Software Requirements Specification

for

Online Movie Store

Version 1.0 approved

Prepared by Meet Dave(CE20), Khushi Desai(CE25) & Riya Delhiwala(CE21)

Computer Department, DDU

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1.   Introduction

1.1   Purpose

This document describes full requirements and specifications of Online Movie Store. It explains functionalities, interface details and design constrains. This document will help developers in understanding this system better. This system will deliver movies to the customers which they seek and pay special attention to the entertainment needs and interest of needs of customers. This system will help in raising the dependability, usability and accessibility between customer and the online store.

1.2   Document Conventions

This document follows MLA Format. Bold-faced text has been used to emphasize section and sub-section headings. Italicized text is used to label and recognize diagrams.

1.3   Intended Audience and Reading Suggestions

This document is to be read by development team, Project managers, Marketing staff, Testers and documentation writers. Our Shareholders, Stakeholders and distributors who markets the finished product may review the document to learn about the project and to understand the requirements. The SRS has been organized approximately in order of increasing specificity. The developers and project managers need to become familiar with SRS. Tester need an understanding of the system features to develop meaningful test cases and give useful feedback to developers.

1.4   Product Scope

There is no need to force to stand in a queue for a long time just for having your own ticket or getting the theater. Online Movie Store System intends to deliver or rent movies which customer desires to watch. This system will be helpful in decreasing the time and work selling and buy operation to get movie DVDs and deliver the best quality movies for users. Hence, main objective of this system is to provide satisfaction and entertainment to customers.

2. Overall Description

2.1 Product Perspective

Online Movie Store system is web service based system implementing service model. Online Movie Store system provides number of movies for user to buy. Following are main features that are included in Online Movie Store system:

User account:
> The system allows the user to create their account in the system and provide feature of updating and viewing profiles.

Search:
> System allows user to search for any movie they desire. It is simply local search engine based on keywords.

Buy movies:
> System allows users to buy movies DVDs.

View & Ratings:
> Users can view information about movies and they can also post reviews about movies and DVD quality of movies.

2.2 Product Functions

Major functions of this product include the following.

- Enables user to create their account
- Searches through database to display best results according to user's needs.
- Make orders according the less stock and place them to supplier
- Purchase the product if supplier accept the order.
- Allows users to give feedback for better development of system.

2.3 User Classes and Characteristics

It is considered that the user do have the basic knowledge of operating the internet and to have access to it. The administrator is expected to be familiar with the interface of the online movie store system.

2.4 Operating Environment

The client side has been prepared on Android 4.4 and above, RESTful service has been prepared on Java, which has been deployed in Digital Ocean on Tomcat server. The Database has been prepared using phpmyadmin. The admin side has been prepared in .NET using C#.

2.5   Design and Implementation

```
                        ┌─────────────────┐
                        │   Web Service   │
                        │     [JAVA]      │
                        └─────────────────┘
```

Call
WebService

Json
Response

Json
Response

Call WebService

[Client side]
Android
Application

DataBase

[Admin side]
Web application in
ASP.net
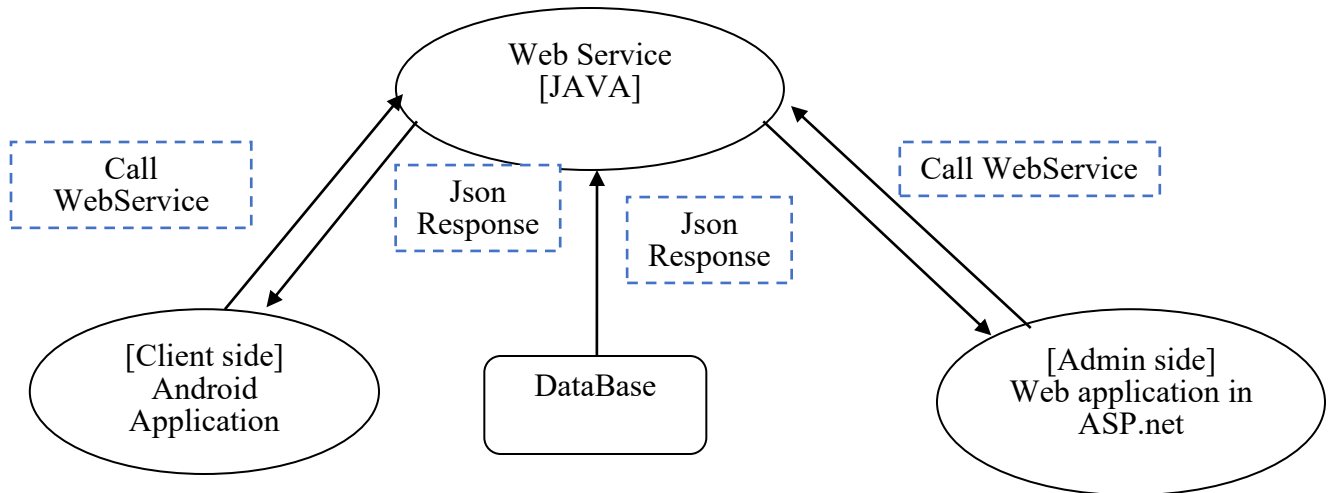
Decision regarding which database to use should be taken considering the fact that data being exchanged or stored is large, and the appropriate data management system will yield efficient performance.

2.6   User Documentation

No User Documentation is provided.

2.7   Assumptions and Dependencies

It is assumed that user must be aware of the basic knowledge on how to use android applications. The user must know how to navigate through one page or one to another. This software highly depends on type and version of Android the user's device is running on i.e. Android 4.4+

3.   External Interface Requirements

3.1   User Interfaces

The application will only run on devices having Android 4.4+

3.2   Hardware Interfaces

Device should be enabled with Internet. Any Android 4.4+ device type having connection to internet will be compatible to have access to the system.

3.3   Software Interfaces

The user's device having Android 4.4+ will be able to use the system.

3.4   Communications Interfaces

- User on Internet will be using HTTP protocol.
- Admin on Internet will be using HTTP protocol.

4. System Features

4.1 Registration and Login:-

4.1.1 Description and Priority

System will allow user to create a user account.
Priority: 9 (high)

4.1.2 Stimulus/Response Sequences

Users will be able to view, edit and create its respective account after providing correct login credentials.

4.1.3 Functional Requirements

R1: User should be able to create an account.
Input: User specific information.
Output: Creates an account if all specified information are correct.
Processing: Validates user input which if correct registers the user in the system's database else erroneous message will be displayed.

R2: User should be allowed to login into their respective account.
Input: E-Mail Id and password.
Output: User's account details page.
Processing: The system will grant access to user's account if user input correctly matches to the entries in the system's database else erroneous message will be displayed.

R3: User should be able to modify their information.
Input: Data to be modified.
Output: Update information.
Processing: Input gets updated in system's database.

4.2 Search:-

4.1.1 Description and Priority

Users should be able to search movies according to specified keywords.
Priority: 7 (medium)

4.1.2 Stimulus/Response Sequences

Search results will be provided to user as per user's specified information.

4.1.3 Functional Requirements

R1: Searching by keyword.
Input: Search keyword.
Output: Results according to user's input.
Processing: Specified keyword will be searched in the database and appropriate result will be displayed to the user.

4.3   Managing Items:-

4.1.1   Description and Priority

Admin will be able to add new movies, Update existing data and delete movies from application. This feature is only accessible to admin side of the application.
Priority: 9 (high)

4.1.2   Stimulus/Response Sequences

No user interaction is required. The changes made by admin should automatically be displayed on the client side.

4.1.3   Functional Requirements

R1: Add new movies to the list.
   Input: Name and other details of the movie.
   Output: A success message.
   Processing: Input details will be stored at the respected location in the database.

R2: Admin should be able to edit and modify existing data of the movie such as stocks available and any details related to the movie.
   Input: Information to be updated.
   Output: A success message.
   Processing: The information provided as the input will be updated to respected movie.

R3: Admin should be able to remove movies.
   Input: Movie id.
   Output: A success message.
   Processing: The movie specified will be removed from the system's database and client will no longer have access to that movie.

4.4   Buying and Cancelling Items:-

4.1.1   Description and Priority

User will be able to buy or rent certain movies as per user's interest. If after placing the order user wants to cancel the order than user will be allowed to do so within specific amount of time.
Priority: 9 (high)

4.1.2   Stimulus/Response Sequences

User will be able to add or remove movies in or from the cart as per user's requirements but only before placing the order with confirmation. The order placed will be submitted to admin side of the system which in turn will start the procedure for delivering the movie.

4.1.3   Functional Requirements

R1: Users should be able to buy or rent movies from the system.
   Input: Selected movies.
   Output: Order Confirmation.
   Processing: When user buys selected movies the admin side will be notified for the same and confirms the order by sending confirmation to user.

R2: Cancelling previously placed orders.
    Input: Order ID.
    Output: Confirmation of cancellation.
    Processing: Order id specified by user will verified at admin side for cancellation and appropriate message will be shown to user.

4.5   Posting Review:-

4.1.1   Description and Priority

Users are allowed to post review about the movies which they have already watched. User can also post review or rate the quality of the DVD delivered by the system.
Priority: 6 (medium)

4.1.2   Stimulus/Response Sequences

Users posting the review will be displayed to the rest of the users on specified movie sections. A different section will be allocated for the reviews about the quality of the DVDs which the users have bought.

4.1.3   Functional Requirements

R1: Users should be able to submit their review about the movie which they have watched.
    Input: Specified Review.
    Output: Displays review on the particular section of the movie.
    Processing: System receives the specified review and updates the appropriate section of the movie.

R2: Users should be able to submit their review and rating about the quality of the DVD delivered to the user.
    Input: Specified Review and Rating.
    Output: Displays review and rating on the particular section of the movie.
    Processing: System receives the specified review and rating and then updates the appropriate section of the movie.

5.   Other Nonfunctional Requirements

5.1   Performance Requirements

- The time duration of loading of the application should be minimal.
- Maximum number of user interaction should not slow the application speed.
- The system should be platform independent i.e. it should be supported on all type of the devices accessing internet and operating systems.
- The system must be interactive and the delays involved must be less. So in every action-response of the system, there are no immediate delays.

5.2   Safety Requirements

Information should be securely transmitted to server without any changes in information. A log is to be kept of any errors occurring in the system.

5.3   Security Requirements

The main security concern is for users account hence proper login mechanism should be used to avoid hacking. The tablet id registration is way to spam check for increasing the security. Hence, security is provided from unwanted use of recognition software.

5.4   Software Quality Attributes

These are a variety of constraints that might affect the user or system. This is to enable that reliability is always at a high level; sometimes users could not connected to the internet due to firewalls.. Another interoperability requirement is that the system should allow any storage device to connect to the system. As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverses quickly between its states.

5.5   Business Rules

User:
- Creating a personal account.
- Logging in the created account.
- Searching desired list of movies.
- Adding the movies to the cart which are to be bought or rented.
- Confirming the order.
- Post any review about the movie or the quality of the product.

Administrator:
- Adding or removing the movies.
- Updating any movie info.
- Updating the number of stocks available of each movie in the system.
- Handling the database as required.
- Keeping the track of all orders placed.

6.   Other Requirements

Other Requirements Include:-
1. Users can subscribe for a mail notification to a movie if the DVDs of the specific movie are out of stock.
2. Invoice will be generated automatically on any new order placed.
3. Previous orders can be tracked according to the users account details.
4. If rent period expires then certain extra charges will be applied.
5. The system should be available 24 X 7.