



MIU AIRBNB

Use Case Specification: Tenant search and renting property

Version 1.1

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1. Tenant searches for rental property

1.1. Brief Description

The property search activity for tenants in the MIU AirBnB system.

1.2. Actors

1. Tenant
2. Property listing Database

Preconditions

3. The tenant is registered and logged into the MIU AirBnB system.
4. The system has available property listings.

1.3. Flow of Events

1.3.1. Basic Flow

User Action	System Response
Tenant navigates to property search section in their dashboard.	The system displays the property search page, where the tenant can enter search criteria such as location, number of rooms, rental budgets.
Tenant enters desired search criteria and click the "Search" button.	<p>The system searches the property listing database for properties that match the tenant's search criteria.</p> <p>The system displays a list of properties that match the search criteria.</p>
Tenant reviews the list of properties and selects a property of interest to view its details	The system displays the detail page of selected rental property.

1.3.2. Exceptional Flow

1.3.2.1. *No matching properties found*

User Action	System Response
Tenant navigates to property search section in their dashboard.	The system displays the property search page, where the tenant can enter search criteria such as location, number of rooms, rental budgets.
Tenant enters desired search criteria and click the "Search" button.	<p>The system searches the property listings database but does not find any properties that match the tenant's search criteria.</p> <p>The system displays a message stating "No matching properties found. Please refine your search criteria."</p>

1.4. Post-Conditions

None. State of the system remains unchanged by the use case.

1.5. Business Rules

1.6. Nonfunctional Requirements

- The response time should be fast to ensure a smooth user experience.

1.7. Sample Screen

1.8. Project Repository

- https://github.com/puruprajapati/swe_CS425DE

2. Renting a property

2.1. Brief Description

The renting a property activity for tenants in the MIU AirBnB system.

2.2. Actors

- 5. Tenant
- 6. Property listing Database

Preconditions

- 7. The tenant is registered and logged into the MIU AirBnB system.
- 8. The system has available property listings.

2.3. Flow of Events

2.3.1. Basic Flow

User Action	System Response
Tenant selects a property from the list to view its details.	The system displays detailed information about the selected property, including images, location, rent, and amenities.
Tenant reviews the property details and decides to rent the property.	The system provides an option to “Rent Now” or “Contact Landlord” for further inquiries
Tenant clicks the “Rent Now” button.	<p>The system redirects the tenant to a rental confirmation page, displaying the rental details and clicks the “Confirm Rental” button.</p> <p>The system processes the rental transaction, deducting the rental amount the tenant’s account balancing.</p> <p>The system update s the property’s status as “Rented” and sends a confirmation email to the tenant and landlord.</p>

2.4. Post-Conditions

- 9. The tenant successfully rents the selected property.
- 10. The property’s status is updated to “Rented” in the property listings database.

2.5. Business Rules

- 11. Tenants can only rent properties when they have sufficient funds in their account balance.

2.6. Nonfunctional Requirements

- 12. The property search process should be fast and responsive, providing real-time search results.
- 13. The rental transaction should be secure and protect tenant and landlord data.

2.7. Sample Screen

2.8. Project Repository

- https://github.com/puruprajapati/swe_CS425DE