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| VIDEO RENTAL STORE |
| Software Requirements Specification |
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**Acronyms and Abbreviations**

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| **Abbreviation** **Description** | |
| Customer | The customer can only search through the video inventory. |
| Functional requirement | A service provided by the software system |
| Member | Anyone who registers with the VRS to acquire membership in the video store |
| Non-functional requirements | A constraint on the system or how the system is developed |
| Owner | The person with administrative power in the VRS |
| SRS | Software Requirements Specification document |
| Video ID | Unique number given to each video unit |
| Video Rental Form | Printout showing an individual rental by a member. For each rented video, it displays the video ID, video name, and due date. It also shows rental charges. |
| VRS | Video Rental Store (the system under development) |

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# Introduction

## Purpose

The purpose of the Software Requirements Specification document is to clearly define the system under development, namely the Video Rental Store (VRS). The intended audience of this document includes the owner of the video store, and the end users of the VRS.

## Organization of the Document

Section 1 describes the introduction about the system.

Section 2 describes the product perspective and some details about the product.

Section 3 describes about the interfaces.

Section 4 describes system features and functional requirements.

Section 5 describes non-functional requirements.

## Intended Audience

The development team such as the requirements team, requirements analyst, design team, and other members of the developing organization of the Document, testers, project managers.

## Product Scope

The owner of a video store wants to create a new business plan where everything about renting a video is done online. Therefore, the VRS will allow the following functionality online: to search for videos, to become members, to rent videos, to modify membership information, and to pay overdue fees. The owner may use the VRS to process the rented or returned videos, to add or remove videos to/from his store’s video inventory and to update video information. The VRS is intended to increase the owner’s profit margin by increasing video sales with this unique business approach.

## References

Google.

# Overall Description

## Product Perspective

The VRS is a web-based system. The system interfaces with two other systems, the owner’s email system, the video distributor’s video system, and the browsers used by VRS customers. The system provides a secure environment for all financial transactions and for the storing and retrieving of confidential member information.

## Product Functions

The VRS allows customers to search the video inventory provided by this video store. To rent videos through the VRS, one must register as a member using the VRS. Upon becoming a member and logging into the VRS, the VRS provides the functionality for browse videos, renting videos, modifying membership information, and paying for rented videos and paying overdue fines.

The owner of the video store use VRS to process the return of rented videos and to add new videos into the system, remove videos from the system, and modify video information, to view member information, and to keep track of payments. The VRS sends emails to members concerning video rentals. One day before a rented video is due to be returned, VRS emails the member a reminder of the due date for the video(s). For any overdue videos, VRS emails the member every 2nd day with overdue notices. At the 10-day limit for outstanding videos.

## User Classes and Characteristics

The two main groups of VRS users are customers and members.

* The customer can only search through the video inventory.
* Member is someone who has registered with VRS. A member can rent videos and pay fees online.

## Operating Environment

* Java Environment in windows system.
* HSQL database is used.
* JDBC is used for connecting to database.

## Design and Implementation Constraints

This system provides web access for all customer and member functions. The user interface will be intuitive enough so that no training is required by customers, members, or store personnel. All online financial transactions and the storage of confidential member information will be done in a secure environment. Persistent storage for membership, rental, and video inventory information will be maintained.

## User Documentation

Very well documentation is provided and maintained.

## Assumptions and Dependencies

No assumptions and dependencies affect this system at this time.

# External Interface Requirements

## User Interfaces

The first screen is of ‘Home page’ which has two buttons – Register and Login  
Next screen is of ‘Registration page’ where user has to fill the registration form in order to become a customer. Then comes the ‘confirmation screen’ where screen with confirmation message appears.

## Hardware Interfaces

Hardware interface consists of the following- A computer running on windows OS.

## Software Interfaces

* Language used - JavaEE.
* Database – MySQL
* IDE - Eclipse.

## Communications Interfaces

Web Browser- runs fine on almost all of them.

# System Features

## System Feature

Some of the features of Online Video Rental Store are as follows,

* Fast as well as easy online shopping.
* Account Management.
* Inventory Management.
* Tracking the transactions history as well as the user profiles.
* Multiple Gateways for payment.
* 100% Secured and quickest monetary transactions.
* Notifying the Members.

### Description and Priority

**Registration:** It provides a membership to any customer who is interested to be the part of our Organization.

**Priority: High.**

**Video Searching:** It allows customer and member to search for their favourite videos.

**Priority: High**

**Video Renting:** It allows member to rent his/her favourite video for some period of time.

**Priority: High**

**Overdue Fines:** If a member fails to return the rented video before last date, he/she must pay some overdue fine to the Organization.

**Priority: Medium**

**Modifying Member Ownership:** It allows members to change/modify their membership

details.

**Priority: Medium**

**Sending Notification:** Notification is sent (either by sms/email) to the member whose return Date is in 2 days and also for those who have not returned the

Video at all.

**Priority: High**

**Admin access:** Providing complete access to administrator/owner in order to add, delete and modify videos.

**Priority: Low**

### Stimulus/Response Sequences

|  |  |  |
| --- | --- | --- |
| **User Action** | **System Response(Yes)** | **System Response(No)** |
| Browsing the website | Homepage appears | Please check Connectivity |
| Membership Registration | Registration Successful | Sorry! Please try again later |
| Searching Videos | Video found | Sorry! Please search for valid video |
| Payment | Payment Successful | Unsuccessful |
| Modifying Membership details | Successful | Enter valid data |

### Functional Requirements

The system shall provide the following features,

* Registration for customers to become members.
* Record membership information for future use.
* Allow the customer or member to search video information.
* Allow members to rent videos.
* Allow members to pay overdue fines.
* Allow members to modify membership information.
* E-mail due notices to members.
* Allow the owner to add and remove videos to the video inventory.
* Allow the owner to modify the video type.

# Other Non-functional Requirements

## Performance Requirements

* The system shall provide web-access for all customer and membership functions.
* The system shall provide persistent storage for membership, rental, and video inventory information.
* The system shall provide an intuitive user interface that requires no training.

## Safety Requirements

* We have to check for the viruses in the videos and remove it and then only pass it onto customers or members.

## Security Requirements

## The system shall provide a secure environment for financial transactions and for the storage of confidential member information.

* The customers or members have got access to maintain their own Authentication credentials.
* We may also provide OTP if the login fails for more than 3 times.

## Software Quality Attributes

* We can adapt reusability of videos from customers to customers.
* There is provision made to adapt testability function for videos.
* Maintainability function is adapted to maintain records of customers and members.
* There is provision made to check for availability of videos.
* Videos are made to be easily portable.

## Business Rules

* Customers are allowed only for searching videos.
* Members are allowed only to authenticate and select the videos to be rented.
* Owner can add or remove videos from video list only if that video is not selected by any member at that particular time.