Software Requirements Specification

SMART MOVIE THEATER MANAGEMENT

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# Introduction

## Purpose

***SMART MOVIE THEATER MANAGEMENT*** *system is a part of a* ***SMART CITY AUTOMATION****. It’s purpose is to give easy access and operation to all kinds of entertainment related to movies.*

## Document Conventions

*This report uses the following conventions.*

1. *DB as Database*
2. *ER as Entity Relationships*
3. *UI as User Interface*

## Intended Audience and Reading Suggestions

*The project is a prototype of* ***SMART MOVIE THEATER MANAGEMENT SYSTEM*** *and**is designed for all the people living in this city.*

## Product Scope

*The* ***SMART MOVIE THEATER MANAGEMENT SYSTEM is to ease the*** *Theater management easier. We will have a database server supporting major theaters around the city. Above all, we hope to provide a comfortable user experience to all.*

## References

*A beautiful example of a web based theater management system can be found on this link for getting a good overview of a very professional theater management system.*

*<https://www.artsalliancemedia.com/products/theatre-management-system>*

# Overall Description

## Product Perspective

*The* ***SMART MOVIE MANAGEMENT SYSTEM*** *is all about the management of a theater with the help of technology. For example, our system will gather the information for booking tickets, available tickets, users information, time of a show, booking time etc.*

## Product Functions

*The* ***SMART MOVIE MANAGEMENT SYSTEM*** *will have some functions within itself.*

*They are given below:*

1. *With this system the movie theater ticket sell will be managed.*
2. *This system will provide all kind of movie schedules for the entertainment seekers.*
3. *The theater locations will be given with the help of google map for easy tracking.*
4. *The schedules will be managed in a more efficient way and so on.*

## User Classes and Characteristics

*Users of the system should be able to buy tickets easily from our system. There are two types of* privileges, users and administrators. Users will have access to user sections and administrators will have access to not only users section but also admin section.

## Operating Environment

*Operating environment for the theater management system is listed below.*

* *database*
* *client/server system*
* *Operating system: Multi-operating systems*
* *database: SQL + database*
* *platform: Multi-platform*

## Design and Implementation Constraints

1. *SQL commands for above queries/applications.*
2. *Implement the database at least using a centralized database management system.*
3. *Working with different schema.*

## User Documentation

*A manual and online help will be provided by the software management group to provide good support to the users using the system.*

## Assumptions and Dependencies

*As we can see the* ***SMART CITY AUTOMATION*** *project is a big project to handle. So all the developers working here should be a helpful hand in every sphere. We should encourage each other and develop a mentality on working together. We have to doubly sure that any dependencies don’t make a problem in the development or cause a failure in the development of the system.*

# External Interface Requirements

## User Interfaces

* *Front-end software: VB.Net(For A Desktop Based System), PHP(For A Web Based System)*
* *Back-end software: SQL*

## Hardware Interfaces

* *Windows.*
* *VB.Net*
* *SQL*
* *A browser which supports HTML & Javascript*.

## Software Interfaces

1. *Operating system*

*We have chosen Windows operating system for it’s good support and user-friendliness.*

1. *Database*

*To save the records we have chosen SQL database.*

1. *VB.Net*

*For desktop UI and functionality implementation.*

1. *PHP,HTML,CSS*

*For desktop UI and functionality implementation.*

## Communications Interfaces

*This project supports all types of web browsers. We are using PHP,HTML,CSS based UI and functionality to get those operations going.*

# System Features

*4.1.1* **Description**

1. *With this system the movie theater ticket sell will be managed.*
2. *This system will provide all kind of movie schedules for the entertainment seekers.*
3. *This system will save us a good amount of time by giving us the freedom to get our tickets in some clicks.*
4. *The theater locations will be given with the help of Google map for easy tracking.*
5. *The schedules will be managed in a more efficient way.*
6. *The information of the users will be well hidden and encrypted to provide security.*

*4.1.2* **Stimulus/Response Sequences**

*1. The user will be able to create account into the system.*

*2. The user will be able to login into the system. Which will give the user to easily manage his own purpose.*

*3. Booking of tickets will be easier than the analog way.*

*4. Canceling the ticket before the show will be possible within the system.*

*5. Show schedules will be updated for the users.*

*4.1.3* **Functional Requirements**

*1. UI based system.*

*2. SQL based databases for storing all important data.*

*3. A client section and a administrator section.*

*4. Multi-user support.*

# Other Nonfunctional Requirements

## Performance Requirements

*The UI, database and all other components of the system should be properly designed to operate with ease. They should be quick and robust. Should use little resources to give good performance. Should be secured too and occupy little space. So that the users will be encouraged to use this system.*

## Safety Requirements

*If there is extensive damage to a wide portion of the database due to system failure, the recovery method restores a past copy of the database that was backed up to archived storage.*

## Security Requirements

*Security systems need database storage and many other third party applications. So, vendors should choose their third party partners wisely.*

## Software Quality Attributes

*There Are Mainly four quality attributes of a good software:*

***Maintainability***

*Software should be written in such a way so that it can evolve to meet the changing needs of customers. This is a critical attribute because software change is an inevitable requirement of a changing business environment.*

***Dependability and security***

*Software dependability includes a range of characteristics including reliability,security and safety. Dependable software should not cause physical or economic damage in the event of system failure. Malicious users should not be  able to access or damage the system.*

***Efficiency***

*Software should not make wasteful use of system resources such as memory and processor cycles. Efficiency therefore includes responsiveness, processing time, memory utilization, etc.*

***Acceptability***

*Software must be acceptable to the type of users for which it is designed. This means that it must be understandable, usable and compatible with other systems that they use.*

## Business Rules

*Business ethics and rules should be followed with caution. We should always update the system as needed. Because the world is developing day by day. Specially business is getting into a new dimension. So we should keep a eye on business goals and rules.*