

Software Requirements Specification (SRS)

Introduction

This Software Requirements Specification (SRS) describes the requirements for the House Renting Platform, a web-based system designed to facilitate rental property listing, discovery, and transactions between property owners (renters) and potential tenants (rentees).

The system allows renters to list properties for rent and manage those listings, while rentees can search, view, and book available properties. Key features include user authentication, property listing and browsing, search and filter, booking functionality, and payment integration.

- **Renter:** A user who owns and lists rental properties.
- **Rentee:** A user who searches for and books rental properties.
- **Listing:** A property made available for rent.

References

- Django Documentation: <https://docs.djangoproject.com/>
- IEEE 830 SRS Guidelines

Overview

This document describes the overall system structure, interfaces, and both functional and non-functional requirements for the House Renting Platform.

Overall Description

Product Perspective

This is a standalone web platform built using the Django framework. It is structured with separate apps for accounts, listings, and system configuration.

Product Functions

- Renter account registration and login
- Rentee account registration and login
- Property listing creation and management (by renters)
- Browsing and filtering listings (by rentees)
- Booking properties
- Payment integration for bookings

User Characteristics

- Rentees are general internet users familiar with web forms and searching.
- Renters are property owners with basic digital literacy.

Constraints

- The system must be built with Django.
- Payments must integrate with a third-party processor.

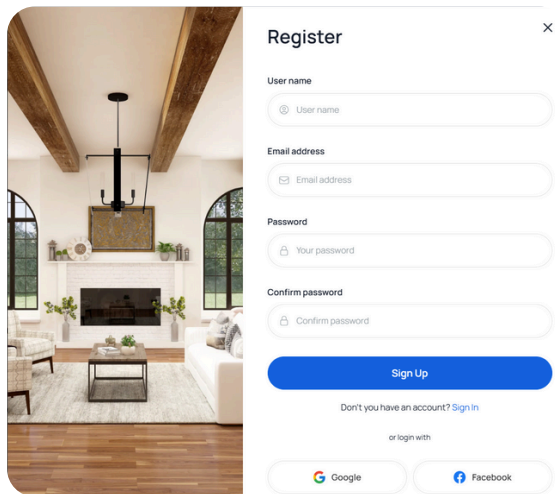
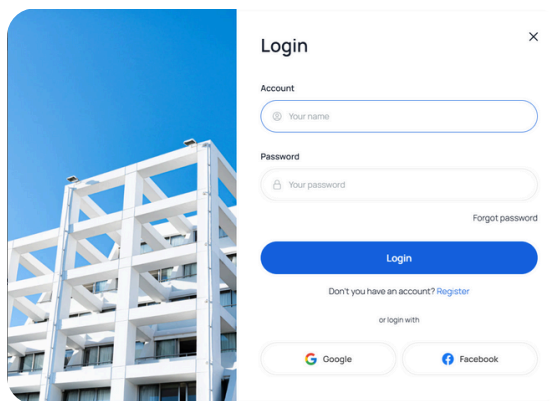
Assumptions and Dependencies

- All users will have stable internet access.
- Django and other dependence's are the chosen backend technologies.

Functional Requirements

FR1: User Authentication

- The system shall allow users to register and log in.



FR2: Listing Management (Renter)

- Renters shall be able to create, update, and delete property listings.
- Each listing shall include images, address, price, and availability status.

Profile

Account

themesflat@gmail...

Menu

Dashboards

Profile

Reviews

My Properties

My Favorite

Message

Add Property

Logout

Home

Listing

Properties

Pages

Dashboard

Themesflat

Submit Property

Price

Price:*

Example value: 12345.67

Have Bank Dedt:*

No

Additional Infomation

Property Type:*

Apartment

Property Status:*

For Rent

Condition:*

10+ Years Ago

Size (Sqm):*

Size of the property

Land Area (Sqm):*

Area of the property

Furnished:*

No

Rooms:*

How many Rooms does the property have ?

Bedrooms:*

How many bedrooms does the property have ?

Bathrooms:*

How many bathrooms does the property have ?

Parking Space:*

Not Available

Kitchens:*

How many kitchens does the property have ?

Balcony:*

How many balcony does the property have ?

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My Properties

My Favorite

Message

Add Property

Logout

Home

Listing

Properties

Pages

Dashboard

Themesflat

Submit Property

Select photos

Videos

Video URL:


Youtube, vimeo url

Add Property

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FR3: Property Discovery (Rentee)

- Rentees shall be able to view all available listings.
- Rentees shall be able to search listings by location, price, and availability.



[Home](#)
[Listing](#)
[Properties](#)
[Pages](#)
[Dashboard](#)

[Sign in](#)
[Submit Property](#)

Filters

Title contains:

Province:

Location contains:


Price is less than:

Price is greater than:

Property type:

Find Properties →

Property Listing



Featured


Siraj

Beds: 4

Baths: 3


Sqft: 450.00

Ayat 49, Addis Abeba, Addis Abeba



Arlene McCoy

12000000.00 ETB



Featured


Abdukadir

Beds: 4

Baths: 3


Sqft: 450.00

Ayat 49, Addis Abeba, Addis Abeba



Arlene McCoy

12000000.00 ETB



Featured

Fakaro

Beds: 4

Baths: 3


Sqft: 450.00

FR4: Booking Functionality


- Rentees shall be able to book a property for a given period.

FR5: Payment Integration


- The system shall provide a payment gateway for processing bookings.
- Payments shall be securely handled via a third-party provider.




Select your payment method here



Test Bank Payment



Test Card Payment



Chapa Checkout

Helping you serve international and local customers by providing access to secure digital payment solutions.


No actual money is used in the test mode. Only our test cards and bank accounts can be used.

Testing phone number

Phone Number

09*****

Pay using Test Mode


Secured By Chapa



RECEIPT

Receipt From

Test Business

TIN Test TIN

Phone No. 0900123456

Address Test Address

Chapa Financial Technologies
S.C

TIN 0071406415

VAT Reg. 18595770010

Phone No. +251-960724272

Website chapa.co

PAYMENT DETAILS

RCAP6WYz9RgdoOA

Payer Name / የክፍያ ስም

Test User

Phone Number / ስልክ ቁጥር

0912345678

Email Address / ኢሜል አድራሻ

imsirajabdulkadir@gmail.com

Payment Method / የክፍያ መንገድ

Test

Status / ሁኔታ

Paid / ተከፍሏል

External Interface Requirements

User Interfaces

The web interface shall use Django templates.

- Forms shall be provided for login, registration, and listing submission.

Hardware Interfaces

The web-based system shall be accessible from any device with a browser

Software Interfaces

- Django web framework
- SQLite database

The system shall integrate with a payment with chapa

Communication Interfaces

- HTTP/HTTPS protocols

Non-functional Requirements

Performance

- Page load time should not exceed 2 seconds under normal conditions.

Security

- Passwords shall be hashed.
- Only authenticated users can create listings or book properties.

Maintainability

1. Code should follow Django best practices with modular apps.
2. The system should use reusable templates and forms.

Portability

- Should run on Linux, macOS, or Windows servers

Other Requirements

- Logging of system activity for audits

Appendices

- Sample listings
- Screenshots (to be included in final version)
- URL routes
- Database schema(ER diagram optional)