Requirement Gathering

Date: 11-12-2025

Project Overview

RendeX is an online second-hand rental space management system designed to connect item owners, renters, delivery partners, and administrators within one unified digital platform. It enables users to rent a wide range of everyday items across multiple categories, including student essentials, clothing, vintage collections, fitness equipment, agricultural tools, medical items, electronics, travel/outdoor gear, home essentials, and furniture.

The system aims to ensure transparent pricing, secure payments, smooth rental workflows, structured item listings, multi-owner comparisons, and reliable delivery and return handling. RendeX enhances accessibility, affordability, and convenience by providing a trustworthy platform for renting items from verified owners.

System Scope

RendeX is designed as a comprehensive rental marketplace that supports end-to-end workflows—from item listing and availability management to booking, delivery, returns, and dispute resolution.

The system's scope includes:

- User onboarding, owner registration, and account management

- Item uploads, categorization, filtering, and multi-owner comparisons

- Rental workflow operations (availability check → booking → delivery/pickup → return)

- Secure transaction handling and deposit management

- Delivery partner assignment & tracking

- Feedback, ratings, and issue reporting

- Administrative oversight for pricing, categories, and dispute handling

The platform ensures structured data flow, reliable performance, user-friendly navigation, and scalability for future enhancements.

Target Audience

The RendeX system is intended for the following user groups:

- **Renters (Users):** Individuals who browse, search, book, and rent second-hand items.

- **Item Owners:** People who list their products, set rental terms, manage availability, track bookings, and earn revenue through rentals.

- **Delivery Partners:** Individuals responsible for picking up items from owners and delivering them to renters.

- **Administrators:** System-level managers who oversee users, categories, payments, complaints, pricing policies, and overall platform health.

Each user interacts with the system based on their role-specific access permissions.

Modules

1. User Management Module

Handles all user-role operations including:

- User and owner registration

- Profile updates and identity verification

- Browsing rental items, applying filters, maintaining wishlists

- Viewing booking history

- Uploading products (for owners)

- Setting rental price, deposit, availability, and terms

- Admin-level operations such as user control, dispute review, payment supervision, and category updates

This module ensures secure user authentication, personalized dashboards, and controlled access to platform features.

2. Inventory Management Module

Manages organized listing and structured presentation of rental items:

- Categorization of items into structured groups and subcategories

- Search filters, sorting, item comparisons, and multi-owner display

- Safety guidelines and rental instructions

- Delivery and insurance information for each item

- Display of ratings, deposit values, availability dates, and owner details

This module provides a systematic and clean item-browsing experience.

3. Rental & Support Services Module

Handles complete rental operations from start to finish:

- Selecting an item and checking availability

- Choosing delivery or pickup mode

- Auto-assigning delivery partners

- Real-time item movement tracking

- Return handling and damage assessment

- Secure payment processing and refund of deposits

- Dedicated dispute-resolution workflow

This module ensures smooth communication between owners and renters, delivering a stable and trustworthy rental environment.

User Roles

• Renter/User

- Register and manage profile

- Browse categories and search for items

- Add items to wishlist

- Check availability, book items, and track orders

- Make payments and view rental history

- Raise complaints or request support

- Rate items and provide feedback

• Item Owner

- Create account and verify identity

- Upload items, descriptions, photos, and terms

- Set rental price, deposits, and availability

- Manage bookings and approve/reject requests

- Track item delivery and return

• Delivery Partner

- View assigned pickup and delivery tasks

- Update item movement status

- Ensure safe handling and timely delivery/return

- Report delivery issues and submit proof of delivery

• **Administrator**

- Manage all user accounts (renters, owners, delivery partners)

- Approve or remove product listings

- Oversee payments, refunds, and dispute cases

- Update categories, policies, and platform settings

- Monitor system performance and generate reports

System Ownership

RendeX is owned by the developer/team who designs, builds, and maintains the platform. Ownership includes:

- UI/UX design elements

- Backend architecture

- Database structures

- Rental workflow logic

- Data flow processes

- Intellectual property rights over modules, layouts, and algorithms

Since the system handles sensitive user data, secure ownership and structured governance ensure reliable operation and protection of system assets.

Industry/Domain

RendeX belongs to the **Online Rental Marketplace** domain. It supports the digital transformation of peer-to-peer rental transactions, structured listings, delivery handling, and service support.

Data Collection Contacts

Name: Mr. Amith

Role: Rental Business Owner

Contact: 7561894210

Questionnaire for Data Collection

1. What challenges do item owners face when listing and managing rental products?

Item owners often struggle with uploading detailed product information, setting accurate pricing, and keeping availability updated. They also face issues in coordinating delivery schedules, verifying renter credibility, and dealing with late returns or damages.

2. How are price, deposit, and availability decided for second-hand rental items?

Pricing and deposits are usually based on item condition, brand value, market demand, and replacement cost. Availability is decided according to the owner's schedule, item readiness, and expected rental duration.

3. What difficulties occur in product delivery, pickup, and return handling?

Delivery and pickup issues often arise due to miscommunication, incorrect addresses, and timing conflicts. Returns may be delayed because renters or delivery partners are unavailable or face unexpected travel challenges.

4. What issues arise in tracking item movement or updating order status?

Real-time tracking may fail due to lack of proper technology or delayed manual updates from delivery partners. This creates confusion for both renters and owners regarding the item's exact location and delivery progress.

5. What payment methods and refund policies are preferred by users?

Users generally prefer fast and secure payment modes like UPI, wallet, and card transactions. They expect quick refund processing for deposits and transparent policies for cancellations or deductions.

6. How important is transparency in pricing, item condition, and availability?

Transparency is crucial because it builds trust and prevents misunderstandings during the rental process. Clear information helps renters make confident decisions and reduces disputes between users and owners.

7. What safety or verification measures should be included for users/owners?

Basic ID verification, phone/email authentication, and verified profiles help ensure safety and trust. Owners also expect renter ratings and secure payment methods to reduce risks during rentals.

8. What improvements can a unified rental platform bring compared to manual renting?

A unified platform ensures structured listings, easier comparison, secure payments, and better communication. It reduces manual effort, minimizes confusion, and offers automated updates for all rental activities.

9. Have you previously faced difficulty returning rented items on time? If yes, what caused the issue?

Yes, delays typically happen due to personal schedule conflicts, delivery partner unavailability, or unexpected travel issues. Miscommunication about pickup timing is also a common reason for late returns.

10. What information should be shown clearly before confirming a booking?

The platform should display total cost, deposit, rental duration, delivery/pickup details, and item condition. It must also show return time, owner details, and rental terms to avoid any confusion after booking.