Software Requirements Specification

for

Movie Ticket Booking System

Version 2.0 approved

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29th January 2020

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Revision History

Name	Date	Reason for Changes	Version

1. Introduction

1.1 Purpose

The purpose of this document is to show the detailed explanation of the objectives, features, user interface and application of Movie Ticket Booking System. Document provides the detailed profile of the external interfaces, performance considerations and design constraints imposed on the implementation. This document will further assist the various stakeholders by serving as a reference manual.

1.2 Document Conventions

The standard font used throughout the document is Arial, with font size 11. The
Titles of the various sections of this SRS document have been represented in bold, with font size 14 and font Times New Roman. Important parts of the document have been indicated in bold.

1.3 Intended Audience and Reading Suggestions

This document is intended to assist the users when they use the software and for developers and the project managers to plan their project and implement the software required. This Software Requirement Specification document is divided into five subsections.
Section 1: Introduction
Section 2: Overall Description of the Software giving information about functions, user classes, operating environment, constraints and documentation.
Section 3: External Interface Requirements giving a brief introduction to user, hardware, software and communications interfaces.
Section 4: Gives functional requirements of different features.
Section 5: Provides a list of non-functional requirements
Section 6: Other requirements

1.4 Product Scope

This software will enable people to book or cancel movie tickets in a time efficient manner without even going to the theater. The employees can maintain a database of all the movie theaters in different cities and status of movie tickets availability by which everyone in process knows what is the current status, and there's no time lapse. The customers can book movie tickets by making registration online and also cancel tickets. For the theater staff, it could show all bookings, cancellation specifications and the status of it. It could show the status, as available or not available. In this way, customer can book movie tickets without even going to the theater.

1.5 References

IEEE.*IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specification.* IEEE Computer Society, 1998.

2. Overall Description

2.1 Product Perspective

The Movie Ticket Booking System was developed to help people book or cancel movie tickets with ease and efficiency. It is a replacement of online movie ticket booking system. It is a component of a large system as it is applied to specified cities. It can be further expanded or modified by making some changes in the system.

2.2 Product Functions

The following functions are provided by the software for customers:

- Choose location
- Choose movie theater
- View movies – start time, seats available, cost
- Register
- Book Tickets
- Cancel Tickets
- Make payments with charges included

The following functions are provided by the software for theater staff:

- Information of bookings by customers
- Update the changes regarding availability of seats
- Update movies and timings

2.3 User Classes and Characteristics

- **Customer:** The users have to book/cancel movie tickets. They have to register themselves before booing.
- **Theater Staff:** The users who has to update the booking status and book tickets.

2.4 Operating Environment

This will be an offline System. It will have a server that will actually perform all the functions and will store the customizable details of the bookings. There will be several graphic interfaces. Some of them are – while choosing the city, theater, movie etc. The user end will simply be a graphical interface.

2.5 Design and Implementation Constraints

- This software was developed in Java using NetBeans platform.
- This software requires a JRE component to be installed on the system.

2.6 User Documentation

License and User Manual will be provided along with the software.

2.7 Assumptions and Dependencies

It is assumed that the display will be provided to the respective theater. There would be a proper Banking System working independent to Movie Ticket Booking System. It is an offline working system.

3. External Interface Requirements

3.1 User Interfaces

There will exist an interactive Graphical User Interface. Text boxes and button events will be created where ever possible. All errors to be displayed using dialog boxes. All the main menu and settings options such as account settings, storage management etc. will always be available to the user. Most of the button events will have additional selections to be made, this will be done through an interactive dialog box.

3.2 Hardware Interfaces

There are no special hardware interface requirements.

3.3 Software Interfaces

The Movie Ticket Booking System will interface with a Database Management System (DBMS) that stores the information necessary for the System to operate. The DBMS must be able to provide, on request data concerning the movies, their bookings, cancellations and available seats. Additionally, it should take and archive data provided to it by the system. This data will include records of number of seats booked and transactions executed by the System. The DBMS must store all data such that it can be used for accounting, as well as to show the statistics.

3.4 Communications Interfaces

There are no special communication interfaces requirements.

4. System Features

This subsection presents the identified functional requirements for the subject Movie Ticket Booking System. Where possible, the requirements have been demarcated based on their relevance to the users of the system, that is, customers, theater staff and supervisors.

4.1 Sign Up and Login

4.1.1 Description

Takes the necessary input from the users and creates an account and enables login.

4.1.2 Stimulus/Response Sequences

User has to input whether he/she is a staff member or customer. Accordingly, the person has to give their details. The system will create a space for the user along with his/her information.

4.1.3 Functional Requirements

REQ-1: Ask for user details.
REQ-2: Allocate space in the server memory.
REQ-3: A function to provide a secure username(unique) and password to the user.
REQ-4: A function to provide an extension to keep the user logged in.
REQ-5: A function to create a cv for the user and personalizing his dashboard for him.

4.2 Booking/Cancellation Tickets

4.2.1 Description

Takes the necessary input from the customers. The details of location, theater, movie timings and availability. It is the main function of the system.

4.2.2 Stimulus/Response Sequences

User has to select the specifications of tickets. Also select if they want to book a ticket or cancel prior bookings. The system will book or cancel tickets using the information provided by the user and update the changes.

4.2.3 Functional Requirements

REQ-1: Ask for location.
REQ-2: Ask for theater.
REQ-3: Ask for movie and its timings. Also ask if user wants to book or cancel a ticket.
REQ-4: Ask for type of seat (Silver, Gold) and number of seats.
REQ-5: A function to save data provided by the user.
REQ-6: A function to check availability of seats asked by the user.
REQ-7: A function to update the seats availability.
REQ-8: A function to accept cancellation of tickets (will be accepted only 20 minutes before the start of the movie).
REQ-8: A function to accept cancellation of tickets (will be accepted till 20 minutes before the start of the movie).

4.3 Payment

4.2.1 Description

Takes payment from the customers with booking charges added and also gives refund for cancelled tickets.

4.2.2 Stimulus/Response Sequences

Displays total amount to be paid by the user and it has to be paid by the user. In case of cancellation displays the amount to be refunded.

4.2.3 Functional Requirements

REQ-1: A function to calculate the amount to be paid or refunded based on the information provided by the user.
REQ-2: Ask for payment/refund type that is by card or net banking.
REQ-3: A function to make payment/refund.
REQ-4: A function to confirm payment/refund.

4.4 Statistics and Status

4.2.1 Description

Shows the necessary statistics and status as requested by the user.

4.2.2 Stimulus/Response Sequences

Displays the bookings done by the user and its current status whether it is paid or not, what is the mode of payment and booking details.

4.2.3 Functional Requirements

REQ-1: A function to print the name of the movie, its timing, name and number of seats booked, payment and its status.
REQ-2: A function to store the complete information of bookings and payments done.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- The software will be based on local server.
- Different databases are required.
- The system works fast.
- The system is easy to use for users.

5.2 Safety Requirements

- There is no risk of any threat that can be issued by the system.
- Since this system is offline so there is no chance of internet-based threats.
- The system will provide secured payment gateway while making the payment.
- A bug tracker is provided where the users can report any bugs so that developers can fix it.

5.3 Security Requirements

- The whole system is secured. Only Admin can access all the data.
- The system will use secured payment system external to this system.
- The system will use suitable transfer protocols.

5.4 Software Quality Attributes

Accessibility
The software should be user friendly. As the system is offline so no internet is required.
The system should not have costly requirements.

Maintainability
Different versions of the product should be easy to maintain. For development it should be easy to add code to existing system, should be easy to upgrade for new features and new technologies time to time. Maintenance should be cost effective and easy.

Usability
This can be measured in terms of ease of use. Application should be user friendly. Should be easy to learn. Navigation should be simple.

Flexibility
System should be flexible enough to modify and adaptable to other products with which it needs interaction. It should be easy to interface with other components.

5.5 Business Rules

This software should be use only after proper agreement with the person developing it.
In case of any problems the user should immediately contact the project manager or developer.
The software should not be outsourced to any third party without prior permission.

6. Other Requirements

- **Legal permissions:** Permission from different movie theaters to share their data and cooperate with the system.
- **Legal, Copyright and Other notices:** All rights reserved by our organization.
- **Applicable Standards**: It should be as per the movie theater standards.

Appendix A: Glossary

none

Appendix B: Analysis Models

none

Appendix C: To Be Determined List

none