Software Requirements Specification

Version 1.0

<<Annotated Version>>

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House of Movies

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<<Any comments inside double brackets such as these are *not* part of this SRS but are comments upon this SRS example to help the reader understand the point being made.

Refer to the SRS Template for details on the purpose and rules for each section of this document.

This work is based upon the submissions of the spring 2004 CS 310. The students who submitted these team projects were **Mohammad Haidar, Sleman Almohammad, Rajab Omran, Mohammad Idris.** >>

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# 1.0. Introduction

## 1.1. Purpose

The purpose of this document is to present a detailed description of the House of Movies Lounge automation system. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

## 1.2. Scope of Project

This software system will be a Lounge automation system for a lounge to sell DVD/CD. This system will be designed to facilitate and accelerates work within the Lounge by providing the necessary tools for that. By doing that, the managers of the lounge, employees and even the customer will feel the flexibility of work and service.

More specifically, the system automates the work by dividing the lounge into sections and each section with a specific type of disk and has a unique identifier, and each section divided by a group of ranks and each has a unique number.

All of this information is in the lounge database.

## 1.3. Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Product | The DVD/CD that the customer wants. |
| Director | The owner of the lounge and the person who responsible for the general supervision |
| Database | Collection of all the information monitored by this system. |
| Receptionist | Person who receives the customer and takes his order. |
| Orders Employee | A person who fetching the orders from departments. |
| Customer | The person who gets the service. |
| Software Requirements Specification | A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Stakeholder | Any person with an interest in the project who is not a developer. |

## 1.4. References

IEEE. *IEEE STD 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

## 1.5. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

# 

# 2.0. Overall Description

## 2.1 System Environment

Orders Employee

Receptionist

Customer

Select orders and provide service

Movies Lounge

Director

Figure 1 - System Environment

The Lounge automation system has four active actors and one cooperating system.

The Receptionist, orders Employee, Director, and Customer.

Any customer communication with the system by visiting the lounge.

## 2.2 Functional Requirements Specification

This section outlines the use cases for each of the active readers separately. The Director, the Receptionist , the orders Employee, and the Customer while the director is main actor in this system.

### 2.2.1 Receptionist Use Case

#### Use case: gets the customer order

**Diagram:**

Receptionist

Gets the customer order

**Brief Description**

The Receptionist receive the customer and he gets his order and what he wants.

**Initial Step-By-Step Description**.

1. The Receptionist receive the customer.
2. The Receptionist gets the order from the customer.
3. The receptionist search through the database about the department number for that order.
4. The system determines the department number and the rank number.

### **2.2.2 Order Employee Use Case**

#### Use case: bring the order

**Diagram:**

Order employee

Bring order

**Brief Description**

The order employee bring the order from the correct department.

**Initial Step-By-Step Description**.

1. The employee get the requested order from the receptionist.
2. He go to the selected department and get the order from the correct rank.
3. Finally, he gives the order to the customer.

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### **2.2.3** **Director Use Case**

#### Use case: make an inventory

**Diagram:**

Director

**Make an** inventory

**Brief Description**

Director make an inventory for sells in the lounge.

**Initial Step-By-Step Description**.

1. Every day he Checks for all sales.
2. He Calculates the amount of profit and employee benefits
3. Learn about sales that have been taken in installment

### **2.2.4 Receptionist (Accountant)**

Accountant

Invoice Preparation

### Use Case: invoice preparation

Figure 3 -Accountant Use Case

**Brief Description**

1. The accountant calculates the value of the total orders and make an invoice.

**Initial Step-By-Step Description**

1. The accountant calculates the value of orders.
2. He prepare the invoice.
3. He make a discount.
4. Finally, he print the invoice**.**

**----------------------------------------------------**

**2.2.5 Customer use cases**

**Diagram:**

Customer

Bill Payment

**Brief Description**

Customer is the main person in this system, he make an order and get the service.

**Initial Step-By-Step Description**

1. The customer go to the lounge.
2. He received by the receptionist.
3. He give the receptionist his orders.
4. He get his orders and go back to the receptionist.
5. After the receptionist prepare the invoice, a customer Pay the bill.
6. Additional option is to visit the lounge website and search for products.

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**2.3 User Characteristics**

Because the lounge have a website to display their products , the customer is expected to be Internet literate and be able to use a search engine.

The main screen of the Website will have the search function.

Authorized employees is expected to be Windows literate and to be able to manage, communicate with customers.

## 2.4 Non-Functional Requirements

The lounge website will be on a server with high speed Internet capability.

The software developed here assumes the use of a tool such as Tomcat for connection between the Web pages and the database. The speed of the customer’s connection will depend on the hardware used rather than characteristics of this system.

The lounge Manager PC will contain an Access database. Access is already installed on this computer and is a Windows operating system.

# 3.0. Requirements Specification

## 

## 3.1 External Interface Requirements

The only link to an external system is the link to the lounge Database to verify the membership of a customer.

The lounge Database fields of interest to the lounge automated System are customer’s name, (ID) number, and email address (an optional field for the HS Database).

The *customer* use case sends the customer ID to the Database and a Boolean is returned denoting membership status..

## 3.2 Functional Requirements

The Logical Structure of the Data is contained in Section 3.3.1.

### 3.2.1 Search DVD

|  |  |
| --- | --- |
| **Use Case Name** | Search DVD |
| **Trigger** | The customer access the Online lounge Website |
| **Precondition** | The Web is displayed with grids for searching |
| **Basic Path** | 1. The customer chooses how to search the Web site. The choices are by name, by Category, by year, and by Keyword. 2. If the search is by name, the system creates and presents an alphabetical list of all names in the database. 3. The customer selects a DVD/CD. 4. The system displays the Abstract for the DVD. 5. The customer selects to by the DVD or to return to the DVDs list or to the previous list. |
| **Alternative Paths** | In step 2, if the customer selects to search by category, the system creates and presents a list of all categories in the database.   1. The customer selects a category. 2. The system creates and presents a list of all DVDs in that category in the database.   In step 2, if the Reader selects to search by keyword, the system presents a dialog box to enter the keyword or phrase.   1. The customer enters a keyword or phrase. 2. The system searches the Abstracts for all DVDs with that keyword or phrase and creates and presents a list of all such DVDs in the database |
| **Postcondition** | The selected DVDs is added to the Customer digital bag. |
| **Exception Paths** | The Customer may abandon the search at any time. |
| **Other** | The categories list is generated from the information provided when DVD are published. |

### 3.2.2 Communicate

|  |  |
| --- | --- |
| **Use Case Name** | Communicate |
| **Trigger** | The user selects a *mailto* link. |
| **Precondition** | The user is on the *Communicate* page linked from the Online lounge website main page. |
| **Basic Path** | This use case uses the *mailto* HTML tag. This invokes the client email facility. |
| **Alternative Paths** | If the user prefers to use his or her own email directly, sufficient information will be contained on the Web page to do so. |
| **Postcondition** | The message is sent. |
| **Exception Paths** | The attempt may be abandoned at any time. |
| **Other** | None |

### 3.2.3 Add DVD\CD

|  |  |
| --- | --- |
| **Use Case Name** | Add DVD/CD |
| **Trigger** | The Concerned employee selects to add a new DVD\CD to the database. |
| **Precondition** | The Concerned employee has accessed the website Manager main screen. |
| **Basic Path** | 1. The system presents a blank grid to enter the DVD information. 2. The Concerned employee enters the information and submits the form. 3. The system checks that the name field are not blank and updates the database. |
| **Alternative Paths** | If in step 2, either field is blank, the employee is instructed to add an entry. No validation for correctness is made. |
| **Postcondition** | The DVD\CD has been added to the database. |
| **Exception Paths** | The employee may abandon the operation at any time. |
| **Other** |  |