

Online Property Rental System (OPR)

Initial Requirements Document

Document id: OPR-Req-01

1. Introduction

The initial requirements document captures the purpose of the system from the perspective of the client. In this document, background information on the system and its domain is given as well as the environment and the context of the application. This document identifies the goals and scope of the Online Property Rental System (OPR), describes the users of the system, describes the customer who initiated the OPR project, and discusses the functionality that the system must provide to the users.

2. Domain

2.1 Glossary

Agent	A person employed by «Houses of Dreams» responsible for providing services related to property rental.
Customer	A registered user to the OPR site who is interested in using the OPR services to find a rental property.
financial information	The information required by the third party handling financial transactions to complete the financial transaction.
financial transaction	An exchange of information resulting in the exchange of money.
interview	Consultation between a prospective customer and an agent. Can be conducted as a “face-to-face” meeting or over the phone.
jpg	A common file format for photos (stands for Joint Photographic Experts Group).
OPR	Online Property Rental System. A web-based system that offers services to Owners as well as Customers related to the advertisement and location of properties.
Owner	A registered User to the OPR site who has legal ownership of a property and is willing to put it for rent.
payment verification	The information received from the third party handling financial transactions in response to a request for payment processing.
PC	Personal Computer
Property	A piece of real estate (land, house, office, apartment) that can be rented.

Tenant	A person or group that rents property, from a property owner for a period of time.
thumbnail	A reduced picture which serves as a link to the full size picture.
Visitation	Act of physically going to a property for personal inspection.
Visitation list	List of customers interested in visiting a property. Specific time slots are set by agents to accommodate visitors and eventual tenants.
website	A collection of web pages on the Internet.

2.2 Environment and context

«Houses of Dreams» is a real estate management company that acts as intermediary between owners who wish to put their furnished properties on rental and customers who wish to rent a furnished property for a fixed period of time.

«Houses of Dreams» currently employs about 2000 employees in 100 subsidiary agencies. Each subsidiary proposes a list of properties for rent. In order to list a property for rental with «Houses of Dreams», a house owner contacts a subsidiary agency, provides details on the property and agrees with the agency manager on a monthly rental fee.

Right after a property is recorded, «Houses of Dreams» takes over and provides a set of services aiming at ensuring the property is rented for the best return possible to the owner and, of course, to the company. Among these services, «Houses of Dreams» meets and evaluates candidate tenants, organizes visits to the property, advertises when needed in newspapers, and negotiate the lease. «Houses of Dreams» assumes the responsibility of rented properties including rent collection.

A person interested in the rental of a property must initially register as a customer at an agency. An interview is normally conducted before a person is accepted as customer. Personal information and preferences regarding desired housing are sought during that interview. Registered customers receive a weekly report listing properties available for rental. «Houses of Dreams» organizes customers' visitations to properties proposed to them. Customers are invited after each visitation to formulate comments on the adequacy or inadequacy of the visited property according to their wishes. Properties for which finding tenants is difficult are subject to local and national newspapers advertisements.

When a customer decides to rent a property, an employee prepares a lease for a duration pre-determined with the customer. At the end of the lease, a customer has the possibility to ask that a new lease be establish to prolong the expired one.

3. Initial formalization of the problem

3.1 System scope and goals

The objective of the project is to develop an online system to help «Houses of Dreams» interact quickly and efficiently with its Customers.

The OPR will be accessible on the Internet through a standard Internet browsers. It will allow owners to advertise properties, customers to access available rental properties, help agents connect customers with properties and prepare leases. Customers will be able to view properties, schedule visits and apply for rental. The OPR will contain a database with information on properties including photographs and the rent amount. Customers will be able to search through properties

according to various criteria, register for visits and apply for rental. Financial transactions will be handled by a third party upon receipt of financial information from OPR.

3.2 Users and customers

There are three types of users: customers, owners and agents. It may be assumed that all users are comfortable enough with computers to be able to browse the Internet and perform transactions on the Internet, as well as send and receive emails. Customers are people interested in renting a property. Owners are people interested in offering their property for a rent. Agents are employed by «Houses of Dreams» and responsible for setting-up accounts and organizing visits. They may also use information from OPR to setup leases.

3.3 Preliminary set of requirements

3.3.1 Functional requirements

See the related use cases document (id: OPR-UC-01).

3.3.2 Constraints

Security

- (SR-1) The OPR shall allow only an agent to create a user account.
- (SR-2) The OPR shall allow only the user owner of an account or an agent, to update or delete that account.
- (SR-3) The OPR shall allow only the owner who added a property or an agent, to update or delete that property.
- (SR-4) The OPR shall allow access to the financial information of a user only to the third party handling financial transactions.
- (SR-5) The OPR shall not save financial information of a user.

Performance

- (PR-1) The OPR shall complete a request from the user within ten (10) seconds ninety five (95) percent of the time.
- (PR-2) The OPR shall be able to manage a database of properties that initially contains five hundred (500) properties and is expected to grow steadily over time.
- (PR-3) The OPR shall be able to manage at least fifty (50) simultaneous visitors to the website.

Availability

- (AR-1) The OPR shall be available every day, twenty-four (24) hours a day with a maximum down-time of five (5) percent averaged over one year.