**Manual Blackbox Testing and Traceability Matrix**

**Test suite**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Test ID** |  |  | | --- | |  | | |  | | --- | | **Test Description** |  |  | | --- | |  | | |  | | --- | | **Tester Name** |  |  | | --- | |  | | |  | | --- | | **Input(s)** |  |  | | --- | |  | | |  | | --- | | **Expected Output** |  |  | | --- | |  | | |  | | --- | | **Actual Output** |  |  | | --- | |  | | |  | | --- | | **Pass/Fail** |  |  | | --- | |  | | | **Steps to Reproduce** | | --- |  |  | | --- | |  | |
| T01 | Verify user login functionality | Fariz Ibrahimov | Username: “ayan”, Password: “ayan” | Login successful message | Login successful!  Welcome, ayan and respective menu option for this user. | Pass | 1. Go to login page 2. Enter valid credentials 3.Click enter |
| T02 | Invalid login attempt | Fariz Ibrahimov | Username: “ayan”, password: “123” | Error: "Invalid credentials" | Invalid username or password. | Pass | Same as T01 but with invalid inputs |
| T03 | Search properties by filtering | Jala Almammadli | Property type: “House”, a part of the address: “Baku” | Gives all properties that match the criteria | Gives all House properties that have Baku in their address | Pass | 1. In Buyer menu, choose Search properties 2. Input location and filters 3. Click enter |
| T04 | Search with no results | Jala Almammadli | Property type: “all”, a part of address: “abababa” | "No properties found" message | “No properties found with this criteria” | Pass | Same as TC003 but with unrealistic inputs |
| T05 | Contact Seller/Agent | Fariz Ibrahimov | Seller Email: "seller@email.com", Message: "Is this property still available?" | Message sent to seller; seller receives notification | Message saved in messages.csv | Pass | 1. Search property 2. Get seller's email 3. Send message to seller by contact seller/agent |
| T06 | Create property | Jala Almammadli | Property details: Type, address, Price, email of seller | Property created successfully message | Property created successfully with ID: ‘id’ of the property | Pass | 1. Choose create property 2. Fill in details 3. Click enter |
| T07 | Make payment | Ayan Jamal | Enter property ID: "id of the property we want to buy" Card Number: "card number" Confirm Payment: "yes" | 1. Payment confirmation displayed: "Payment for property ID : ‘id’ has been successfully processed." 2. Notification sent to the seller for property ID: ‘id’" 3. Property status updated: "Property status updated to 'Sold'." | Payment for property ID: ‘id’ has been successfully processed.  Notification sent to the seller for property ID ‘id’.  Property status updated to 'Sold'. | Pass | 1. Log in as a buyer 2. Select "Make Payment"  3. Enter valid property ID 4. Enter valid card number 5. Confirm the payment by entering "yes" |
| T08 | Agent requesting permission for editing property | Ayan Jamal | Property ID: ‘property id’ | Confirmation message: "Edit request sent to the seller: seller@email.com" Entry added to permissions.csv file. | Edit request sent to the seller: seller@email.com | Pass | 1. Login as agent 2. Choose option 1: “Request Property Edit” 3. Enter the ID of property to edit 4. Click enter |
| T09 | Retrieve properties of chosen seller | Ayan Jamal | Seller email: seller email’ | List of properties associated with the seller. | List of properties associated with the seller including **Property ID, Type**, **Address, Price**, **Status,** Contract **Status, Seller Email, Seller Phone** | Pass | 1. Log in as Admin 2. Select **"Get Seller Properties"** from Admin Menu 3. Enter seller email  4. Verify the displayed properties |
| T10 | Agent helping with contract | Ayan Jamal | Property ID: ‘property id’ | 1. Confirmation of the preparing contract for property: ‘property id’ 2. Property details 3. Contract prepared successfully message | 1. Confirmation: "Preparing contract for property: ‘property id" 2. Property details 3. “Contract prepared successfully for property: ‘property id’” | Pass | 1. Log in as Agent 2. Select **"Help with Contract"** from Menu 3. Enter property ID  4. Click enter |
| T11 | Buyer makes payment for sold property | Ayan Jamal | Property id: ‘property id’ | Error: "This property is already sold and cannot be purchased." | Payment processed successfully (property already sold) | Fail | 1. Log in as Buyer 2. Select **"Make Payment"** 3. Enter property ID ‘property id’ (with status Sold) 4. See payment success despite property being sold |
| T12 | Seller archives property without being asked property id | Fariz Ibrahimov | Seller selects "Archive Property" | Seller is prompted to select a specific property to archive. After selected, the property is archived. | The system archives the same property repeatedly without prompting for selection. | Fail | 1. Log in as Seller 2. Select **"Archive Property"** multiple times 3. Observe that the same property is archived repeatedly without asking for a specific property |

**Traceability Matrix**

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| Requirement ID | Requirement Description | Test IDs |
| R001 | User login functionality | T01, T02 |
| R002 | Property search | T03, T04 |
| R003 | Contact Seller/Agent | T05 |
| R004 | Create property | T06 |
| R005 | Making payment functionality | T07, T11 |
| R006 | Agent’s permission for editing property | T08 |
| R007 | Retrieving properties of seller | T09 |
| R008 | Agent in contract functionality | T10 |
| R009 | Archiving property | T12 |