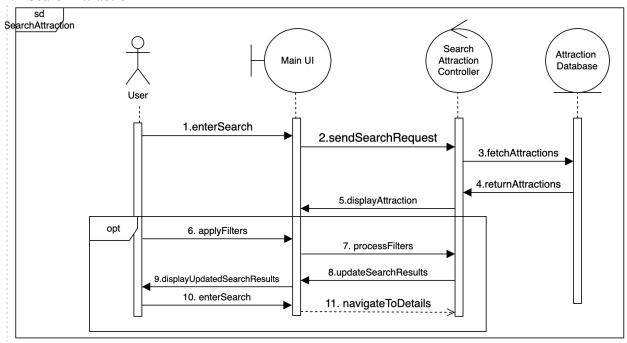
1.4 ViewProfile



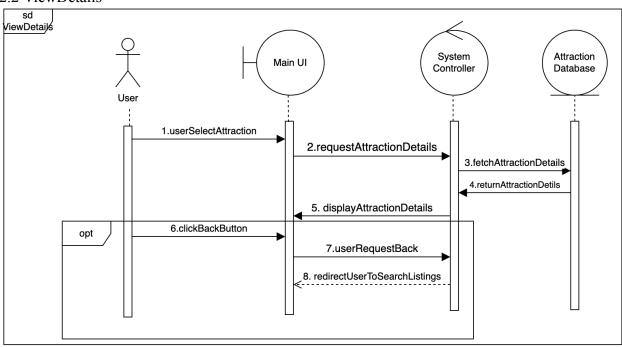
1.5 EditProfile



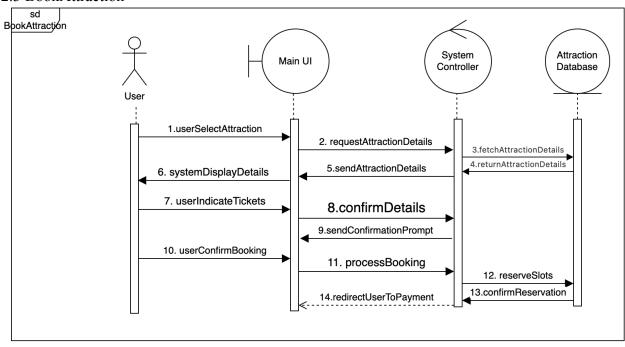
2.1 SearchAttraction

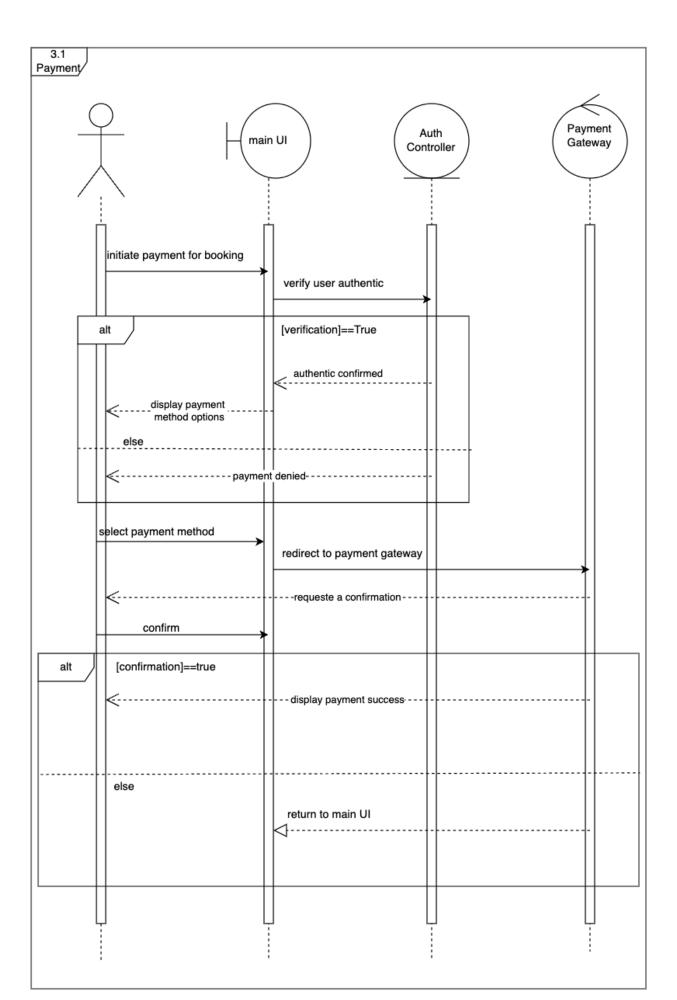


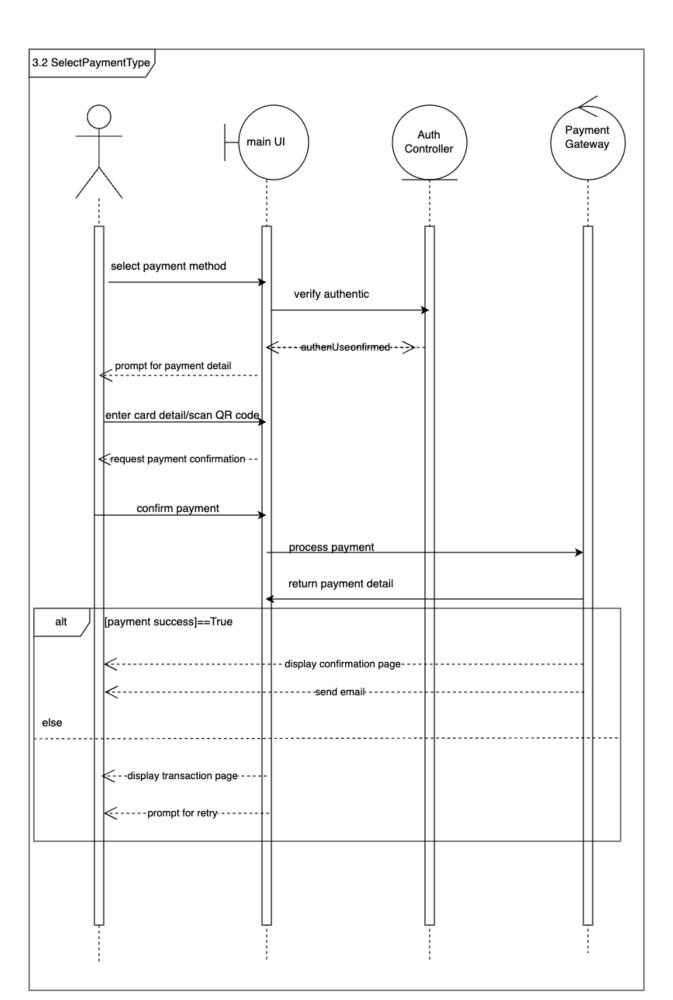
2.2 ViewDetails

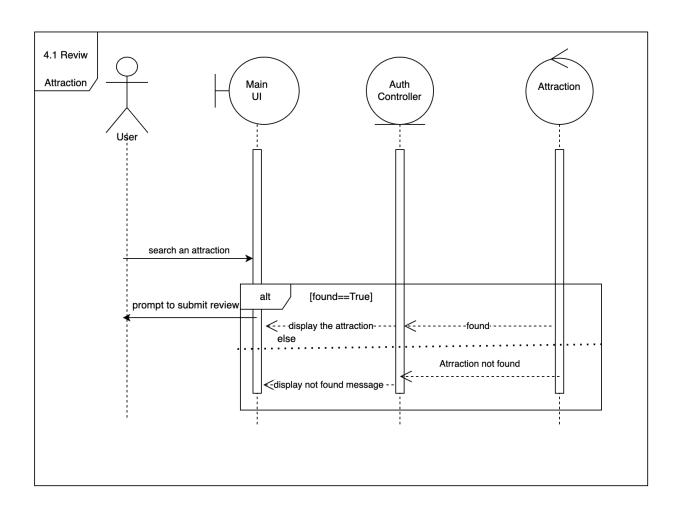


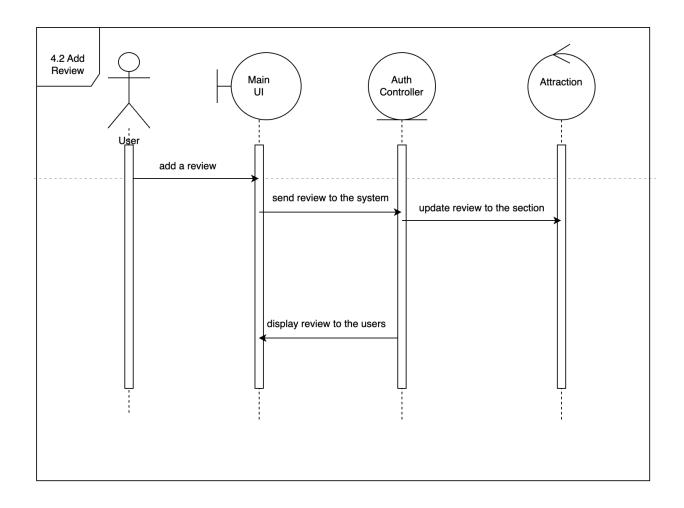
2.3 BookAttraction

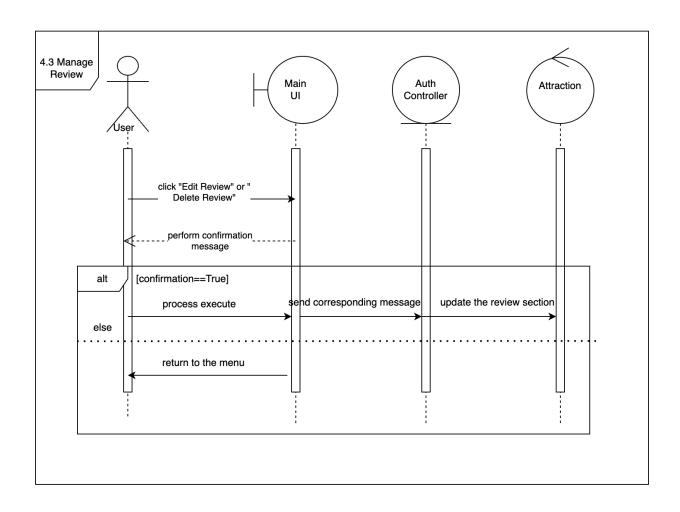


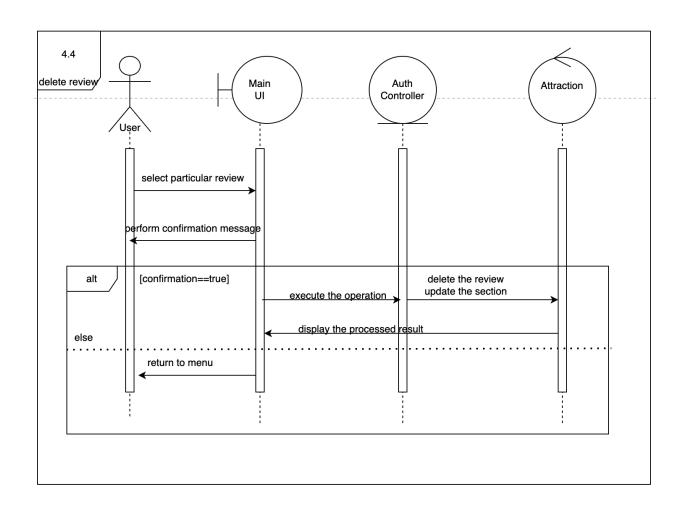


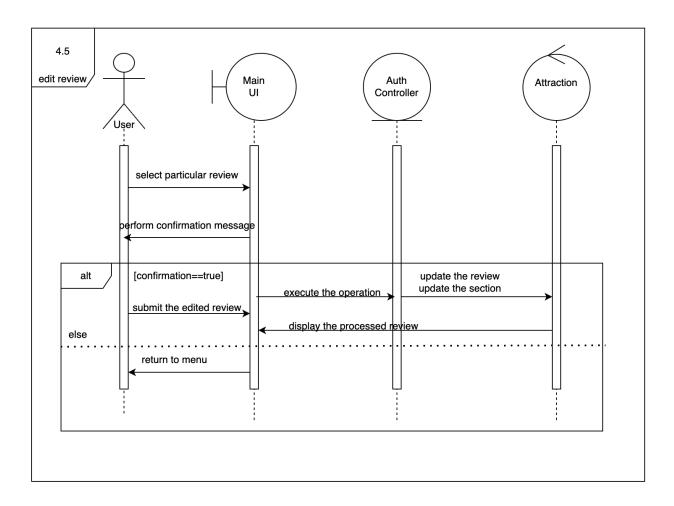




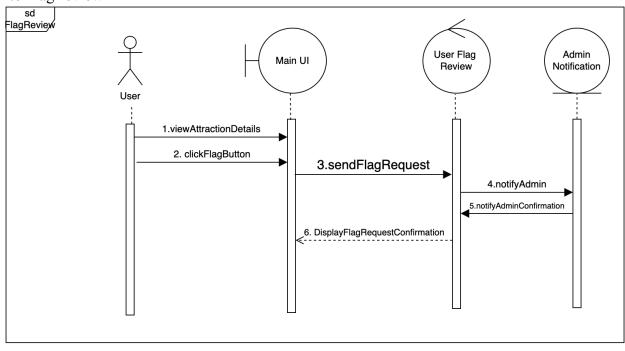


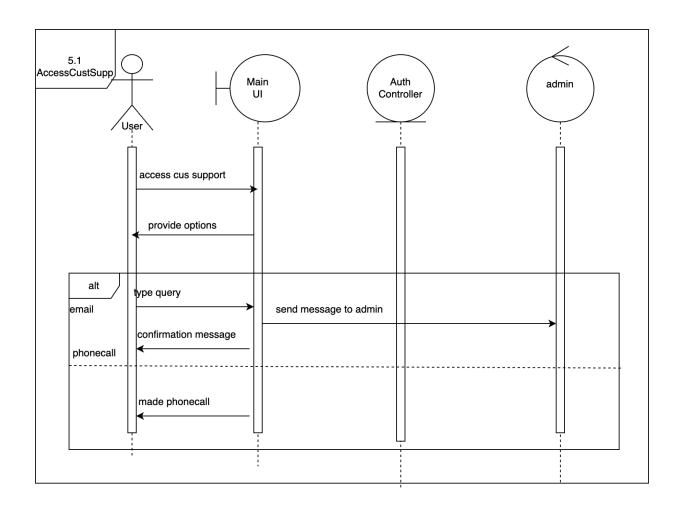


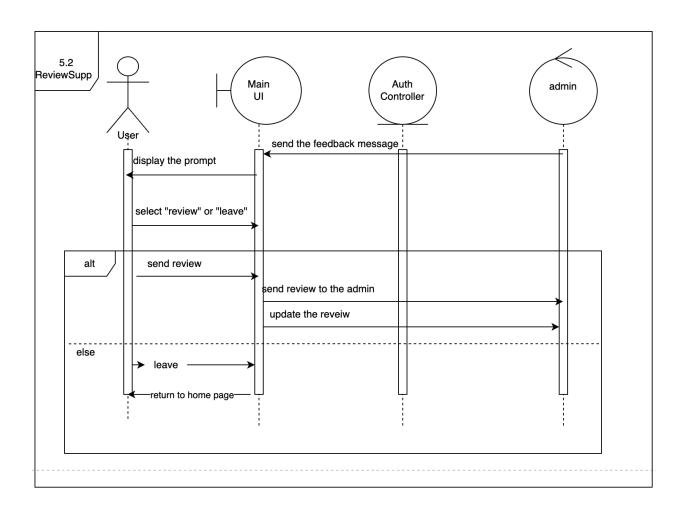


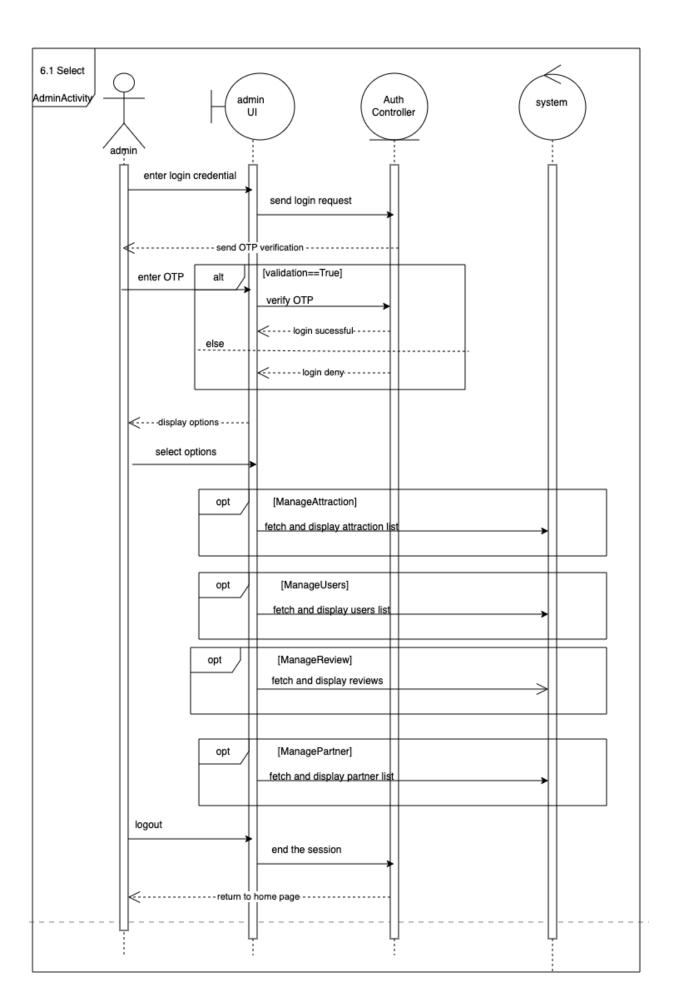


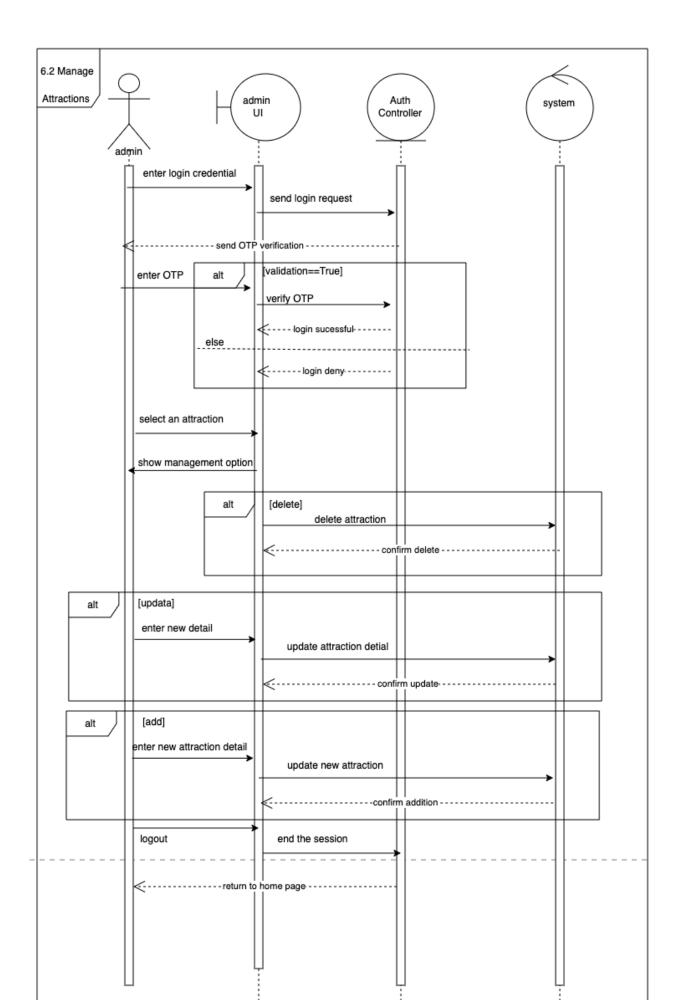
4.6 FlagReview

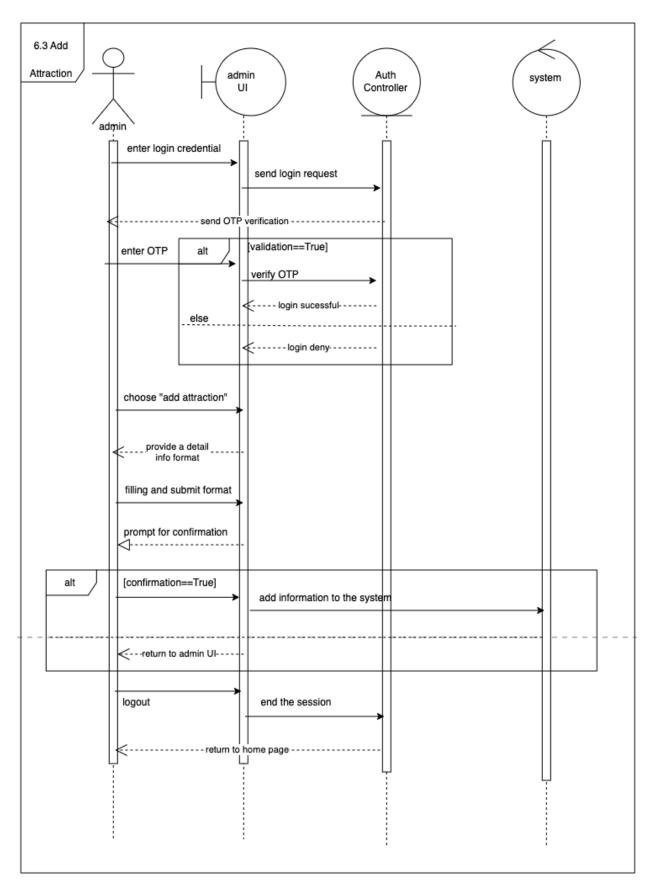


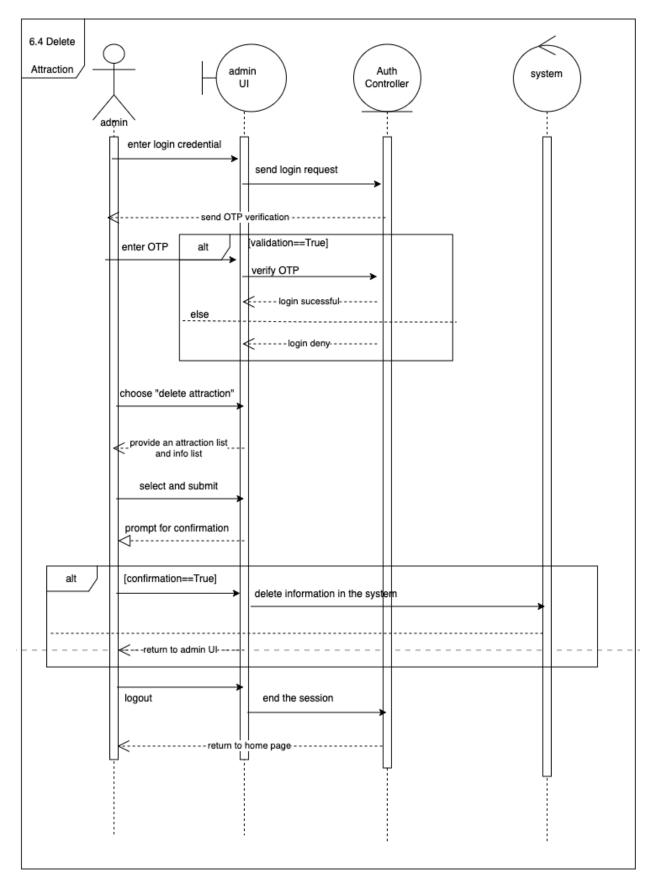


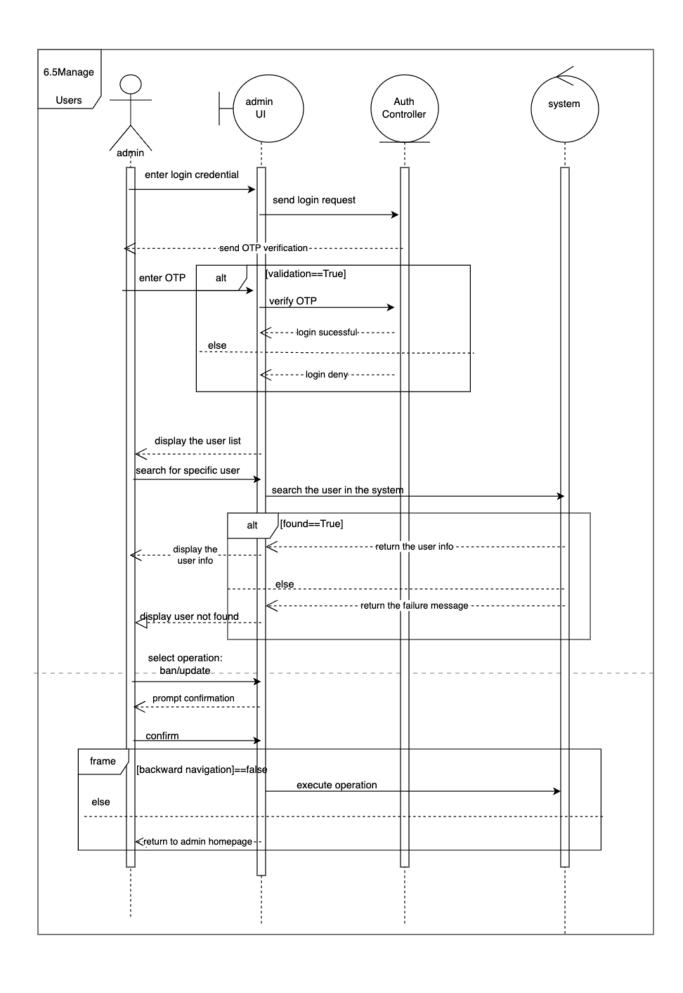


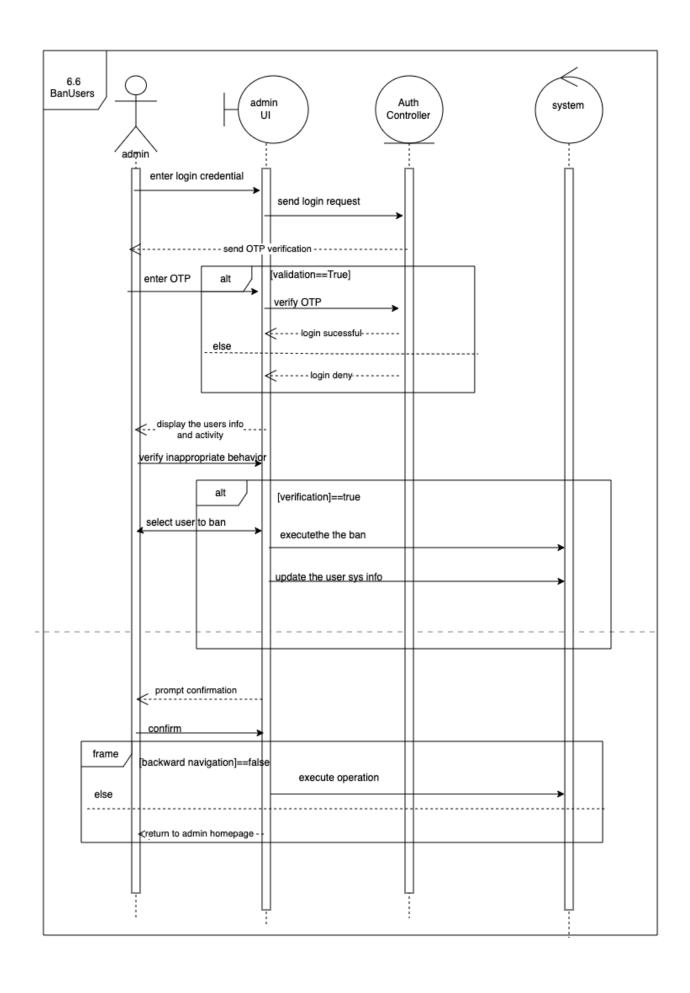


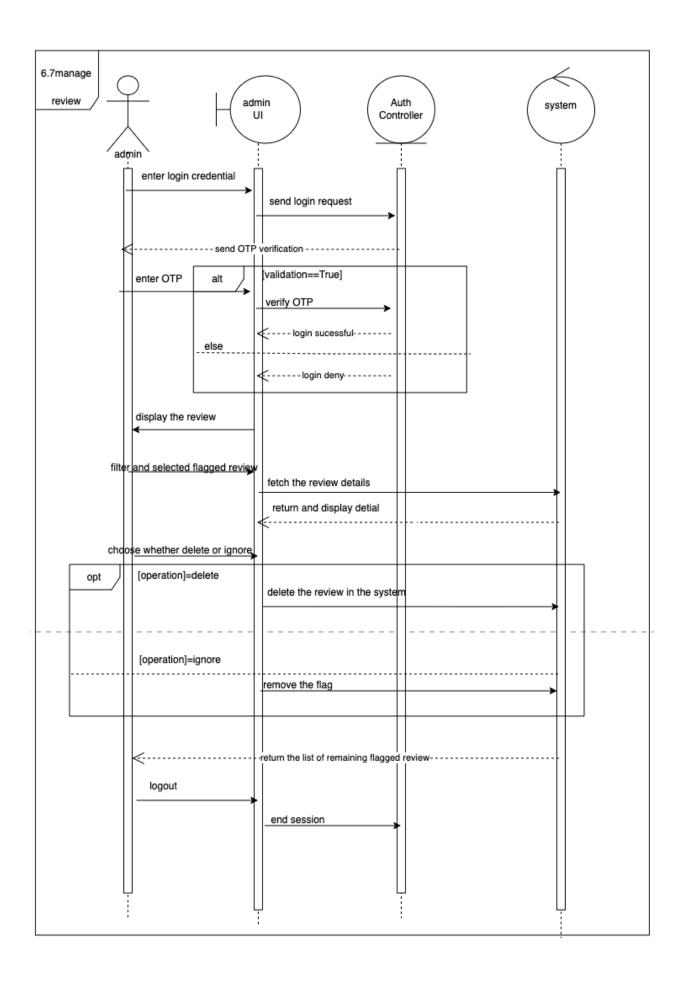












Flow Diagram

