



INSPECTOR CRUMBO

Lost & Found System



Team names:

- Rawan Esmaeil
- Roaa Tolba

Functional requirements

1. Registration:

- i) The owner or finder can register him/herself into the system.
- ii) The owner or finder is able to enter his/her first name
- iii) The owner or finder is able to enter his/her last name.
- iv) The owner or finder is able to enter a valid email address.
- v) The owner or finder is able to set a password
- vi) The system allows the user to set up two step verification if desired
- vii) The user is able to add his phone number

2. Login:

- i) If the owner or finder is registered with the system, then he/she can log in with the system.
- ii) The owner or finder is able to enter registered email address.
- iii) The owner or finder is able to enter registered email address.
- iv) If the owner or finder has given the correct email and password, then they are able to press the login button.
- v) The admin is able to login into the system.

3. Report lost item:

- i) The owner is able to report his/her lost item.
- ii) The owner is able to enter his/her name
- iii) The owner is able to enter his contact email.
- iv) The owner is able to enter the date on which his/her item was lost
- v) The owner is able to enter the geographical location where his/her item was lost.
- vi) The owner is able to enter the category of his/her lost item.
- vii) The owner is able to enter the brand of his/her lost item
- viii) The owner is able to enter the brief description of his/her lost item.
- ix) After entering all the details, the owner is able to press the submit button.
- x) After submitting the form, the system generates a reference id of that particular item
- xi) When user(owner) add all the information regarding item, an automated mail is sent to the provided email with reference number.

4. Report found item:

- i) The finder is able to report his/her lost item.
- ii) The finder is able to enter his/her name.
- iii) The finder is able to enter his contact email.
- iv) The finder is able to enter the date on which item was found.
- v) The finder is able to enter the geographical location where item was found.
- vi) The finder is able to enter the category of found item.
- vii) The finder is able to enter the brand of found item.
- viii) The finder is able to enter the brief description of found item.
- ix) After entering all the details, the finder is able to press the submit button.
- x) After entering all the details, the owner is able to press the submit button.

- xi) When user(finder) add all the information regarding item, an automated mail is sent to the provided email with reference number.

5. View status:

- i) The finder or the owner can check the status of lost item by entering the reference number of that particular item
- ii) The admin is able to check the performance of the system.
- iii) The admin is able to block the user, who is doing something wrong like posting abusive content etc

6. Chat:

- i) The system shall enable the item owner and finder to decide on what location they want to meet.
- ii) The system shall enable the finder to ask for more details of the item to check the validity of the ownership of the lost item from the item owner.
- iii) Owner and finder are able to directly communicate with each other

7. View lost item :

- i) The user(owner/finder) is able to see all the lost items after login in
- ii) The user (owner/finder) is able to see details of the lost item.
- iii) The user (owner/finder) is able to see the status of lost item.
- iv) The admin is able to view the lost item list.

8. View found item:

- i) The user(owner/finder) is able to see all the found items after login in
- ii) The user (owner/finder) is able to see details of the found items.
- iii) The user (owner/finder) is able to see the status of found items.
- iv) The admin is able to view the found item list.

9. Search by category:

- i) The user can search the desired item by entering the category.

Non-functional requirements

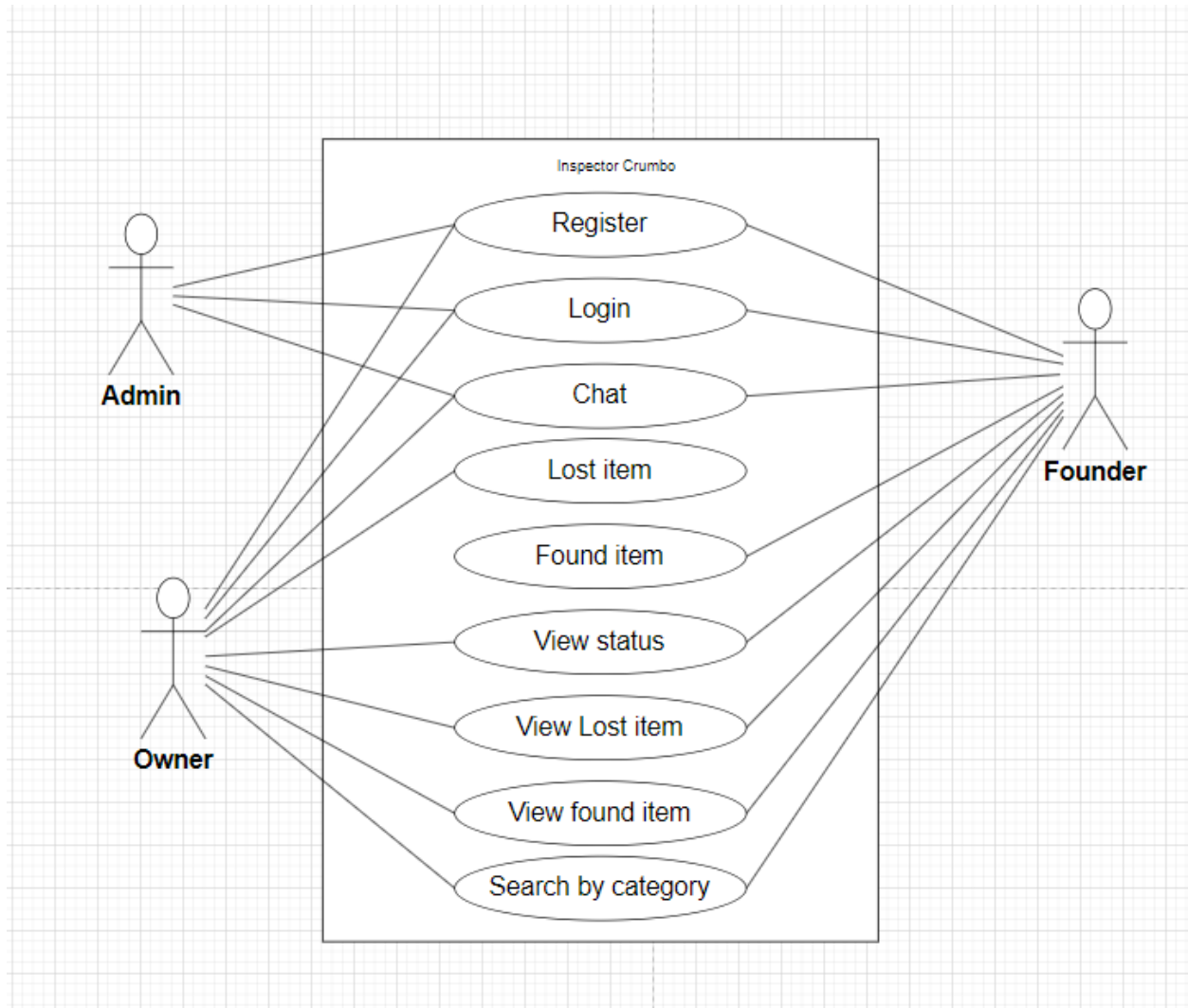
1- Performance: Keep the response time low and make it possible for many users to access it at the same time.

2- Usability: the system UI is easy to understand and easy to reuse it.

3- Security: Make each user's information secure by a two-step verification.

4- Availability: Make regular backups in case a system failure occurs.

Use cases scenario



Use Cases

Use Case ID	1
Use Case Name	Register
Priority	1
Actors	Finder, Owner
Description	Allowing the user to register into our system by providing some information about himself
Preconditions	The email should be valid
Normal Flow	1-the user clicks on sign up button 2-the user enters the required information like his name, password, email 3-a verification mail is sent to the email
Alternative Flow	In step 3 if user doesn't click the button, then verification email will not be sent
Exceptions	The user cannot add an email address that is already registered with the system.
Post conditions	The user will be successfully registered

Use Case ID	2
Use Case Name	Login
Priority	2
Actors	Finder, owner
Description	It enables the user to access the system using the email and password which they provide at the time of registration
Preconditions	User should be registered with the system
Normal Flow	1-the user click on the login button 2-the user provides the email and password
Alternative Flow	

Exceptions	If the email or password is not valid then the user will not be able to logged in with the system
Post conditions	The user will be successfully logged in

Use Case ID	3
Use Case Name	Report lost item
Priority	1
Actors	Owner
Description	It allows the owner to report his lost item in to the system
Preconditions	Owner should be registered and logged in the system before reporting lost item
Normal Flow	1-the owner clicks on the report lost item button 2-the owner enters required information like name email, lost item description, location, color and brand 3-the owner clicks on submit button 4-an automated email is sent to the provided mail with a unique reference number
Alternative Flow	If the owner doesn't click on submit button, then lost item is not be registered
Exceptions	The system avoids the owner from reporting an item if it has already been registered.
Post conditions	The item will be successfully reported and the database will be updated

Use Case ID	4
Use Case Name	Report found item
Priority	1
Actors	Finder
Description	It allows the finder to report the found item in to the system
Preconditions	Finder should be registered and logged in the system before reporting found item

Normal Flow	1-the finder clicks on the report lost found button 2-the finder enters required information like name email, lost item description, location, color and brand 3-the finder clicks on submit button 4-an automated email is sent to the provided mail with a unique reference number
Alternative Flow	If the finder doesn't click on submit button, then lost item is not be registered
Exceptions	The system avoids the finder from reporting an item if it has already been registered.
Post conditions	The item will be successfully reported and the database will be updated

Use Case ID	5
Use Case Name	View status
Priority	3
Actors	Finder, owner
Description	It allows the user to check the status of item
Preconditions	The item should be reported in to the system
Normal Flow	1-the user will click on the view status button 2-the user will enter the reference number of the item 3-the user will press the enter button
Alternative Flow	The user will not be able to see the status if the session is expired
Exceptions	If the reference number is not valid, the system will not show any status
Post conditions	The status of the item will be displayed on the screen

Use Case ID	6
Use Case Name	Chat
Priority	2

Actors	Finder, owner
Description	For the convenience of user, both the user and finder can chat with each other to decide for a mutual place to visit each other and exchange the lost item. It can also initially help the user to communicate with each other regarding the lost item.
Preconditions	The user must be login into the system and the user must have either uploaded a lost item request or found an item.
Normal Flow	1-The user (Owner) login into the system by providing email and password. 2-The user either posts a lost item request or responds to a person for finding a lost item 3-The user is having a chat button on the screen that he/she would click to start chat.
Alternative Flow	
Exceptions	The system does not allow the user to chat if they have not either posted a lost item or respond to lost item request.
Post conditions	The user will meet at a mutual place to exchange the lost product.

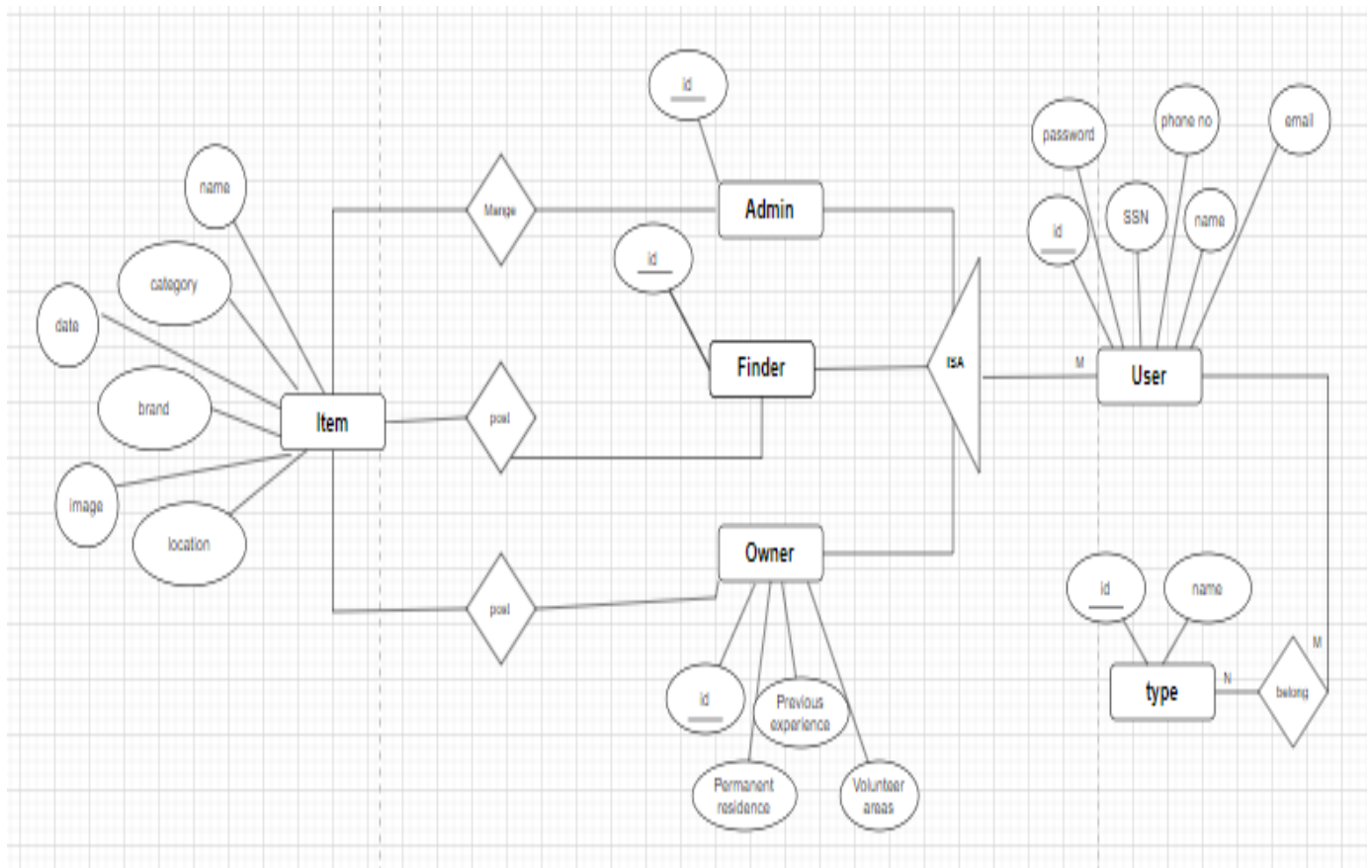
Use Case ID	7
Use Case Name	View lost item
Priority	1
Actors	Finder, owner, Admin
Description	The owner, admin and finder can see from the highlights that which items are lost. All the lost items can be viewed from there. The owner, admin and finder can see from the highlights that which items are lost. All the lost items can be viewed from there.
Preconditions	The user must be login into the system to view the details of the lost items.
Normal Flow	1-The user (Owner/finder) logs into the system by providing email and password. 2-The user (finder) searches an item. 3-he user (owner/finder) clicks on the lost items item button in order to see all the lost items.

	4-The user (owner/finder) clicks on the details to see the lost item details 5-Admin clicks on the lost items button to see all the received and returned items.
Alternative Flow	
Exceptions	The system does not allow the user to see lost items details if he is not logged into the system.
Post conditions	The user will see the lost items. The user will see the lost items.

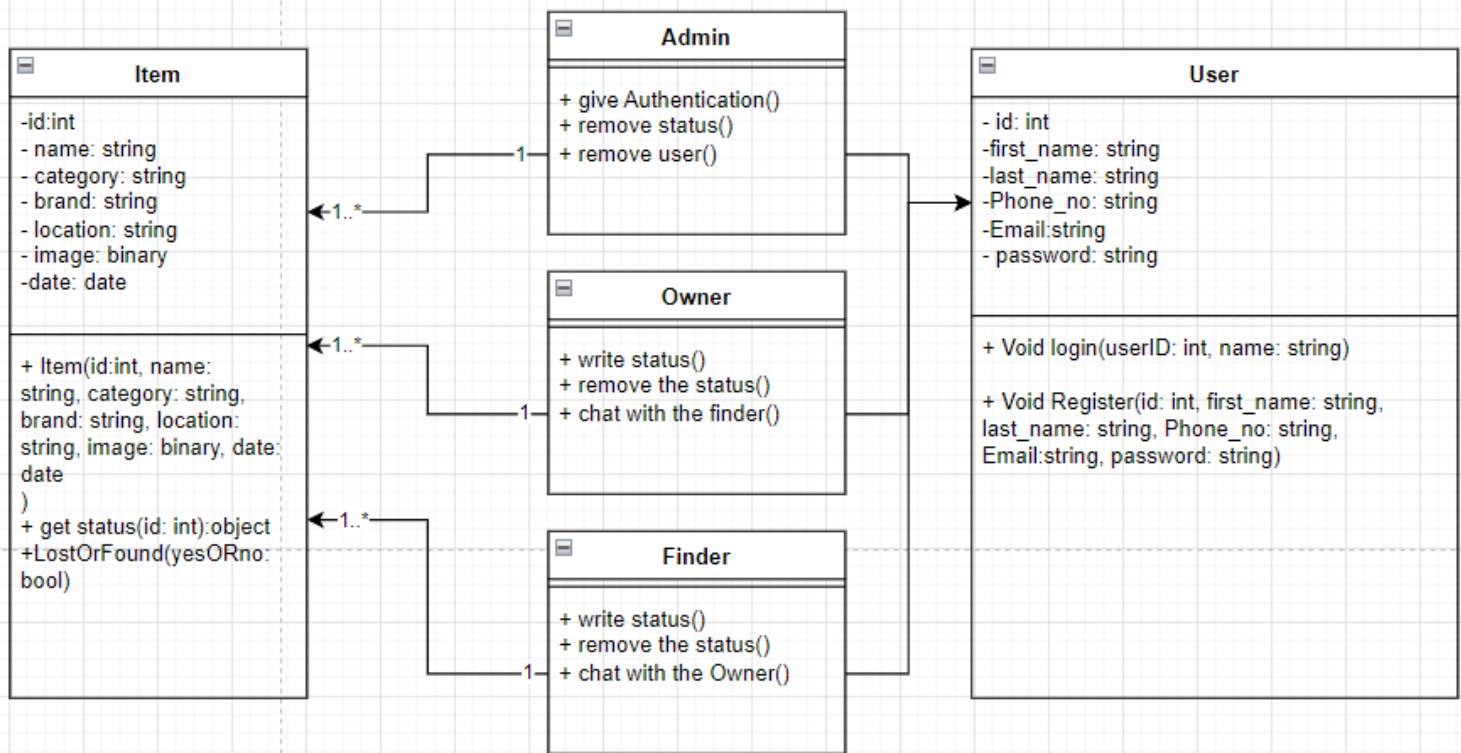
Use Case ID	8
Use Case Name	View found item
Priority	1
Actors	Owner, Admin
Description	The owner and admin will see all the found items reported by finders. They will also be able to see all the details of the lost items for example their category, provided phone number, email etc
Preconditions	The user must be login into the system to view the details of the found items.
Normal Flow	1-The user (Owner/finder) logs into the system by providing email and password. 2-The user (Owner/finder) searches an item 3-The user (Owner/finder) clicks on the found items item button in order to see all the found items. 4-The user (Owner/finder) clicks on the details to see the found item details 5-The admin clicks on the found items button to see all the received and returned items
Alternative Flow	
Exceptions	The system does not allow the user to see found items details if he is not logged into the system
Post conditions	The user will see the found items.

Use Case ID	9
Use Case Name	Search by category
Priority	4
Actors	Finder, owner
Description	Both finder and owner will be able to search the desired item by selecting their desired item category
Preconditions	User must be logged-in in order to search the item by category
Normal Flow	1-The user clicks on the search by category dropdown. 2-The user sees all the selected items in the selected category
Alternative Flow	If an item category that is not present is error then no result would be found.
Exceptions	User is not able to see any other item from other categories.
Post conditions	The user will successfully see all the items in that category.

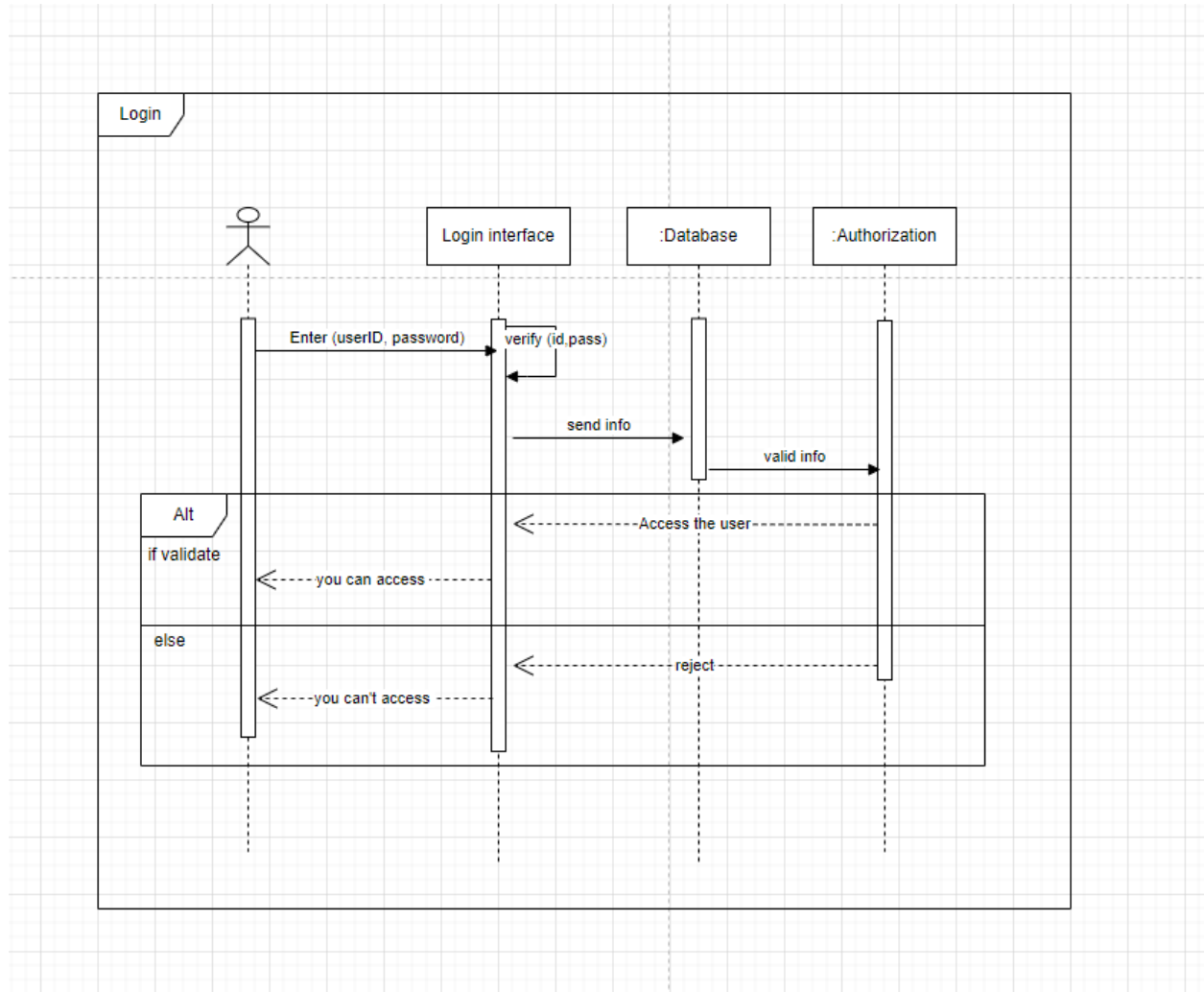
Erd diagram



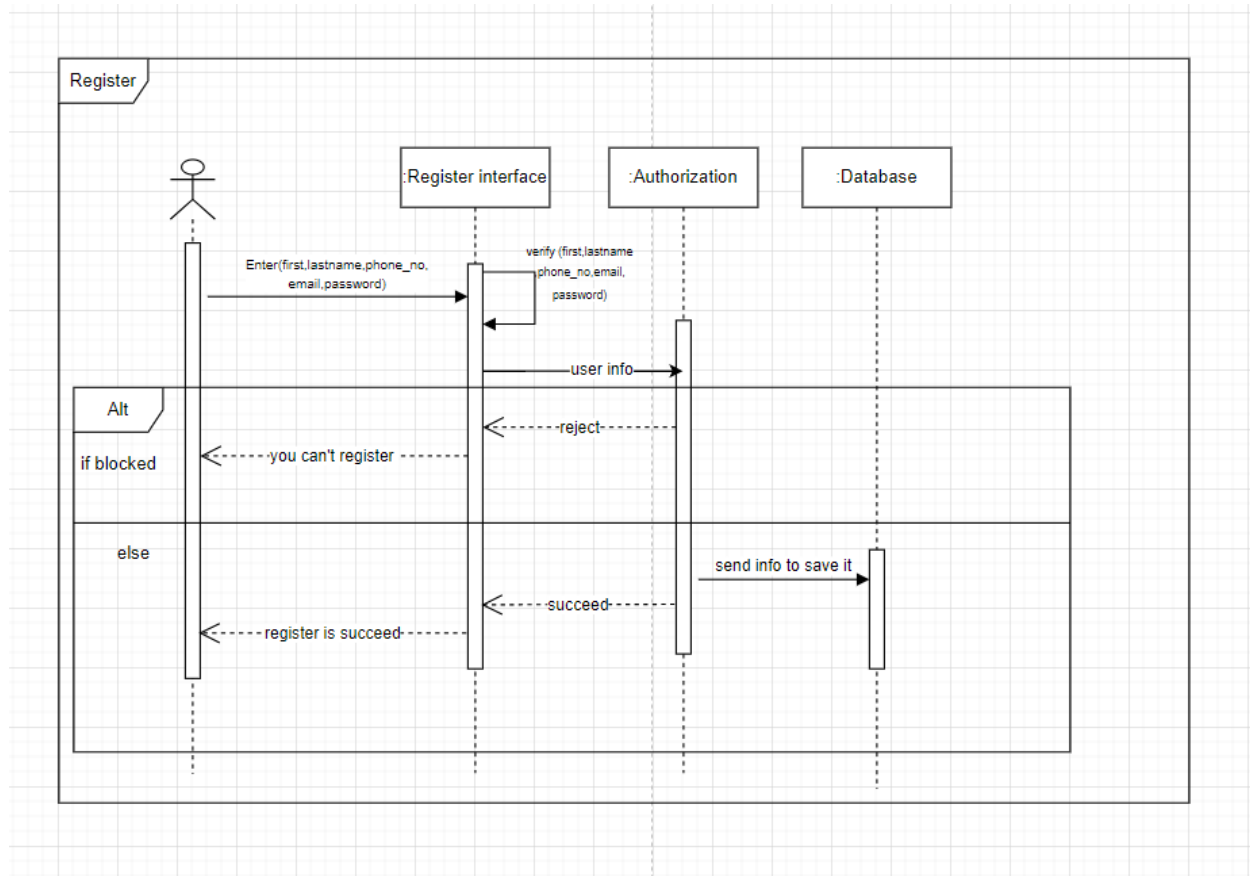
Class diagram



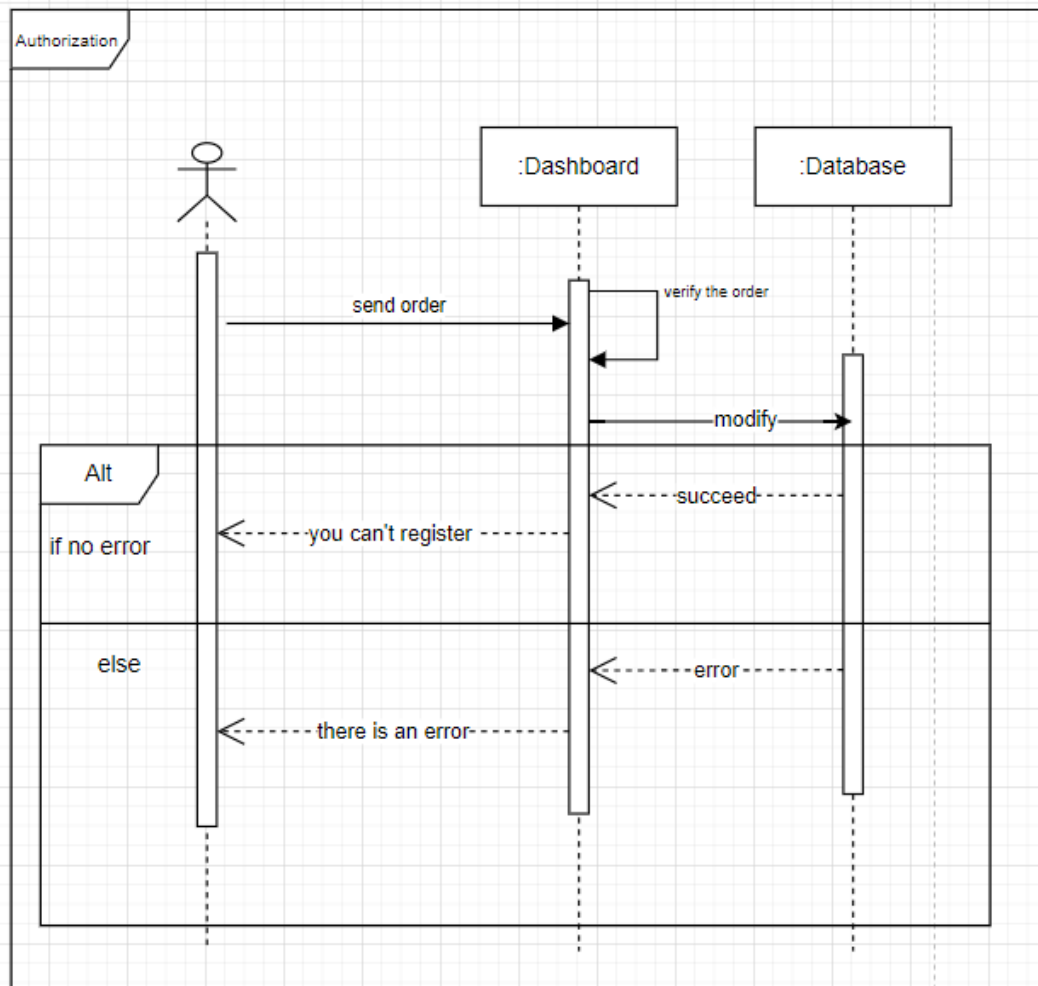
Sequence diagram (Login)



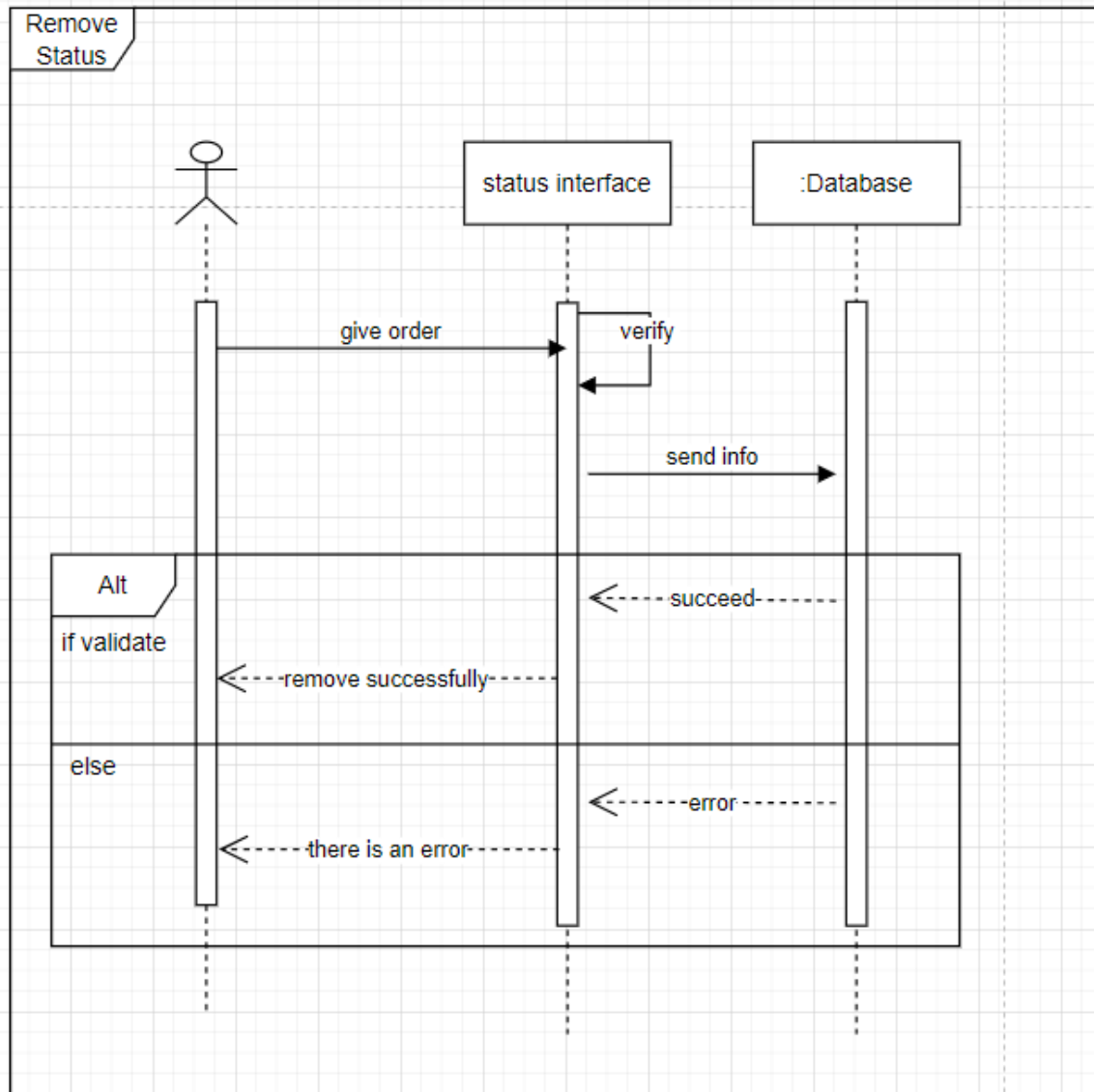
Sequence diagram (Register)



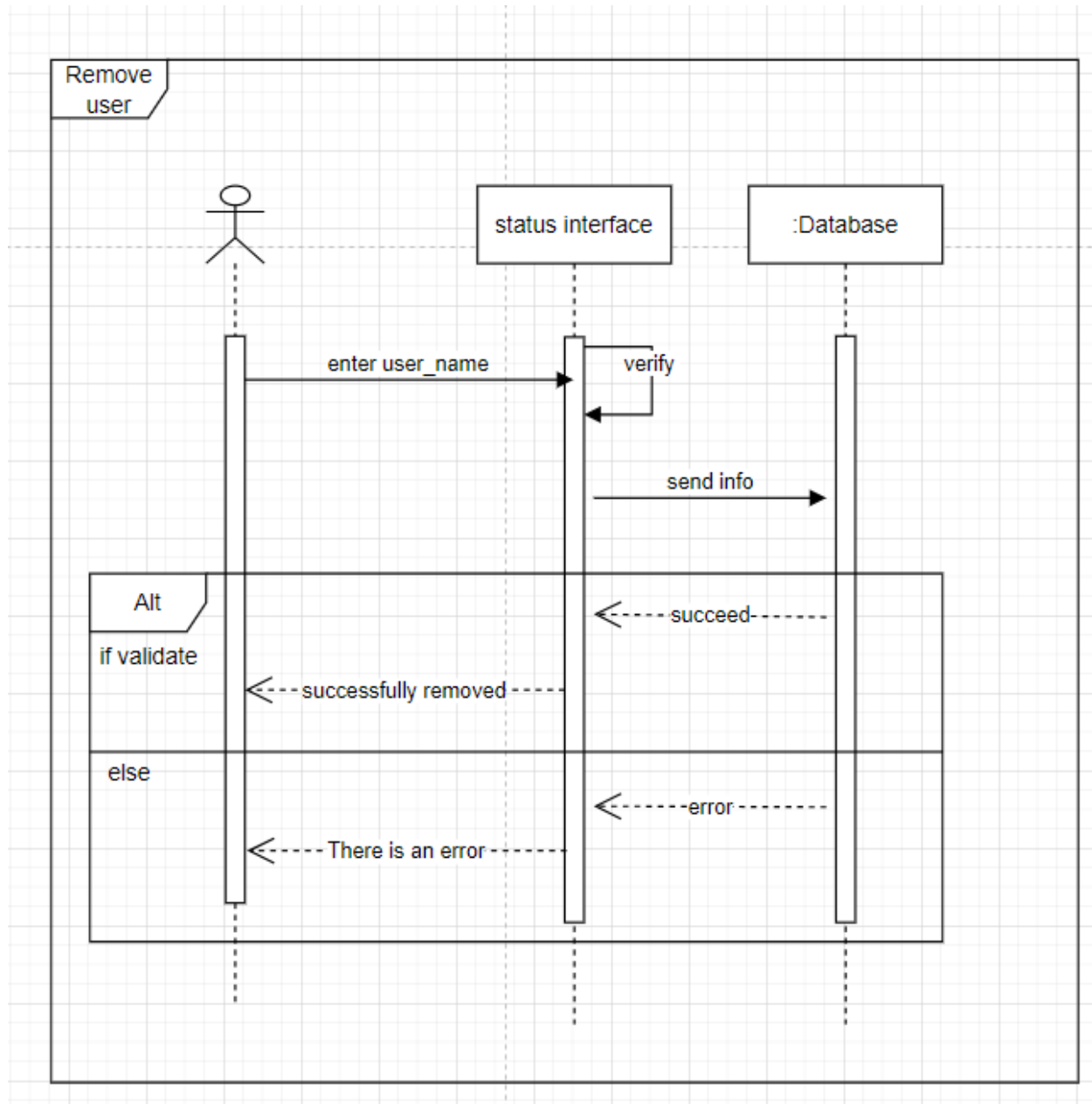
Sequence diagram (Authorization)



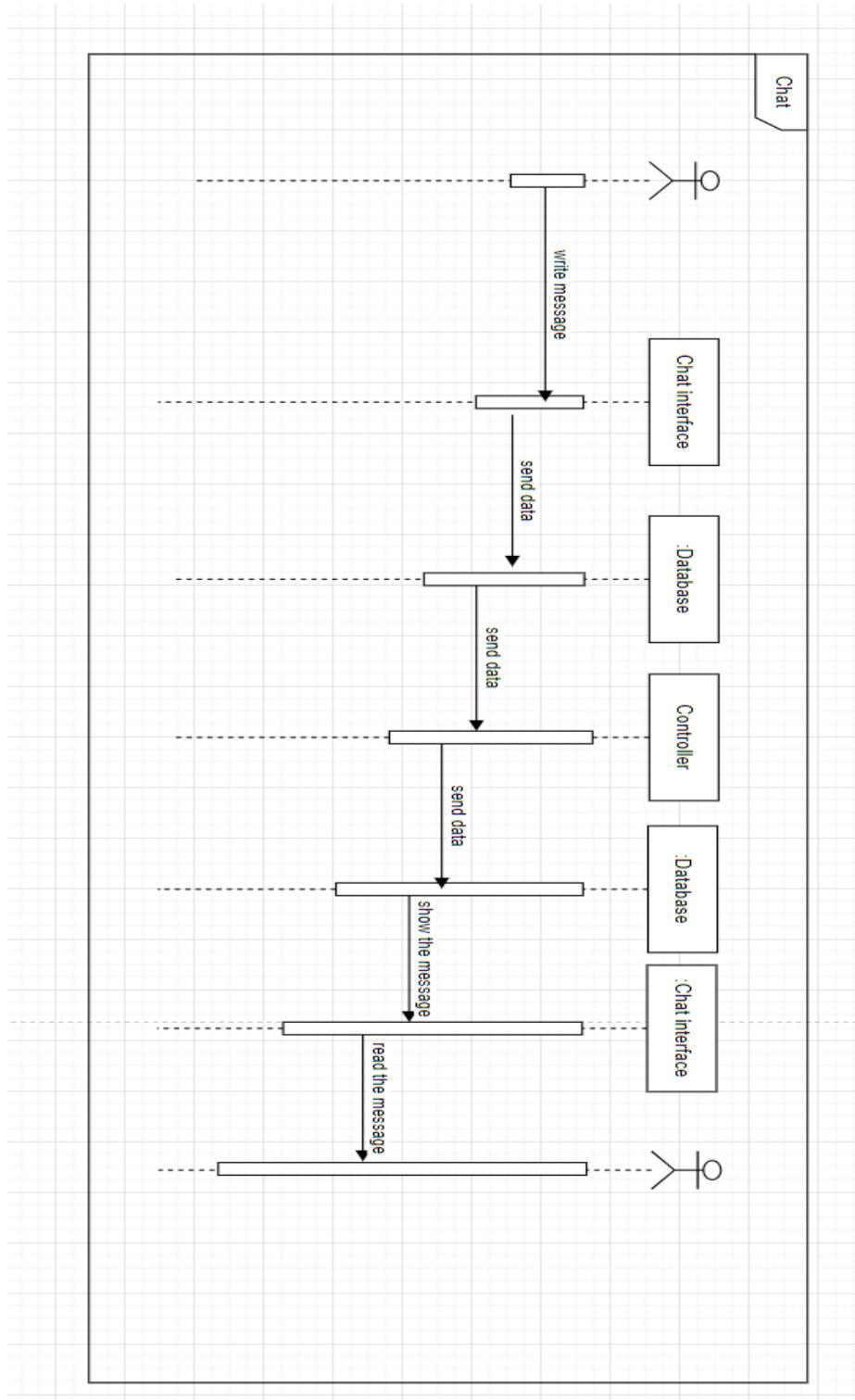
Sequence diagram (Remove status)



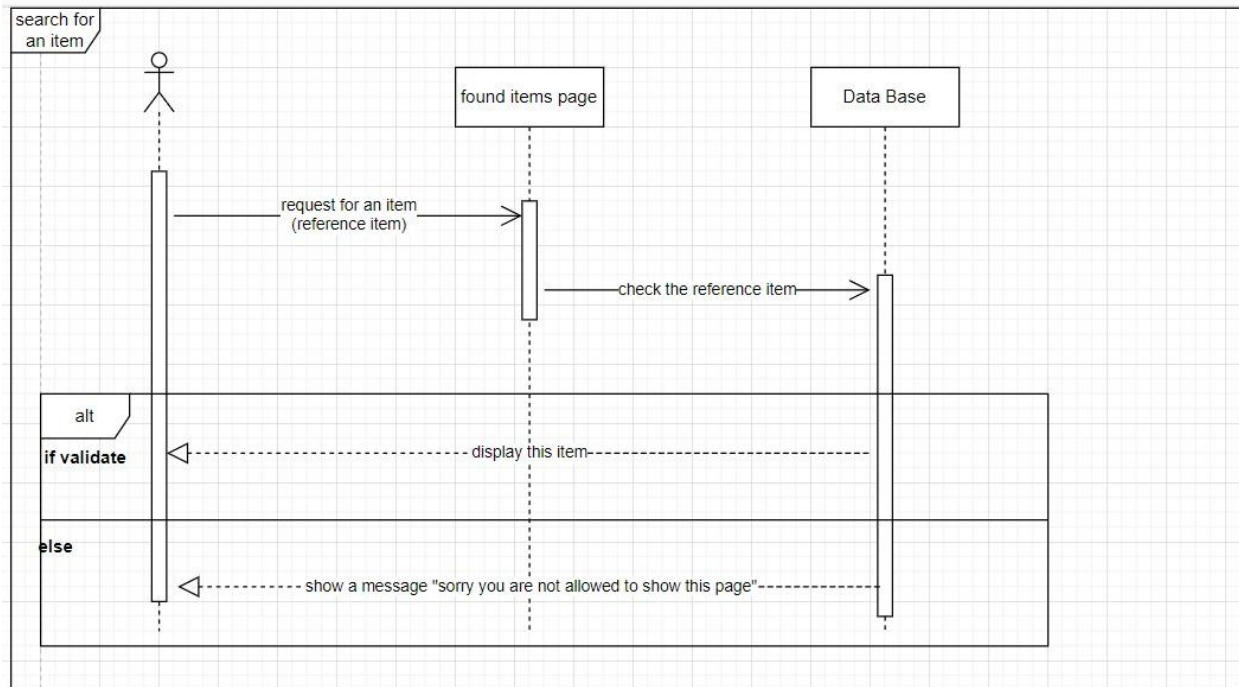
Sequence diagram (Remove user)



Sequence diagram (Chat)



Sequence diagram (View lost item)



Sequence diagram (Search)

