

Menna Wa Feena Application

Software Process Models – Section NHH

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1. Description

Tourism is one of the most important development goals of the Kingdom's Vision 2030, to contribute to diversifying the base of the national economy and reducing dependence on oil. Tourism Organisation the Ministry of Tourism, the Tourism Development Fund, and the Saudi Tourism Authority, watch each of them established according to the best international laws, for tourism development.

Our application will display the most desirable touristic places to the user as it presents opinions and recommendations about them, Depending on their location. The application allows the user to sign up as a tourist, or a business user.

2. Scope

Hands-on: Tourist, business user (individual or group).

Stakeholders: Tourist, business user, tourist facilities, partners, ministry of tourism, developers, designers, project Manager, application tester.

3. Problem

Lack of the local Tourism systems for tourists in Saudi Arabia by recommendation systems.

4. Solution

Providing an application that allows locals and Tourist facilities to share posts for a touristic place and making recommendations for tourists depending on their geographical location.

The application allows viewing post and interact with it, it also allows booking a ticket for a tour. After that the tourist can leave a comment on the post and rate it for other tourists to benefit them.

5. Terms And Definitions

Term	Definition
User	General term for two types of users: tourist and business user.
Tourist	A tourist who can interact with posts via like, comment, share, and can book a ticket for tour.
Business user	A business user expects financial returns and is divided into two types: group business users and individual business user.
Individual business user	A single user can share experiences through their account.
Group business user	An organization that can share experiences and adds tours through their account, and they are required to subscribe monthly.
Admin	A person whose job involves helping to organize and supervise the way the application functions.
Post	General term for two terms: share experience and add tour.
Experience	Type of post available for free and can be interacted with via like, comment, and share.

Tour	A tour is provided by the group business user for a certain price and can be booked via buying a ticket.
Ticket	Paperless electronic document used as proof of your tour reservation.
Subscription	A financial commission is paid by the group business user per month.
Financial commission	Amount of money required from a group business user.
Fee	5% fee on monthly profits from all types of business users.

for a clearer picture:

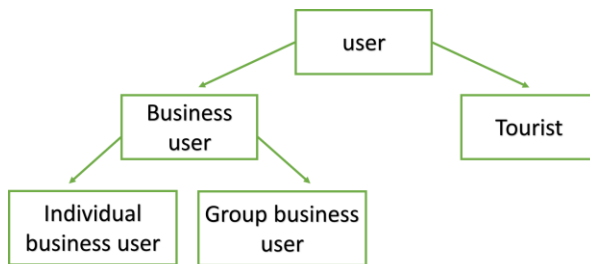


Figure 5.1

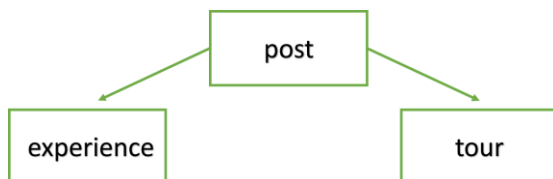


Figure 5.2

6. Functional And Non-functional Requirements

6.1. Functional Requirements

1. The system will be able to display a list of posts.
2. The system will be able to display discription about the post.
3. The system will allow business user to add posts.
4. The system will be able to display top visited posts.
5. The system will provide ticket information.
6. the system will allow payment via PayPal or credit card.
7. The tourist can be able to search for post.
8. The tourist can be able to filter posts depending on culture, activity, or entertainment.
9. The tourist can interact with a post via comment, like, share, and rate.
- 10.The tourist can book one or more tickets for a tour.
- 11.The tourist will be able to cancel the ticket.
- 12.The user can sign up as a tourist or a business user.
- 13.The user can sign in with a username and password.
- 14.The user must share their location.
- 15.The business user will be able to become a group or individual
- 16.The business user can share their experience and post it.
- 17.The group business user can add a tour.
- 18.The group business user will be able to determine the price of the tour
- 19.The group business user must pay 5% fee monthly
- 20.The group business user must pay a monthly financial commission for subscription.

- 21.The admin will be able to manage system.
- 22.The admin will be able to maintain system.
- 23.The admin will be able to update feature.

6.2. Non-functional Requirements

6.2.1. User interface

- The system must have an easy interface and be understandable by all users.

6.2.2. Security

- The user must enter the code entered on the phone to verify the validity of the data entered.
- Any user that login will be asked to enter a long strong password consist of characters and numbers, to avoid any breaches.
- The error rate of users submitting their payment details mustn't exceed 10 percent.

6.2.3. Availability

- The system can be available to a user 100% of the time.

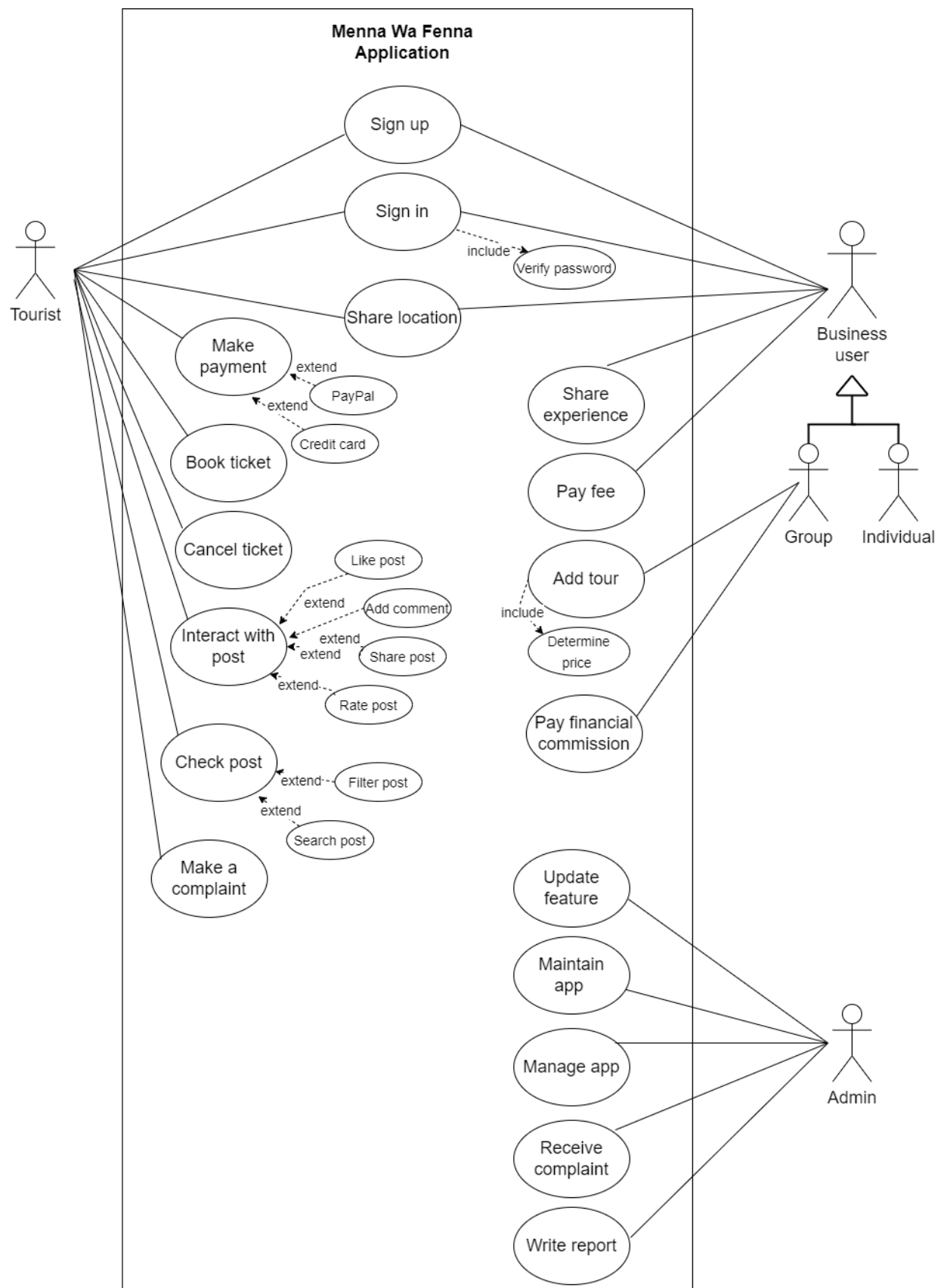
6.2.4. Performance

- The system should not take more than 5 seconds to respond to the user.

6.2.5. Usability

- The system should be clear and easy to use.

7. Use Case Diagram



8. Use Case Specifications

Name Use case	Sign in	
Brief description	User and admin can sign into their account by username and password	
Actor	Tourist, business user, admin	
Related Use Case	Verify password	
Precondition	User must have an account	
Postcondition	Verify password	
Flow of Activities	Actor	System

Name Use case	Share location	
Brief description	User must share their location once they are logged in	
Actor	Tourist, business user	
Related Use Case	None	
Precondition	User must be logged into account	
Postcondition	None	
Flow of Activities	Actor	System
	1. Sign in then a location interface appears, and they select their location.	2. Display the location interface for the user once they sign in.

Name Use case	Book ticket	
Brief description	Tourist can book a ticket for a tour provided by group business user	
Actor	Tourist	
Related Use Case	Make payment	
Precondition	None	
Postcondition	Make payment	
Flow of Activities	Actor	System
	1. Chooses a tour and check its price then book a ticket for it.	2. Calculates the total price for the guest then asks for payment.

Name Use case	Make payment	
Brief description	Tourist pays for the ticket they booked	
Actor	Tourist	
Related Use Case	Book ticket	
Precondition	Book ticket	
Postcondition	None	
Flow of Activities	Actor	System
	1. Chooses the preferred payment method then manage to pay.	2. Display payment confirmation message. 3. Display ticket information.

Name Use case		Cancel ticket
Brief description	Tourist can cancel a ticket they booked and get money back	
Actor	Tourist	
Related Use Case	None	
Precondition	Tourist must have paid for the ticket they booked	
Postcondition	None	
Flow of Activities	Actor	System
	1. Go to booked ticket and cancel it.	2. Cancel booking and manage refund.

Name Use case		Interact with post
Brief description	Tourist can interact with a post by adding comment, like, and share	
Actor	Tourist	
Related Use Case	None	
Precondition	None	
Postcondition	None	
Flow of activities	Actor	System
	1. User views post then interacts with it by liking or commenting or sharing it.	2. Calculates profits according to the number of likes.

Name Use case	Check posts	
Brief description	Tourist can check about the specific post by filter or search	
Actor	Tourist	
Related Use Case	None	
Precondition	The post is available	
Postcondition	None	
Flow of activities	Actor	System

Name Use case	Update feature	
Brief description	The admin will be able to update the feature.	
Actor	Admin	
Related Use Case	None	
Precondition	None	
Postcondition	None	
Flow of activities	Actor	System
	1. Admin will log in to the app then add new features	

Name Use case	Share experience	
Brief description	The business user can share their experience and post it.	
Actor	Business user	
Related Use Case	None	
Precondition	None	
Postcondition	None	
Flow of activities	Actor	System
	1. The business user can share the experience via their account	2. the system able to the business user to share the experience

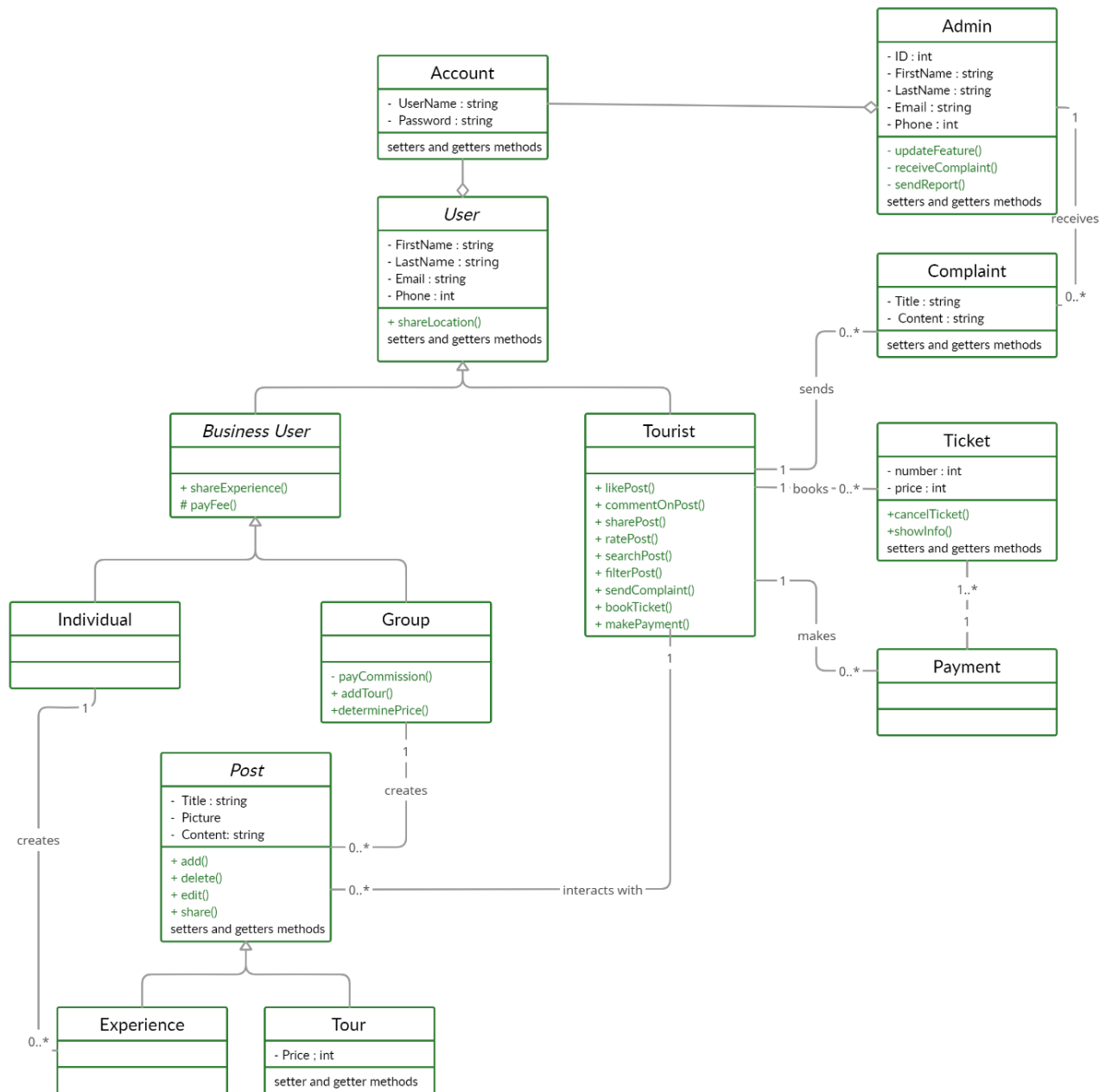
Name Use case	Add tour	
Brief description	The group business user can add a tour.	
Actor	Business user	
Related Use Case	None	
Precondition	None	
Postcondition	None	
Flow of Activities	Actor	System
	1. Business user can add tour	2. The system able to business user to add new tour

Name Use case	Determine price	
Brief description	The group business user will be able to determine the price of the tour	
Actor	business user	
Related Use Case	None	
Precondition	The business user must add tour	
Postcondition	None	
Flow of Activities	Actor	System
	1. The group business user will determine price for each tour	

Name Use case	Pay fee	
Brief description	The group business user must pay 5% tax monthly	
Actor	business user	
Related Use Case	None	
Precondition		
Postcondition	None	
Flow of activities	Actor	System
	1. The group business user must pay for the system	2. The system will authorize the operation

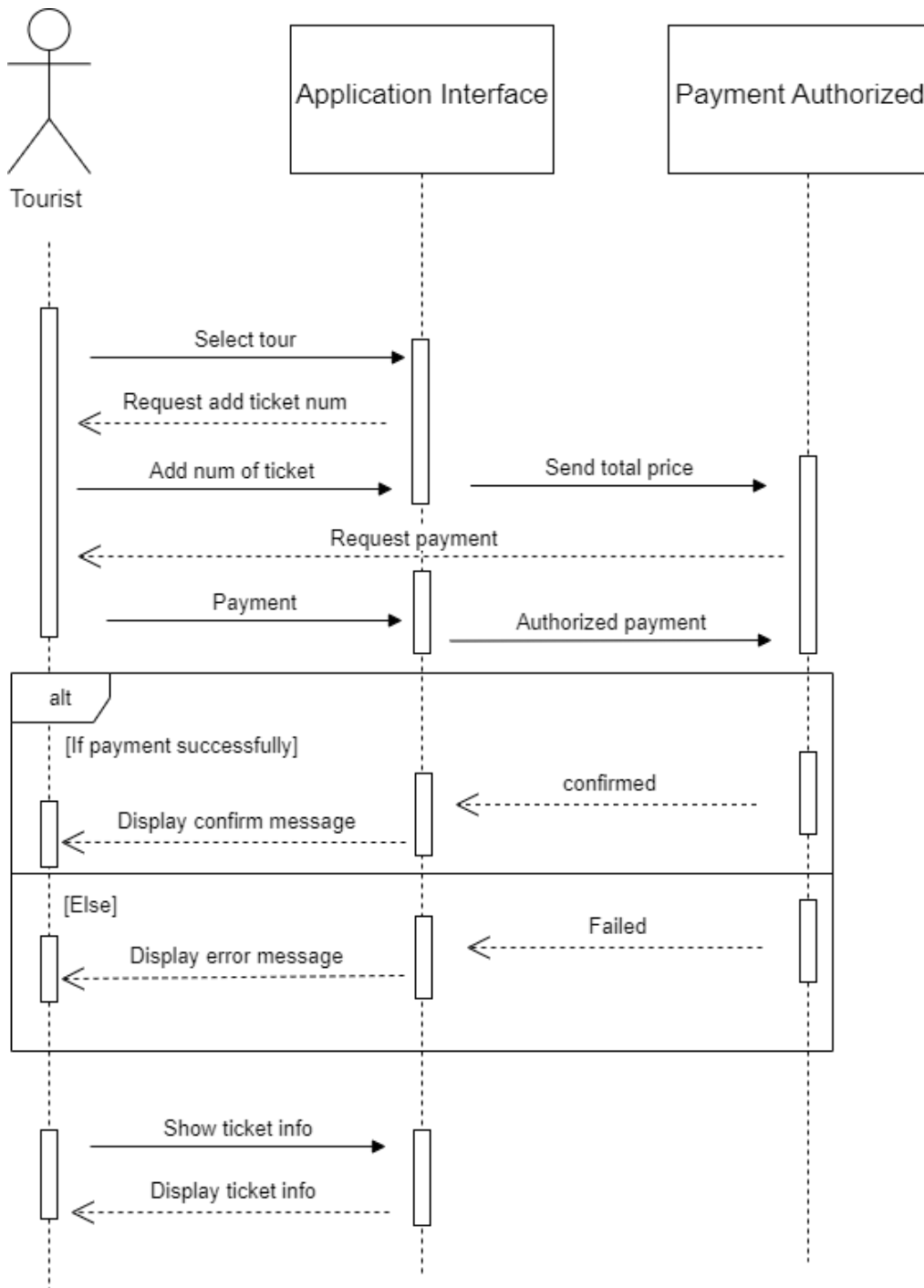
Name Use case		Pay financial commission	
Brief description		The group business user must pay a financial commission for a subscription	
Actor		business user	
Related Use Case		None	
Precondition			
Postcondition		None	
Flow of activities		ActorSystem	
		1. The group business user must pay a financial commission	2. The system will authorize the operation

9. Class Diagram

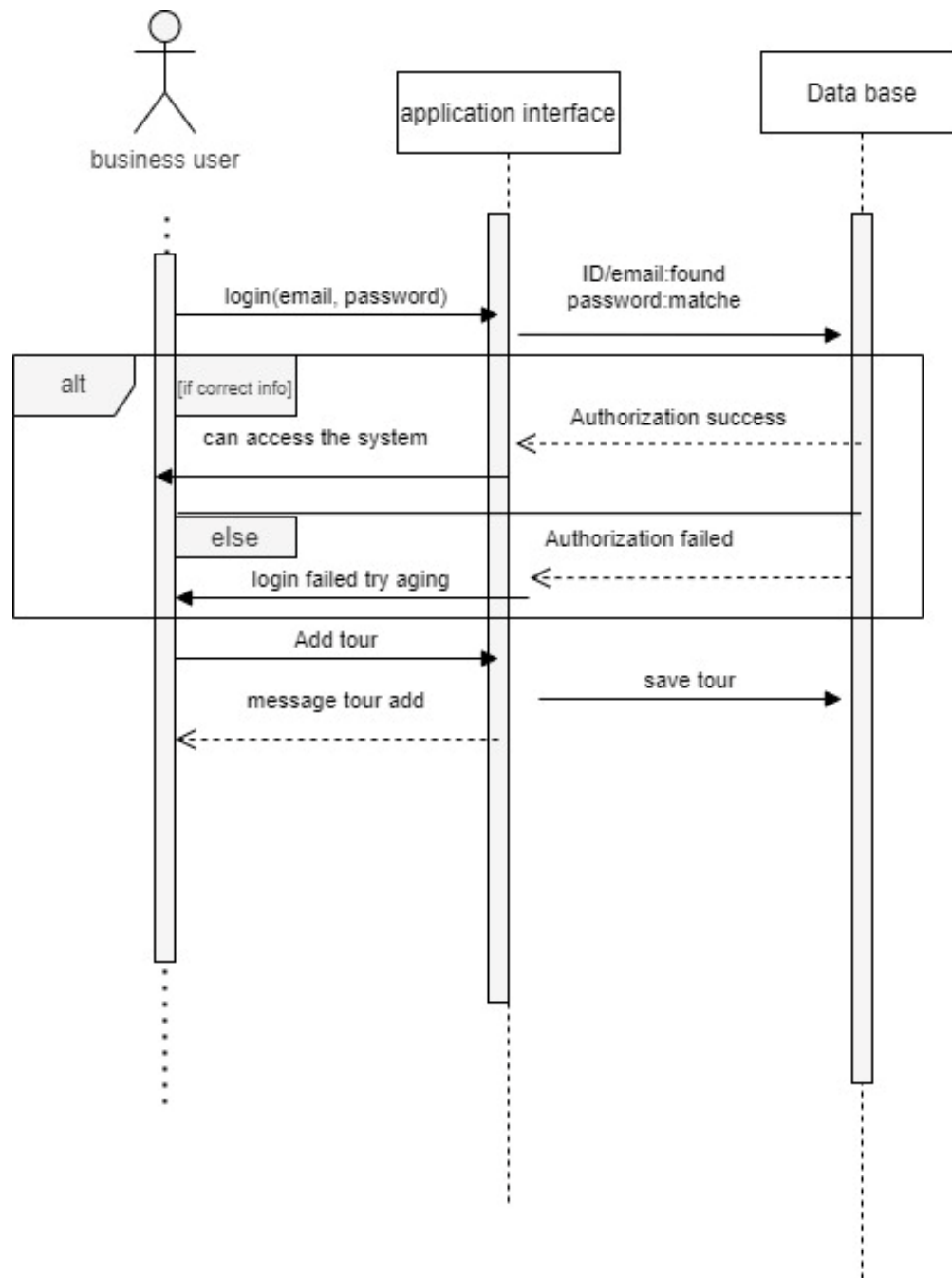


10. Sequence Diagrams

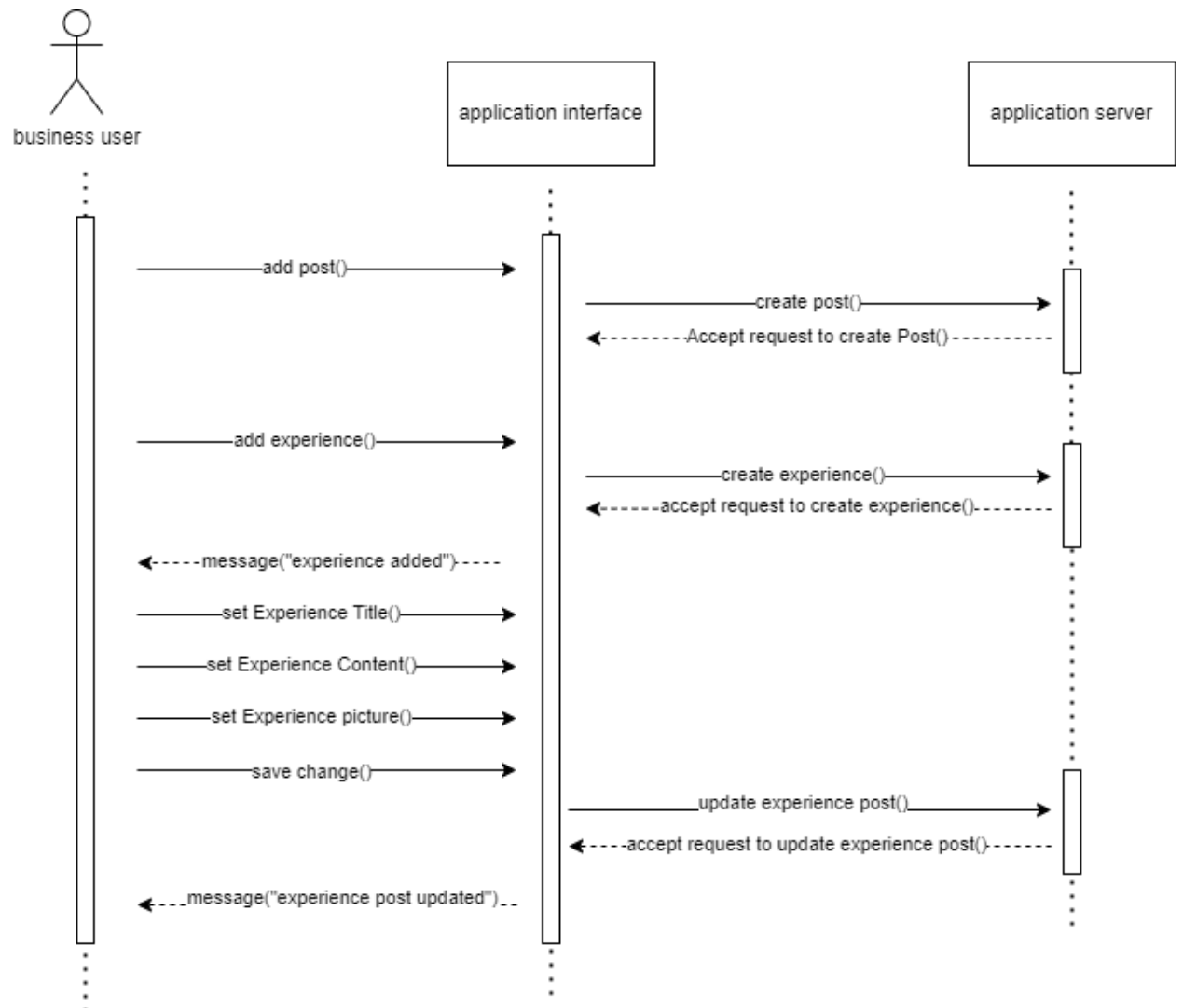
10.1. Tourist book ticket



10.2. Business user add tour



10.3. Business user share experience



11. Activity Diagram

