Rental House Management System

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Introduction:

Rental House Management system is a management application which deals with a trending problem that the people of metropolitan cities are facing. It is a web-based application which brings a platform for the house owner and the people who wants to rent a house. It creates a two-way communication between the House owners and the People who wants a House. There exists an admin who has the authority to take decision to keep the process clean. Also, House owner can set some valid criteria with it. It is like a social media but for renting a home. Where house owner can post about an ad about their house, rents, facilities etc. and some criteria to follow. people can easily find the nearby houses based on search preferences and take a house for a rent through system procedures.

Functional Requirements:

Admin:

1. **Login-** Admin shall be able to login to the system.

2. **Add Other Admins-** User shall be able to add other admins to the system.

3. **Ban landlords and tenants-** User shall be able to ban landlords and tenants if there is any problem.

4. **Approve or delete ads-** Admin shall be able to approve or delete any ads.

Landlord:

1. **Registration-** Landlords shall be able to register themselves to the system.

2. **Login-** User shall be able to login to the system.

3. **Post ads**- User shall be able to post ads about houses to rent.

4. **See tenants' request**- User shall be able to see any tenants' request for renting house.

5. **Accept or delete tenants' request**- User shall be able to accept or delete any tenants' request.

6. **Confirm rent payment-** User shall be able to confirm any rent payment made by the tenants.

7. **See other landlord's ads**- User shall be able to see other landlords' ads.

Tenant:

1. **Registration**- Tenants shall be able to register themselves to the system.

2. **Login**- User shall be able to login to the system.

3. **See ads**- User shall be able to see ads for renting houses.

4. **Send request to the landlord-** User shall be able to send requests for rental agreement to the landlord if they like any house.

5. **Make renting payment**- User shall be able to make payment if any landlord accepts their request for house renting.

Non-functional Requirements:

It describes aspects of the system that are concerned with how the system provides the functional requirements. They are:

Security:

The subsystem should provide a high level of security and integrity of the data held by the system, only Admin
can gain access to the secured page on the system; and only users with valid password and username can login to
view user's page.

Performance and Response time:

The system should have high performance rate when executing user's input and should be able to provide feedback or response within a short timespan usually less than 500ms to 2s for highly complicated task and 100 to 300ms for less complicated task.

Error handling:

Error should be considerably minimized and an appropriate error message that
guides the user to recover from an error should be provided. Validation of user's input is highly
essential. Also, the standard time taken to recover from an error should be 15 to 20 seconds.

Availability:

This system should always be available for access at 24 hours, 7 days a week. Also, in the occurrence of any major system malfunctioning, the system should be available in1 to 2 working days, so that the business process is not severely affected.

Test plan identifier

TP-REV-01

- **Test items**

The whole rental house management system as a whole will be tested. Different functionalities such as registration, password verification, certain approvals will be tested. Related codes will be unit tested and functional tests will be done from a browser through an automated tool like selenium.

- **Item pass/fail criteria**

1. The code will be given green signal for delivery if at least 90%-unit tests passes.

2. After each module is integrated, regression tests must pass 100% of the test cases.

3. After each iteration, in the final phase, the system should be able to handle the stress test and load up to 500 users simultaneously.

4. Once live test sessions start response time from the server should be less than half a millisecond.

Failure to achieve any one of the above points will be considered as Fail , and system will not be flagged ready for delivery .

- **Test Deliverables**

  1. Acceptance test plans.
  2. Integration test plans.
  3. Unit test plans.
  4. Test Report.
  5. Test logs.

- **Staffing and Training Needs**

  It is recommended that there shall be least one full time tester from the start of the project. Then in the later phases more full-time tester might be needed for Blackbox, acceptance and system testing.

  Since the target customers for the system are general people so for their ease to understand the system blogs and tutorials about how to use the system will be uploaded, Help and discussion threads shall be opened for users.

- **Responsibilities**

	TM	PM	Dev Team	Test Team
Acceptance test Documentation & Execution	X	X		X
System/Integration test Documentation & Exec.	X		X	X
Unit test documentation & execution	X		X	X
System Design Reviews	X	X	X	X
Detail Design Reviews	X	X	X	X
Test procedures and rules		X	X	X

- **Schedule**

Time has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan timeline. The persons required for each process are detailed in the project timeline and plan as well. Coordination of the personnel required for each task, test team, development team, management and customer will be handled by the project manager in conjunction with the development and test team leaders.

- The development of this master plan may require at least two reviews.
- Review of the system requirements document by test team personnel to guess the effort and time needed for complete testing of the system.
- Review of the system design document by test team personnel. This will help team to know what to test, what not to test, what to expect, etc. and plan ahead accordingly.

- **Planning Risks and Contingencies**

  If the test staffs are not available at the specified time frame, then the progression of the project might slow down and delay the launch date of the system. Should there be a shortage of test staff, the team lead may take that role with a representative from the stakeholder's side to perform the acceptance testing. The product will not be ready for delivery until all the objectives are met.

Test Cases for Rental House Management System

Test Case#	Test Case Description	Actions	Expected Results	Actual Results	Pass/Fail	Comments
TC-01	Launch the website www.rentalhomeonline.com	User opens a browser a goes to the following URL.	The website should launch with all of its content.			
TC-01	Registration of a user	User will click on the label "Don't have an account? Sign Up "	User should see a registration form that takes username, password, account type and other general information as parameter.			
TC-02	Login of a user (as tenant)	Users will input login credentials (username, password)	Website should validate credentials from DB, and identify user type from username			
TC-03	Checking Feed	User will click on the feed where posted ads loaded.	Website should load all the feed data and show to the user.			
TC-04	Filter Searching in Feed	Users will click on enable filter search and select filters based on preference.	Website should load the filtered data.			

TC-05	Requesting a landlord for rental agreement	Users will click on the Request Landlord button from a selected ad.	A notification for a proposed rental agreement should be sent to the selected landlord.			
TC-06	Making Payment through system	User will click on the payment tab and input account no and amount.	A payment id should be generated.			
TC-06	Logging out of the system	User will click on the logout icon.	Session should be ended, user shall be logged out.			
TC-07	Logging in as Landlord	User will input login credentials	Website should validate login credentials and user type from username.			
TC-08	Adding a flat/house to the system	User will click on add house button and input valid parameters.	House should be added to system after validation by admin.			
TC-09	Posting an ad	User will click on post ad button and fill in necessary information's.	Ad should be added to feed.			
TC-10	Deleting an account	User will click on delete account button	Account should be deleted.			
TC-11	Banning users as admin	Admin will see a ban user button for per users of the system and click on it.	Account should be Banned from the system.			