

AirBnB

Phase 1

Nashit Bin Mashkooor (16L-4104)

Abbas Ahsan (16L-4091)

Zain Arshad (16L-4051)

Zulqarnain Abbas (16L-4102)

Abubakar Siddique (16L-4058)

Project Description:

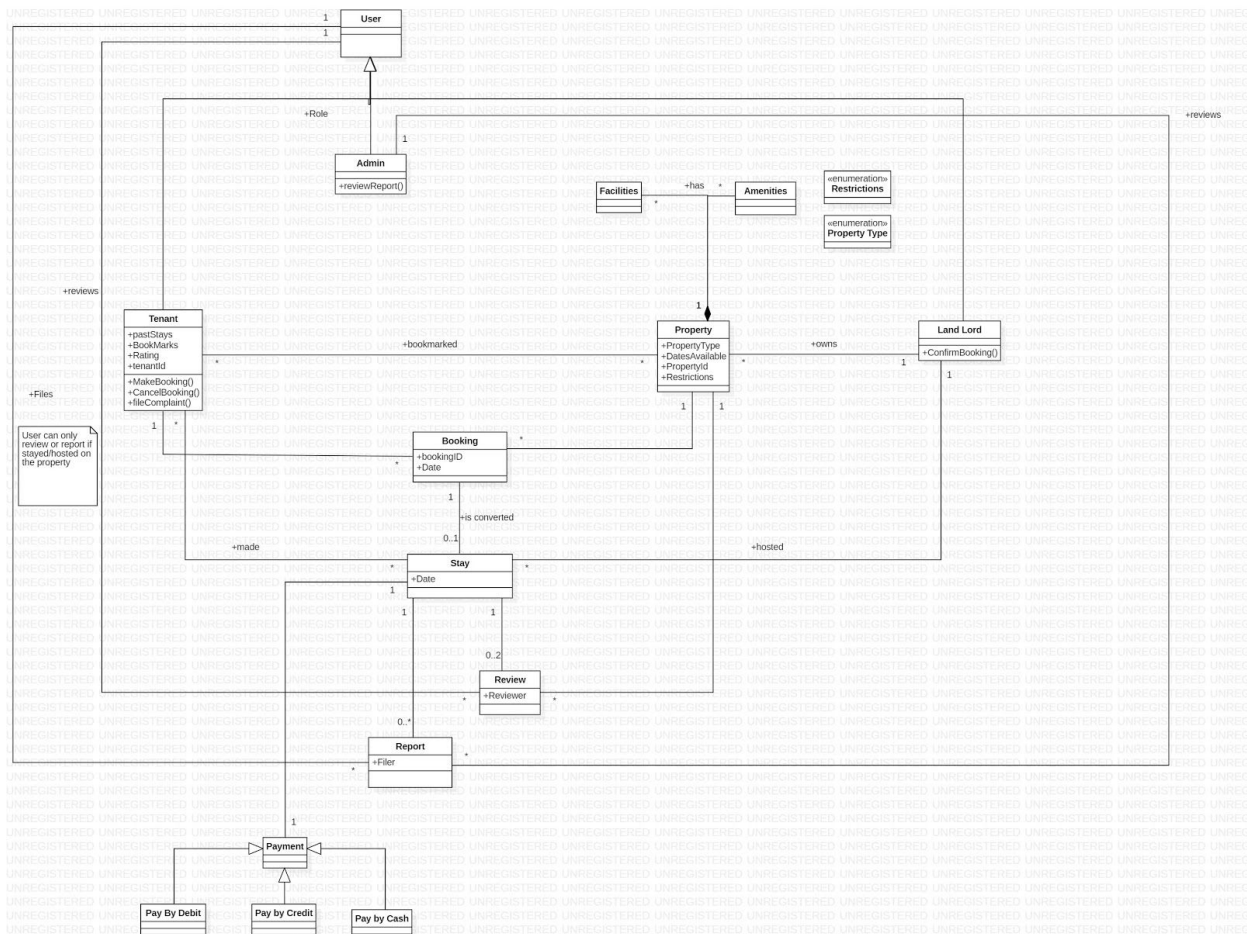
The project at its core is a property renting system in which as user acts as a tenant and landlord. Each host owns property which is of different type, size and has different facilities. Depending on these facilities hosts decide a daily rent. The host decides the availability for each property. Each tenant and landlord review each other which is reviewed by the admin. A guest can book multiple properties at a single time. The tenant can select a number of payment methods as he seems fit.

The tenant requests the booking which is confirmed by the landlord, the landlord then initiates the stay while the stay can be cancelled by either the tenant or the landlord.

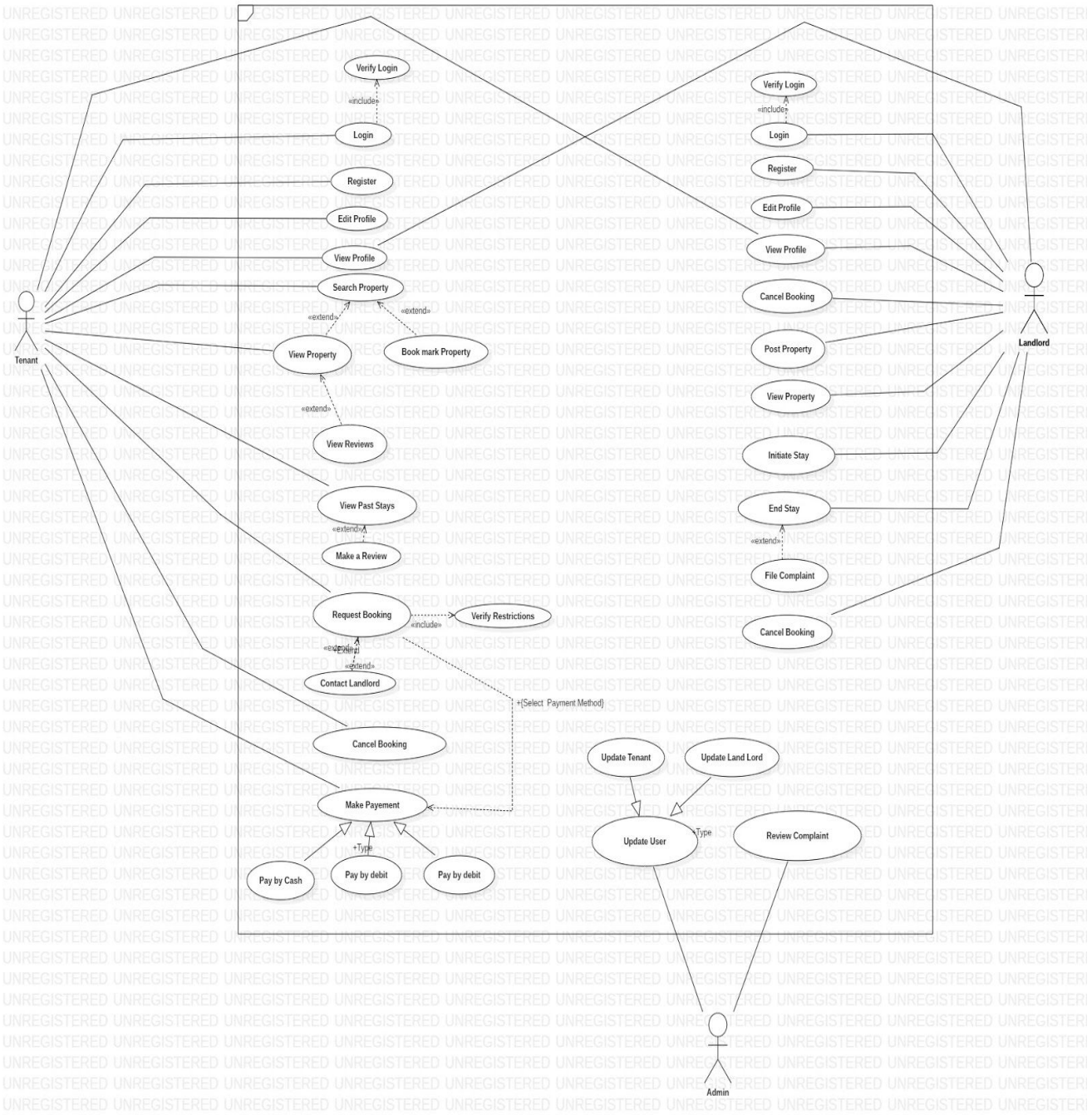
Both users have the ability to file reports.

A history for past stays and booking is kept as a record for both tenant and landlord.

Class Diagram:

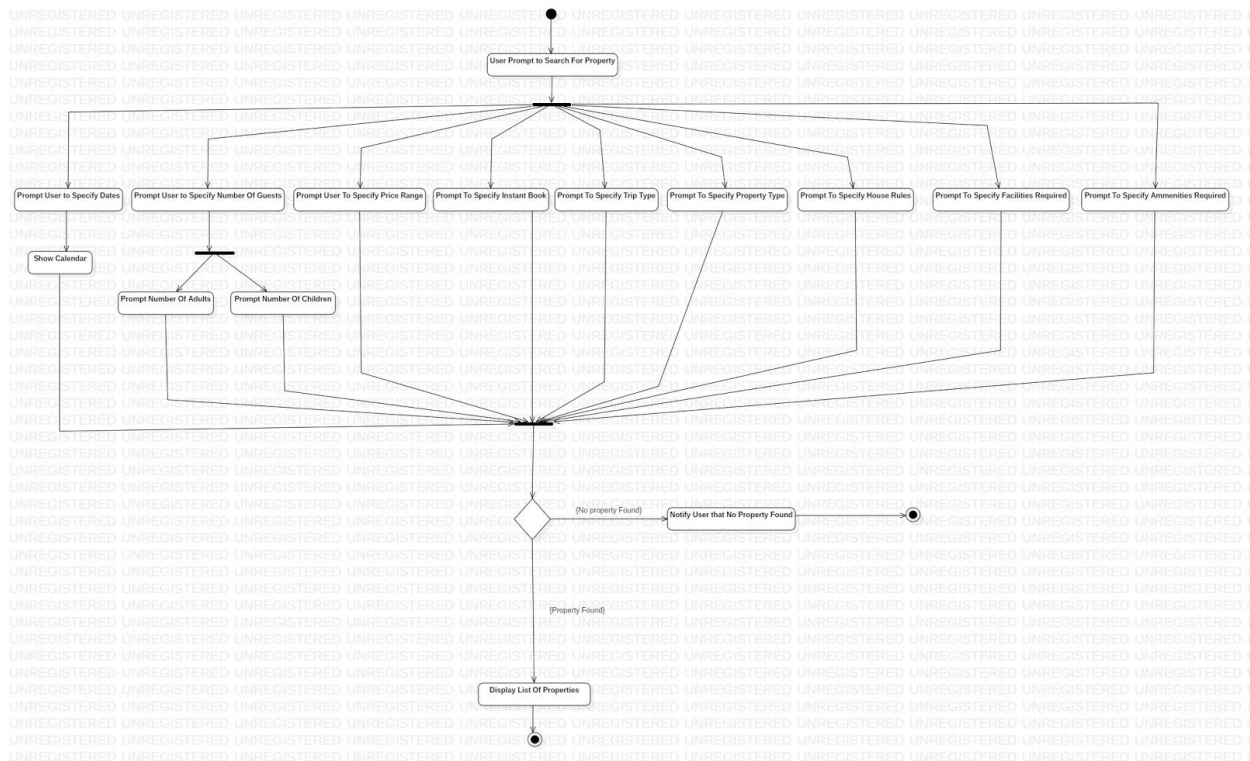


Use Case Diagram:



Activity Diagram and Descriptions:

Nashit Bin Mashkoor:



Use Case: Search Property

Summary: The purpose of this use case it to allow the user to search a property.

Actors: The Tenant

Pre Conditions: The tenant has logged in intents to search a property

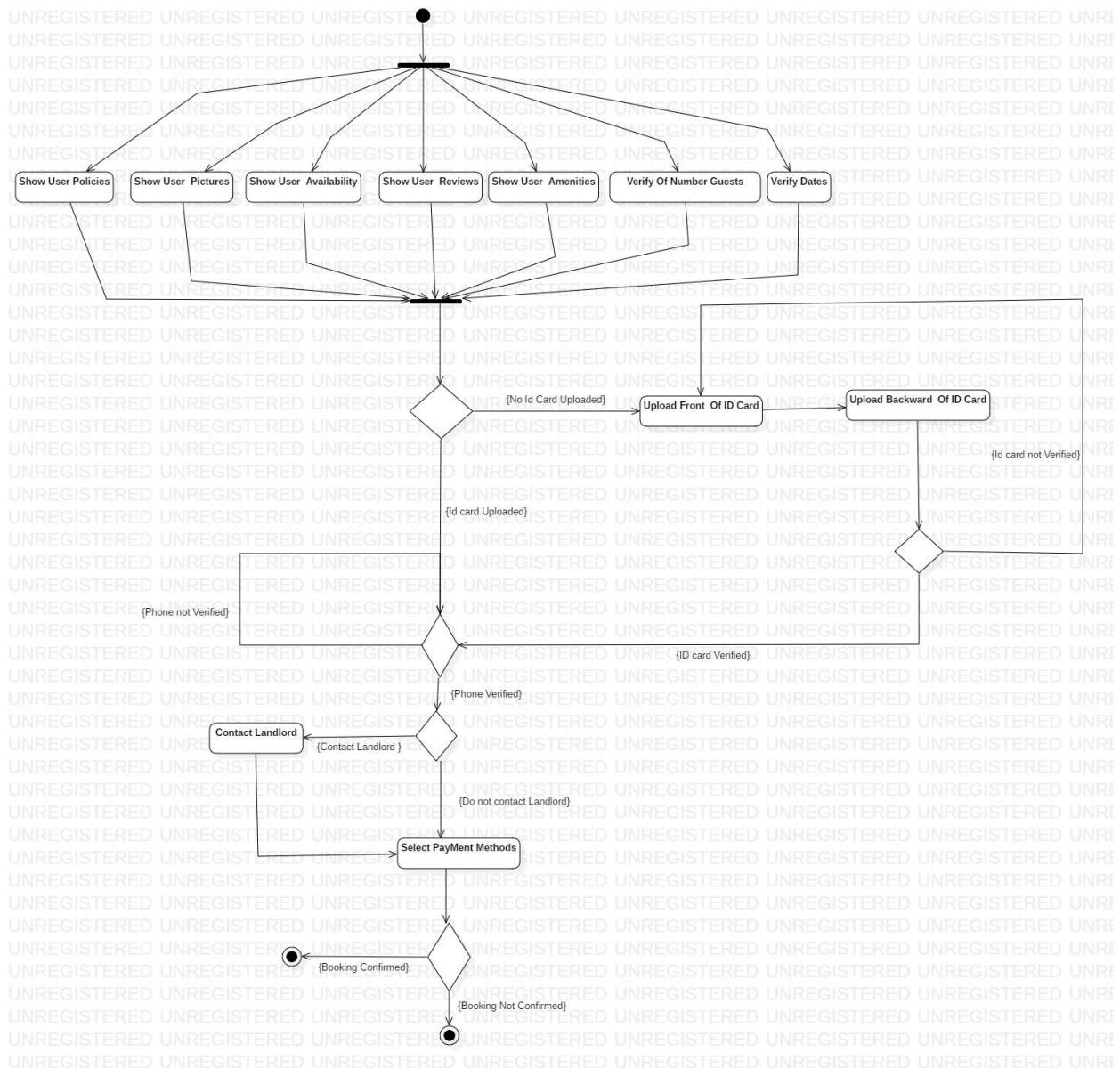
Description: The user is prompted to select a set of restrictions and filter which are used as the basis of retrieving the property that they are interested in. The first filter is of the dates on which the property is available. The user is shown a calendar from which the tenant will select the date from in between where the property will be used. The second filter that tenant is allowed to is to specify the number of people that will be accompanying the tenant. The tenant also is asked to specify the price range along with the ability to select if the property is available for instant book. Additionally the tenant also specifies the property type and the facilities and amenities that they are looking for. The tenant is than shown if there are any properties that are under the filters or not. The list of property fulfilling the filters are displayed. Then the user may decide to <<bookmark >> the property or <<view property>>.

Exceptions:

Problem in retrieval :During the actual retrieval if something were to happen the tenant should see an error message.

No property found: The tenant is notified that no property is found.

Post Conditions: The tenant has been shown a list of properties according to his or her requirements



Use Case: Request Booking

Summary: The use case allows the tenant to request the booking of a property that he/she is interested in.

Actors: The Tenant

Pre Conditions: The tenant has selected a specific property and is trying to book a stay for that property

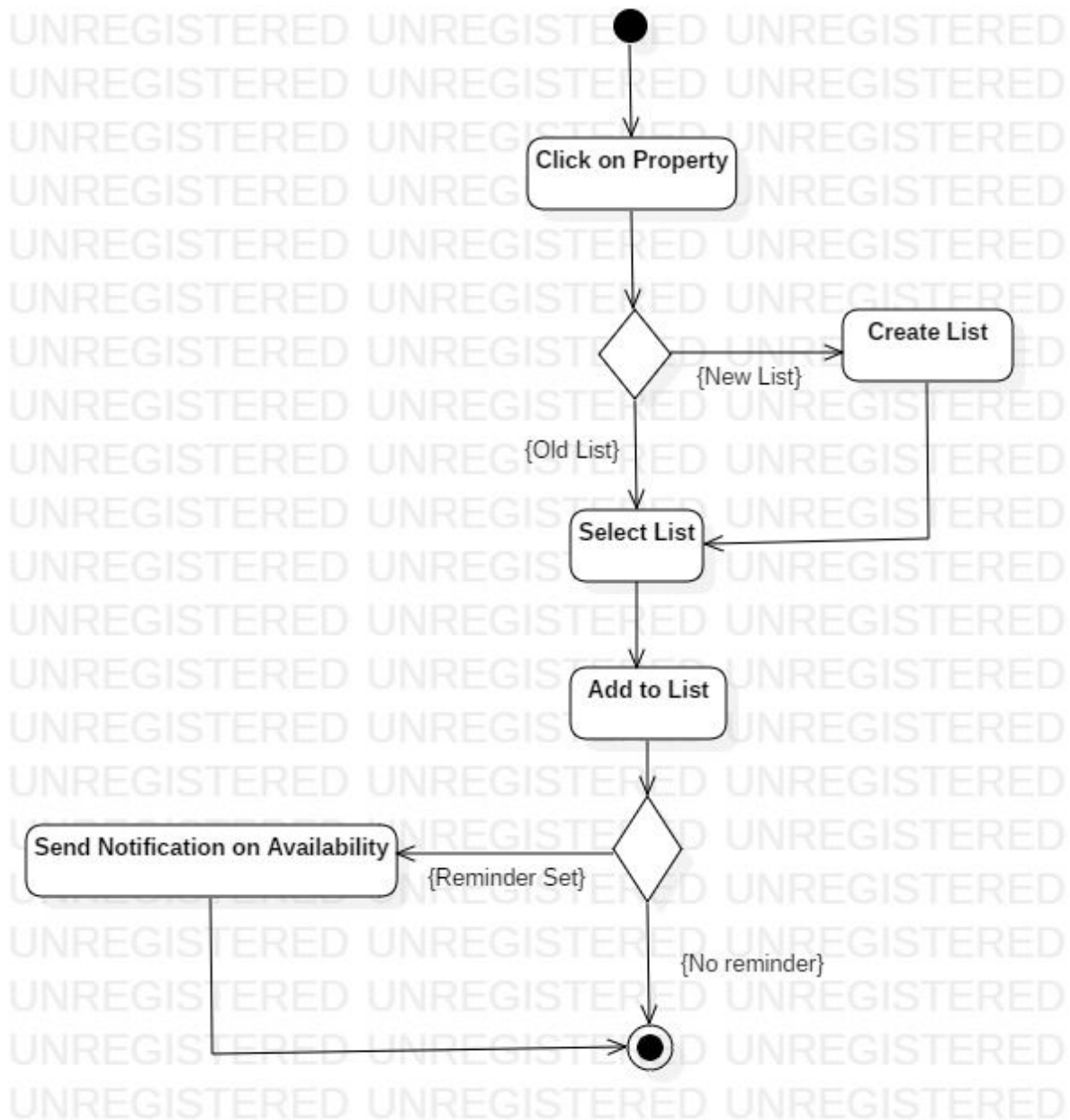
Description: The user is shown the policies imposed by the Landlord on the property, the pictures of the property, the past reviews, the available amenities and the facilities provided in the property. The tenant is asked to verify the number of guests that would be staying along with the dates of the stay.

The system verifies if the user has uploaded the ID card, and is prompted to upload a picture of their ID cards if it has already been not uploaded. The tenant then has to verify the current phone number that would be used by the Landlord to contact the tenant. The tenant then decides the payment method that he/she would be using and then finally confirms the booking of the stay.

Exceptions: *Id card not found:* The tenant does not have a valid ID and is prompted to upload his/her ID card

Phone not reachable: The tenant phone is unreachable and the tenant is notified to enter a valid phone number.

Post Conditions: The tenant has successfully requested a booking for a property



Use Case: Bookmark Property

Summary: The use case allows the tenant to save certain properties for later bookings and viewing

Actors: The Tenant

Pre Conditions: The user has searched properties and a list of properties has been shown

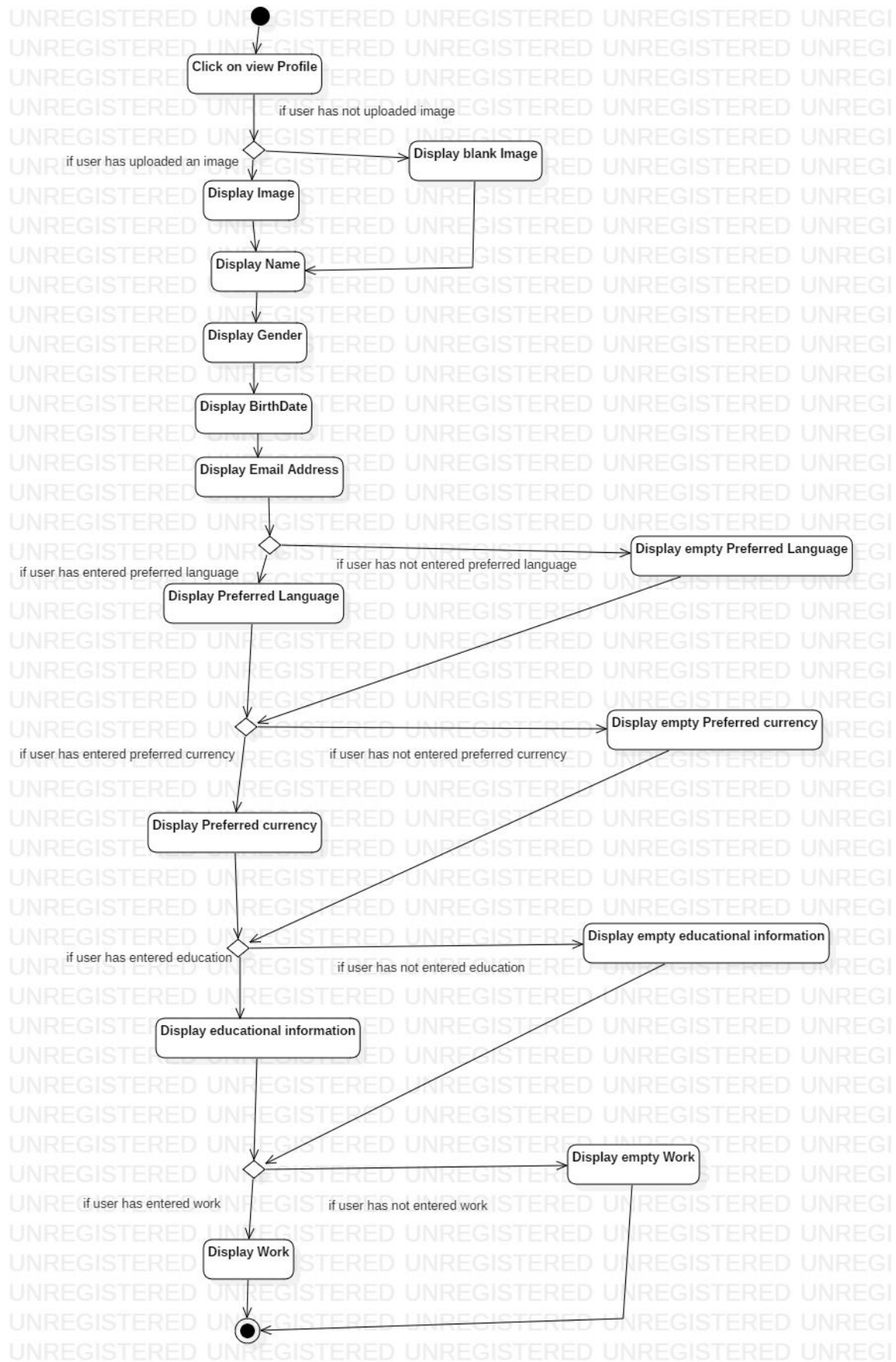
Description: The tenant clicks on a specific property. The tenant is then prompted to select a list of bookmarks. The tenant may select an already made bookmark list or create an new list in

which the property is added. Additionally the user also is given the choice to set a reminder or notification for when a property becomes available or when the tenant may want to use that property in the future.

Exceptions: *Property Deleted:* If a property listing that has been bookmarked is deleted by the landlord then the tenant must be notified and bookmark automatically deleted.

Post Conditions: The user bookmark list has been updated and a reminder has been set if the tenant chose to do so. The original list searched is shown again.

Abbas Ahsan:



Use Case: View Profile (for user)

Summary: It displays profile information of the user.

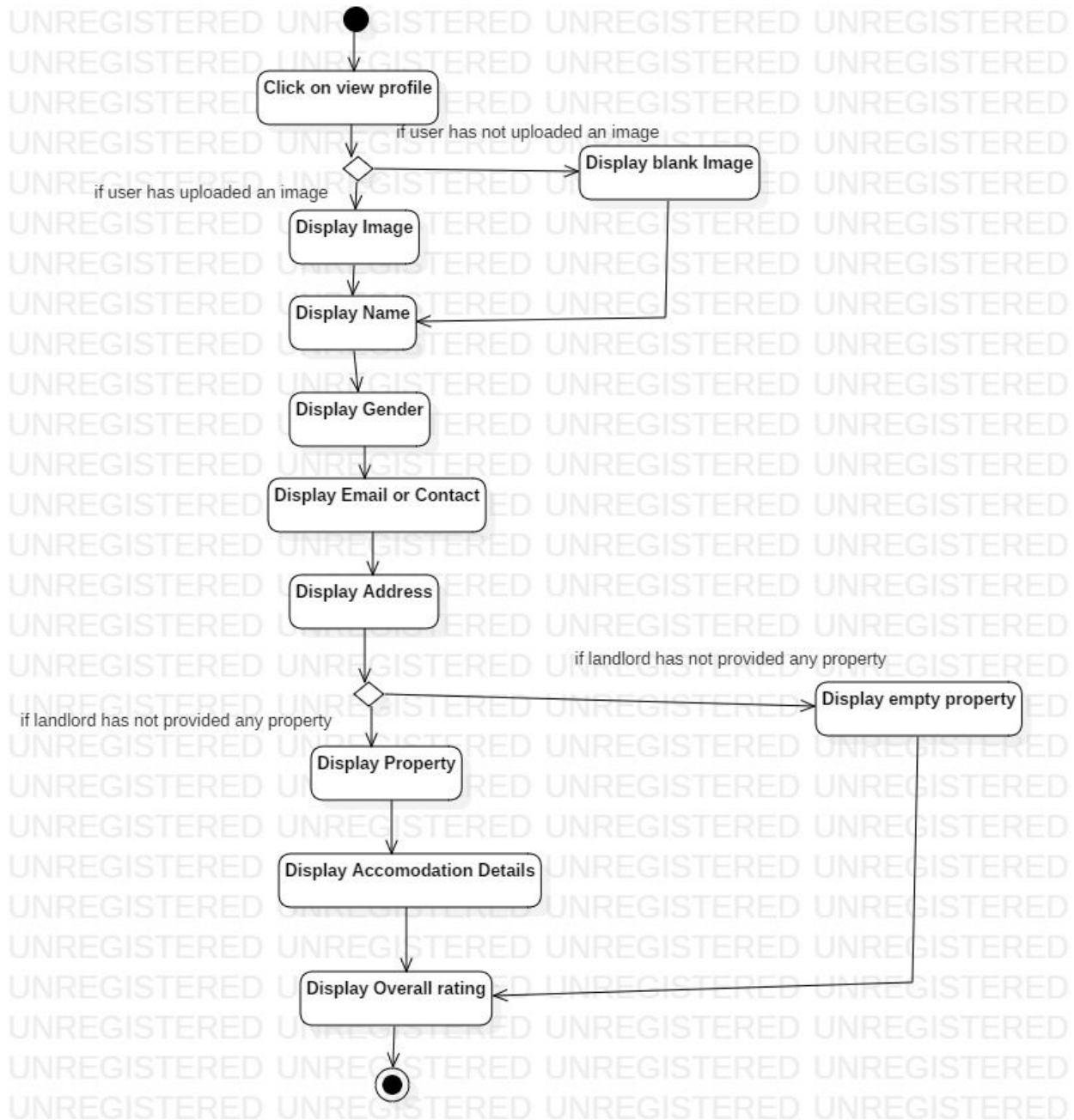
Actors: Tenant, Landlord

Pre Conditions: The tenant or landlord is trying to look at a the profile

Description: When user clicks on view profile, it displays the information about the user on screen. This information includes image, name, gender, date of birth, email address, preferred language, preferred currency, educational information, and work.

Exceptions: The exceptions in this use case are that if the user has not entered any specific information ,when it displays all the information it displays empty information in the respective box. For example the user has not uploaded image it displays blank image, if the user has not selected preferred language or country it displays empty information etc.

Post Conditions: The tenant / landlord has looked at the profile



Use Case: View Profile (for landlord)

Summary: It displays the information of landlord.

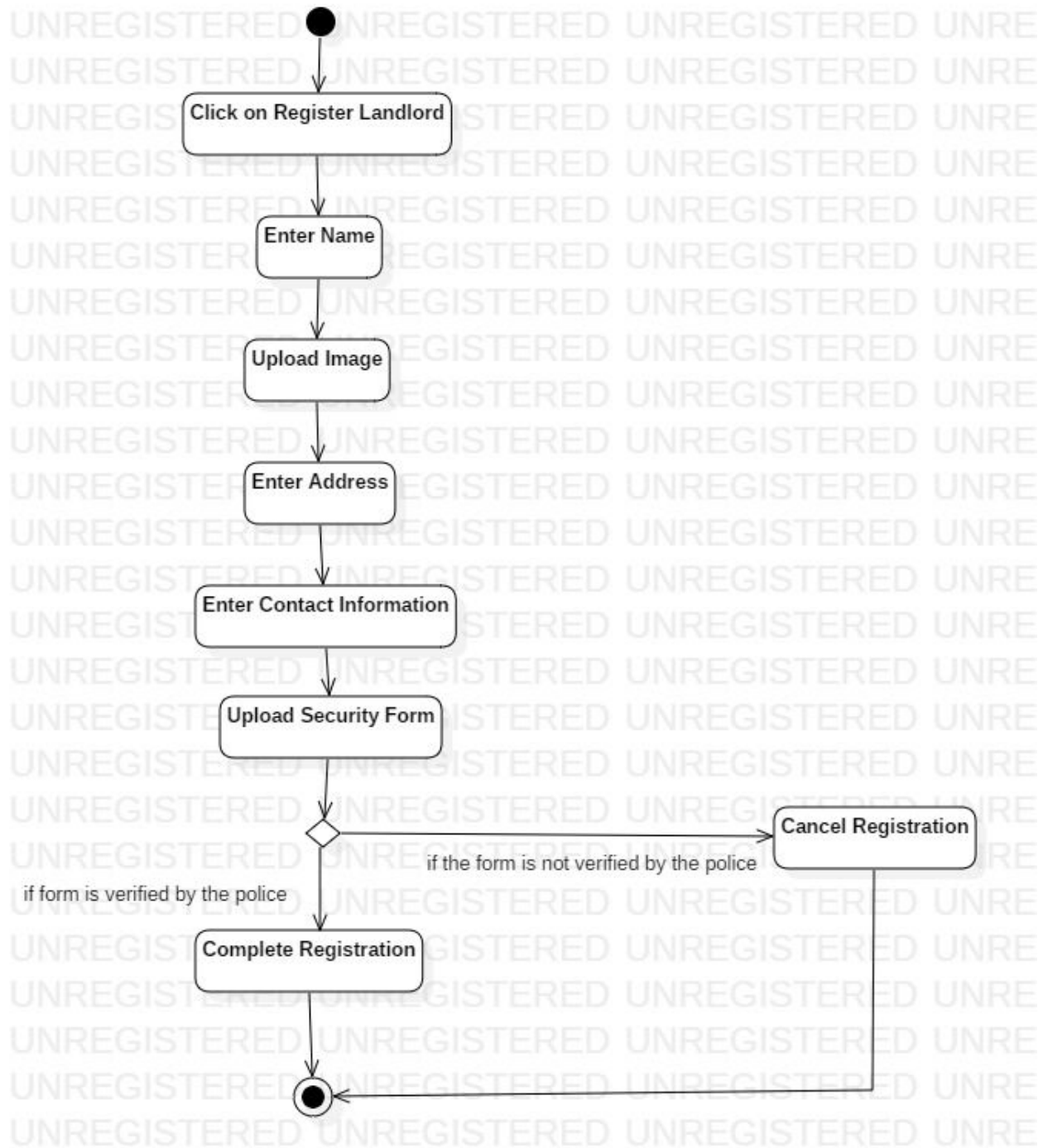
Actors: Tenant, Landlord

Pre Conditions: The tenant or landlord is trying to look at a the profile

Description: When a landlord Clicks on view profile it displays the information about the landlord on the screen. This information includes image, name, gender, email address, address, property, accommodation details, overall rating.

Exceptions: The exceptions in this use case are that if the landlord has not entered any specific information when it displays all the information it displays empty information in the respective box. For example if the landlord has not entered any property detail so it will display empty details.

Post Conditions: The tenant / landlord has looked at the profile



Use Case: Register landlord

Summary: The landlord can register himself/herself.

Actors: Landlord

Pre Condition: A new user is waiting to register

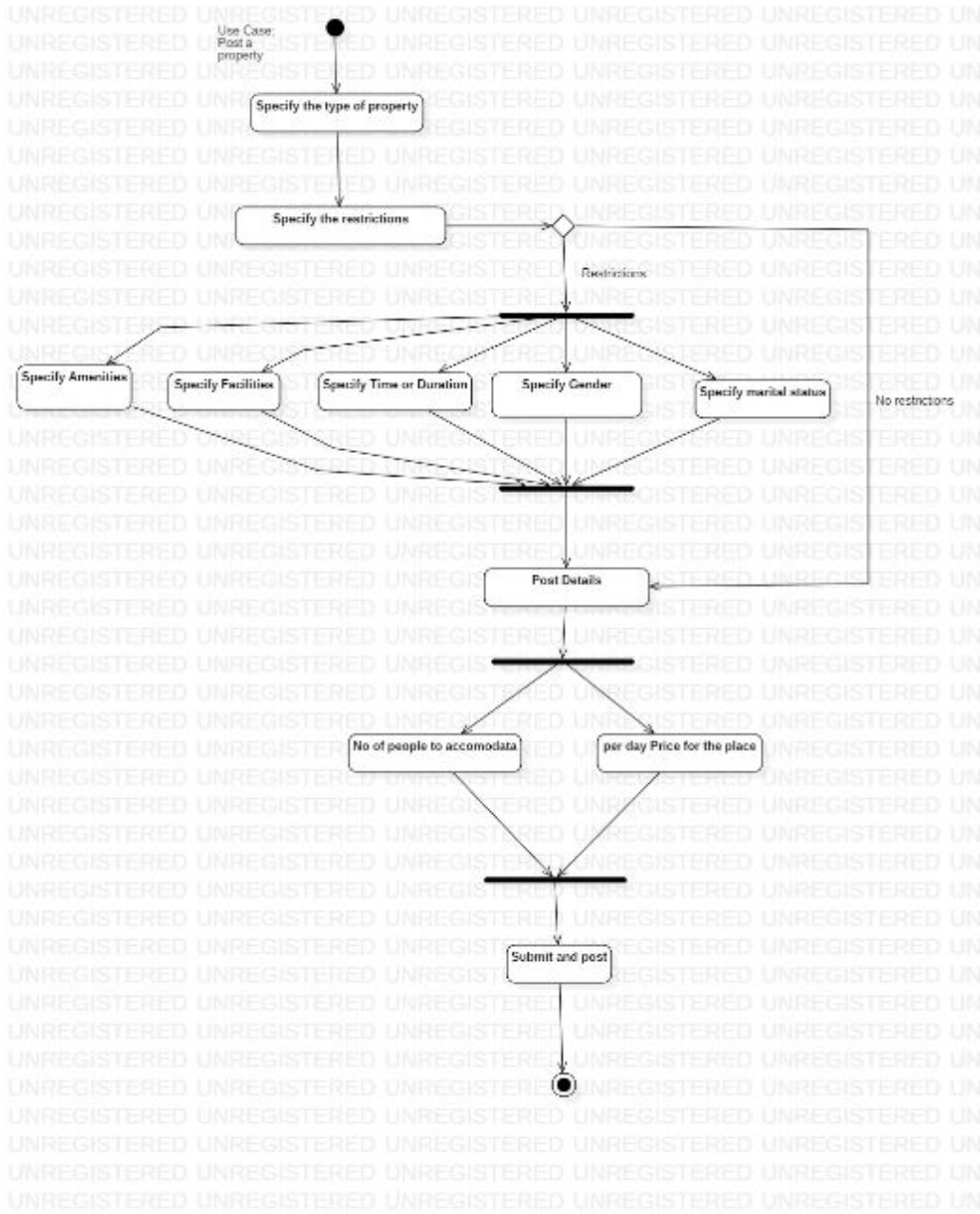
Summary: The use case allows a new user to register as a Landlord

Description: The landlord Clicks on Register Landlord, a page is open it allows the landlord to give information and register himself/herself. The information includes name, image, address contact information and security form. Once the landlord is registered, he/she is able to add property.

Exceptions: The exception in this use case can be that if the security form of the Landlord is not verified by the police the registration process is cancelled immediately.

Post Conditions: The user has been registered as a new Landlord

Abu Bakar Siddique:



Use Case: Post Property

Summary: Landlord post the property on site which he/she wants to rent

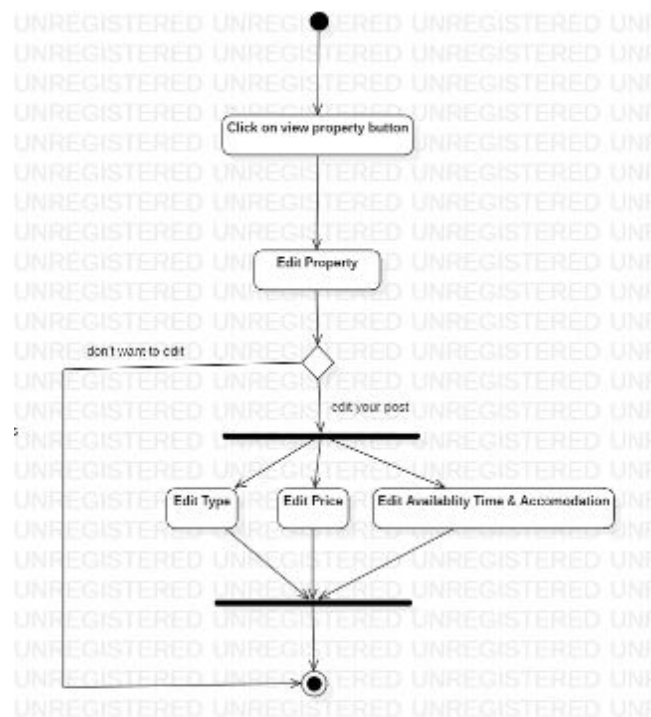
Actors: Landlord

Pre-conditions: The site needs the pictures and the details of the property to be posted

Description: First of all the landlord has to specify the type of property that what he wanted to post like room, restaurant. He/she can specify the restrictions on its property like to whom want to rent his location, his/her marital status and sometimes gender too. He will also have an option and he is not going to specify any restriction. After this he has to post the further details like rent, availability time and then click on the submit button..

Exceptions: This use case does not have a lot of exceptions only one is that you can not post the property without posting all the details like price, availability duration, pictures, else,

Post-conditions: The property which have been posted by the landlord should be available for the customer



Use Case: View and Edit property

Summary: Landlord may view and edit the property he posted on the site

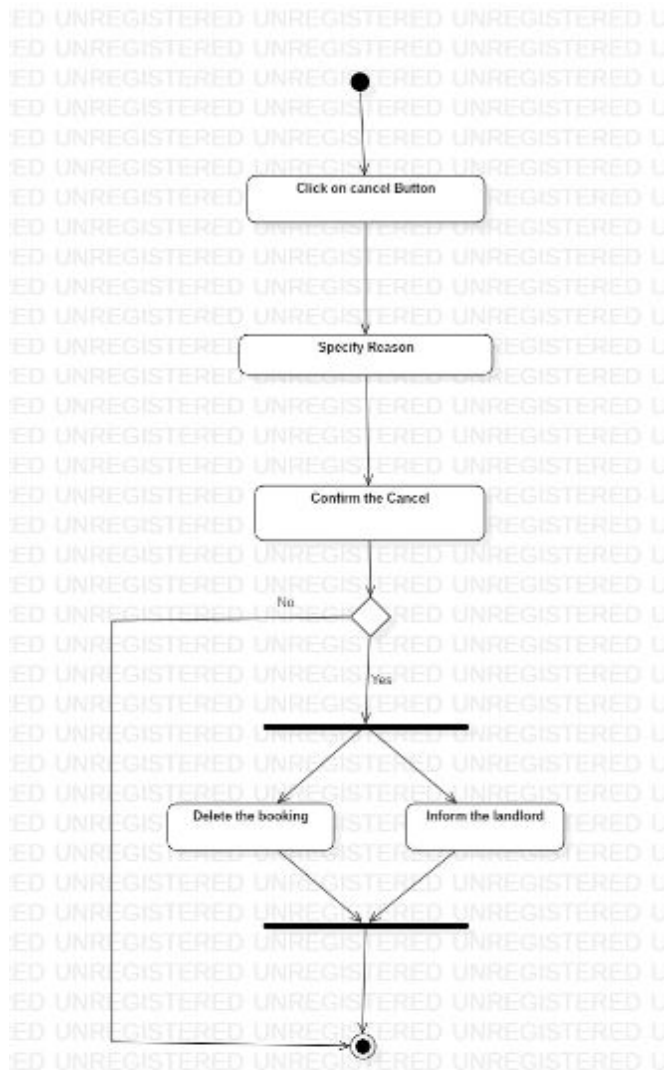
Actors: Landlord

Preconditions: The property is already posted by the Landlord

Description: This use case involves the viewing of already posted add by a landlord. This will further allow the landlord to edit the add of his property. He may change the location, type, address, availability, etc of the property. This process will succeed if the landlord will enter the complete details with the specified requirements.

Exceptions: One exception is that landlord can not edit the property without posting all the details like price, availability duration, pictures, else,

Post-conditions: The property which have been posted by the landlord should be available for the customer



Use Case: Cancel Booking

Summary: A tenant can cancel the booking after he booked a property

Actors: Patent

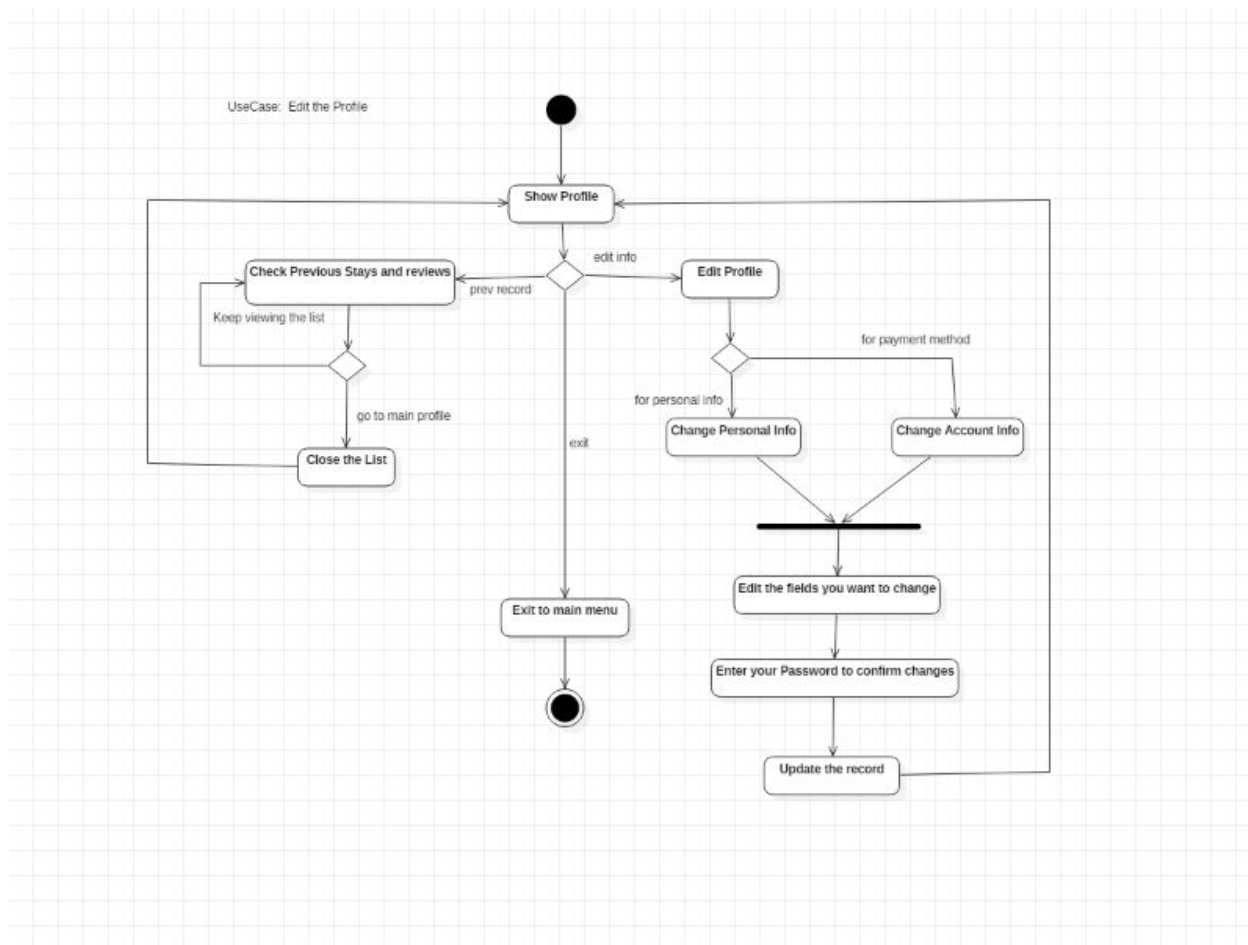
Pre-conditions: The tenant must have booked the property before cancelation.

Description: The tenant may cancel the booking of the property he has done already for some reason. But here is the must condition he should have to mention the reason that why he is going to cancel the booking and after that he has to confirm again that whether he wants to cancel the booking or not. and then a short message will be delivered to the landlord of that property.

Exceptions: This use case can not be used if the user has not done the booking yet.

Post-conditions: No such condition

Zulqarnain:



Use Case: Edit Profile

Summary: Tenant can view and update his/her profile and also can see the previous bookings and reviews.

Actor: Tenant, Landlord

Description: All the information will be display on screen.

Tenant has two options for update his information i.e.

- Update personal information.
- Update payment information.

After updating the information user has to enter his password to save changes.

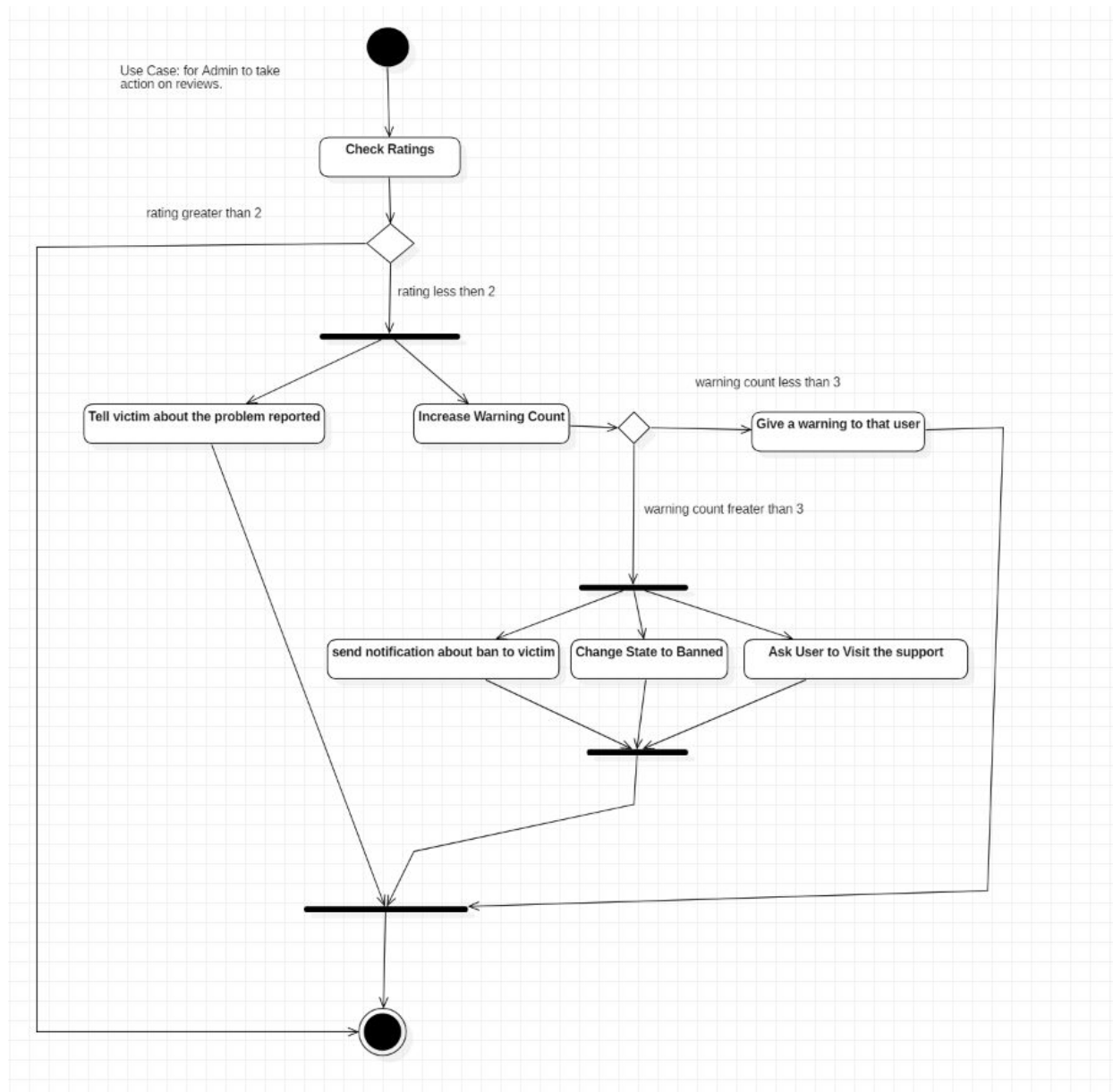
Tenant can also view his previous bookings details and reviews about their stays from landlords.

Preconditions: There are no preconditions for this use case.

Exceptions: there are some exceptions that can occur in this case. These exceptions are as follows:

- **Cancel the changes:** Nothing will happen in such case because the changes will be made if and only if user enter the current password and press on the save button.
- **Incorrect Password:** if user enter the incorrect password than a “Wrong Password” Message will be display on screen.
- **Empty Fields:** If any of the required field is empty then a “Required Field” message will display on screen and nothing will save.

Post Conditions: If the user change something than it will be visible for on the profile otherwise everything will remain same.



Use Case: Admin's re-action on ratings

Summary: This case will check the ratings of both tenant and landlord on the specific bookings and take actions accordingly.

Actor: Admin

Preconditions: There should be ratings from both i.e. from tenant as well as landlord.

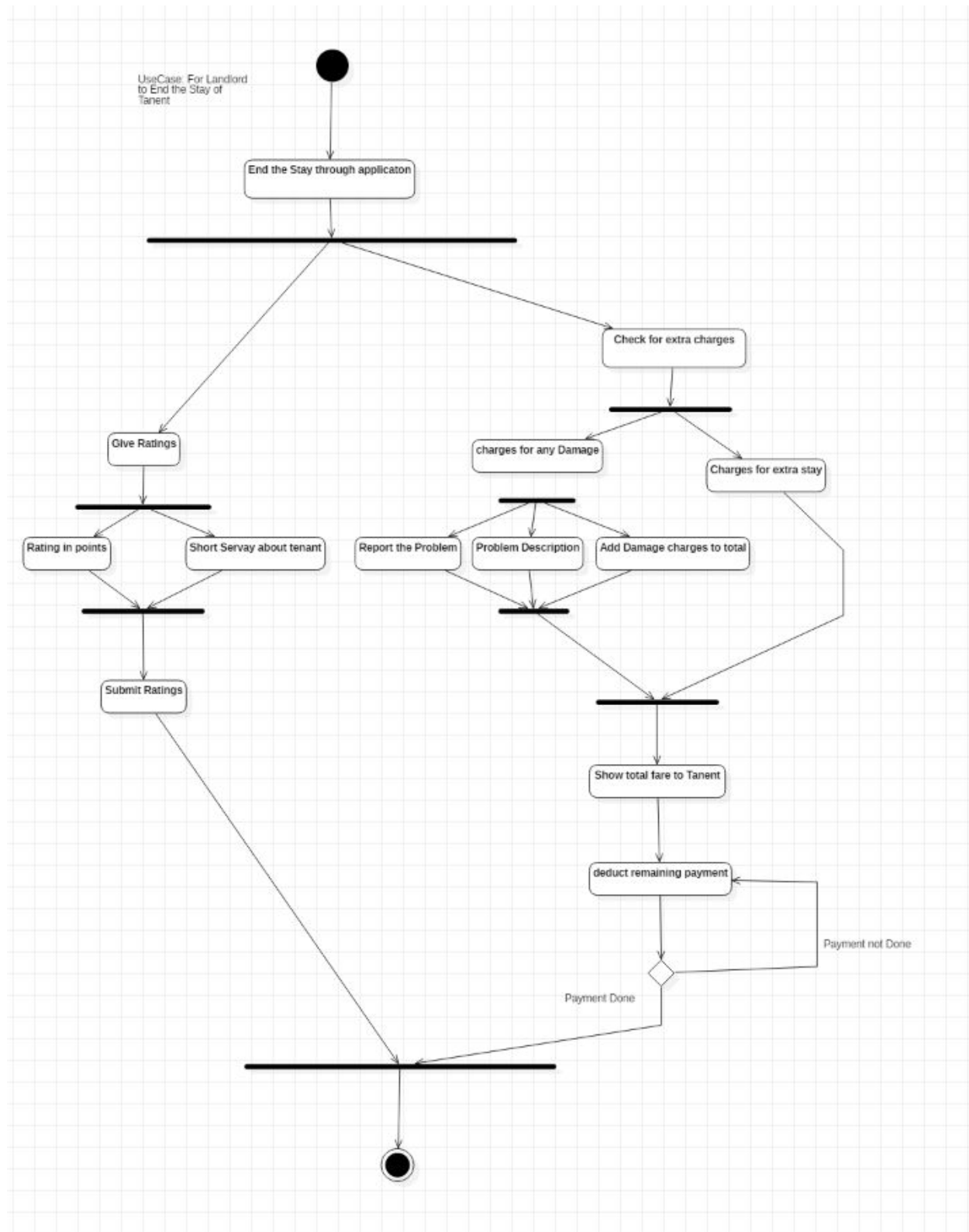
Description: In this use case, admin will see the ratings in two parts,

1. **Ratings greater than 2:** there will be no action on such ratings.
2. **Ratings less than 2:** If the rating is less than 2 then admin will see the short survey submitted by the landlord or tenant accordingly. Then admin check the warning count of that user, if the warning count is greater than 3 then ban that user and notify him that, for further use of this site he should visit the support. If the warning count less than 3 then warn the victim through notification (i.e. email)

Exceptions:

- **If no Survey Present:** if there is no survey then ask the user for the survey again for further action.

Post Condition: If Admin has banned someone then he will be no longer a user of our services.



Use Case: End the Stay

Actor: Landlord

Summary: In this case the landlord will end the stay through the application and collect the remaining payments from the tenant.

Precondition: there are no preconditions for this use case.

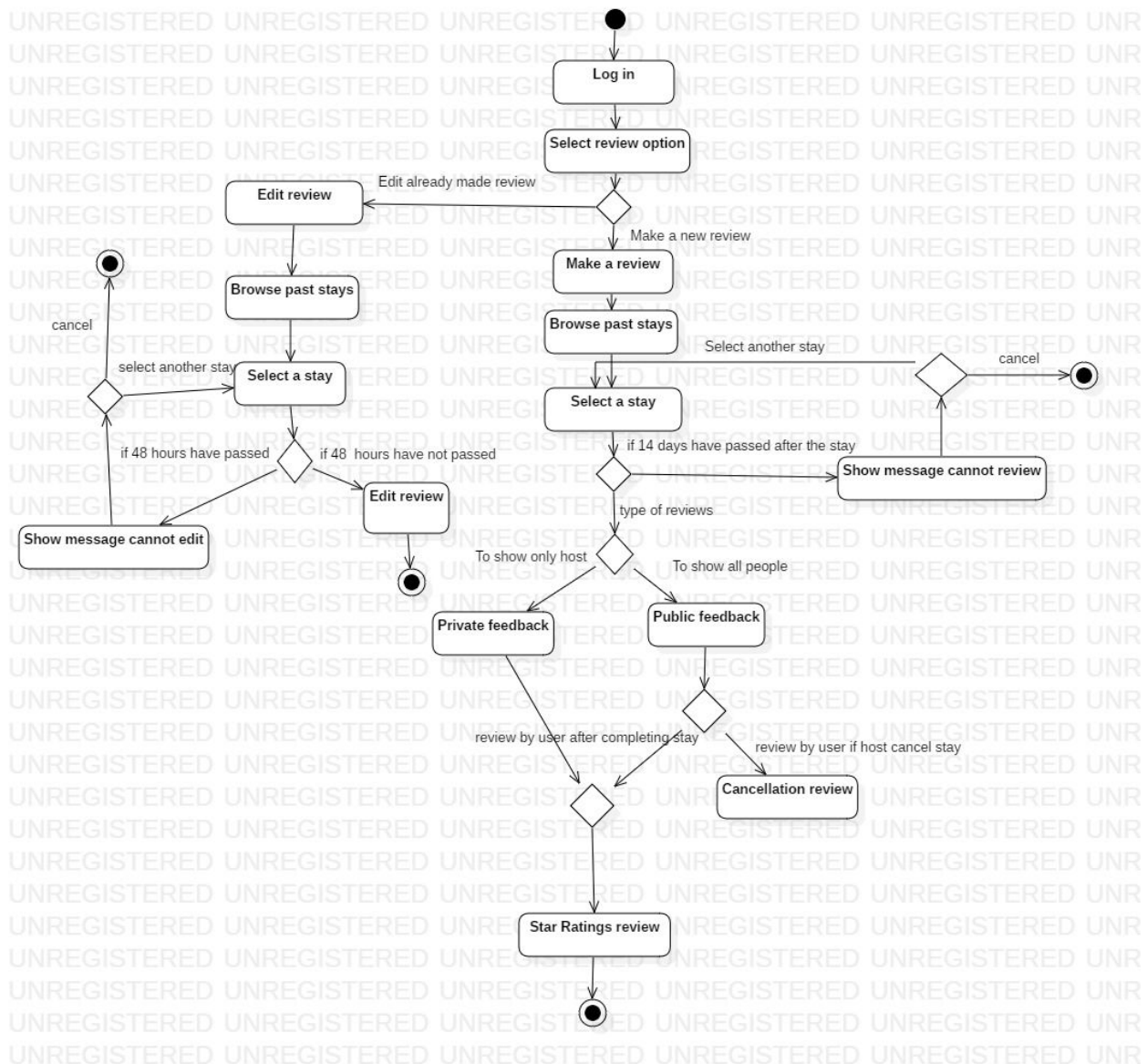
Description: In this case landlord will end the stay of tenant, when he left the place. He will charge the tenant if tenant damage something or he over stays on the place. If tenant damage or steal something then landlord should report the problem and give some description about his problem. Landlord will also give the ratings to the tenant and at same time tenant give the ratings to the landlord. Landlord will check if the tenant paid the full payment or not.

Exceptions: There are some exceptions for this use case:

- **Insufficient amount in the bank account:** if the amount in the account of the tenant is not sufficient then contact the tenant and ask him to add the sufficient amount in the bank account or change the account information in the specific duration like 2 Days.

Post Conditions: If the tenant paid the full charges and his ratings are clear then he will be ready for the new deal.

Zain Arshad:



Use Case: Make a review

Summary: After completing trip user make a review in which he describes his experience in few lines and rate the host between 1 to 5 stars.

Actors: User

Preconditions: The system is waiting for the user to login and make a review of selected trip.

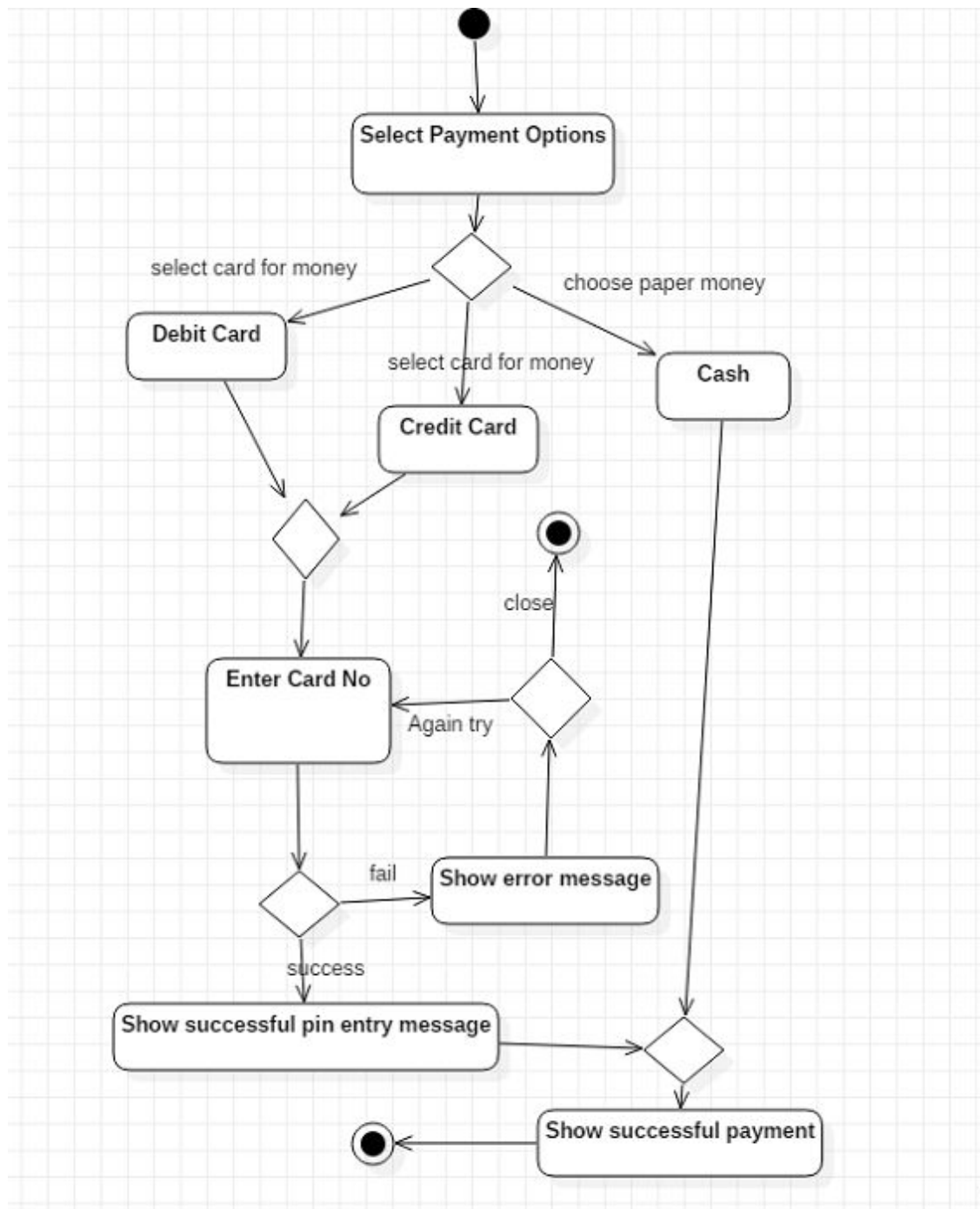
Description: User open the website and select the login page. In login page he entered his valid email address and password. After logging in the customer selects the review option and selects the trip he had made in past for which he wants to rate the host or wants to edit the

review. If he makes a new review for the selected trip the machine will check the number of days has passed after he made the trip. If the number of days is less than 14 then he will allow to make review and if exceeds then error message will show. If he chooses edit review then system will check the number of hours has passed since he made the review if it is less than 48 hours then system will allow it change the review otherwise it will show display you cannot change.

Exceptions: If customer accidentally closed the browser system will close.

If customer select cancel option the system will close.

Post condition: The system is waiting for the user to take an action.



Use Case: Make payment

Summary: At booking trip user select the payment option.

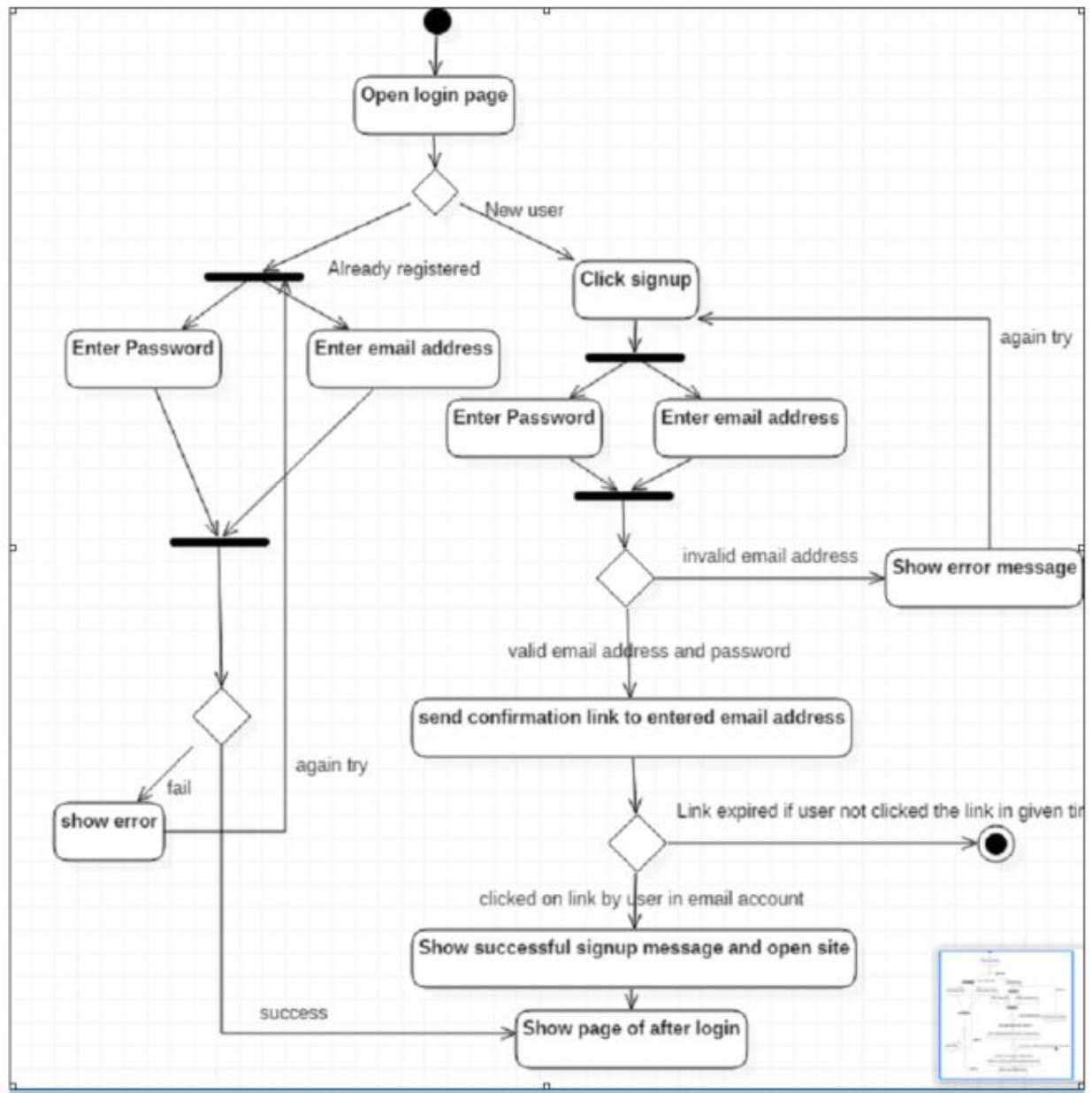
Actor: User

Preconditions: System is waiting the user to select the choice from the given options to make payment.

Description: After completing all steps of booking user will select the payment option. If he selects credit or debit card the system will ask for the number of credit or debit card if the pin number is correct the system show the successful booking message otherwise show error. If user select the payment option show successful booking message.

Exceptions: If customer accidentally closed the browser system will close.
If customer select cancel option the system will close.

Post condition: The system will show the home page.



User Case: User login and sign up

Summary: If user is existed member he will log in and if he is a new member he will sign up.

Actor: User

Preconditions: System is waiting for user to select log in or sign up option.

Description: If a person is already a member he will select login page and if he is a new member he will select sign up option. If he selects the login page he will enter the valid email and password if login is successful next page will display and if email address or password is incorrect error will display. And if a person is a new member he will enter the email and password a link will be send to given email address on whom clicking next page will be display and if wrong error will show.

