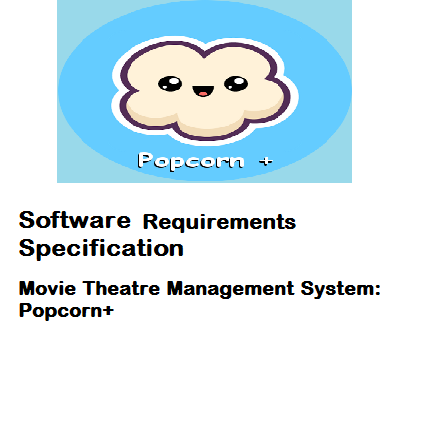
****

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**Introduction**

**1.1 Purpose**

System software will be designed for the theatre staff to manage movies that is currently showing. Two types of users will use this system: Admin and Clerk. As an admin, user will be able to register new employees, edit movie listing (add/remove), manage screens and sell tickets. Clerk will be able to manage screen and sell tickets. Database will be designed with certain privileges for the two users.

**1.2 Scope**

Movie Theatre Management System is basically updating the manual library system into a database-based application so that the users/clerks can know the details of their Screens, Movies, availability of seats and remaining time for viewing.

The project is specifically designed for the use of cinemas/theatres and cinema employees (clerks). The product will work as a complete user interface for a movie theatre management system and theatre, screens and movie usage from clerks (users). Movie theatre management system can be used by any existing or new movie to manage the screens and seat plan, insertion of booked seats and monitoring.

**Timeline**

**Start Date**: 29/05/2017

**End Date**: 16/06/2017

Refer to Gant Chart Attached.

**1.3 Audience Definitions**

**1.3.1 Audience Definitions**

The intended readers of this document are the developers of the application, tester, theatre clerks and managers and coordinators. Any suggested changes on the requirements listed on this document should be included in the last version of it so it can be a reference to developing and validating teams.

**2. Overall Description**

**2.1 Product Perspective**

Movie Theatre Management System is a replacement for the ordinary theatre management systems which depends on paper work for recording movie and user purchase information.

**2.2 Product Functions**

**2.2.1 Administrators**

**2.2.1.1**

Admin shall have primary rights to change all information i.e. Register New Employees, edit Movie listings, sell tickets.

**2.2.1.2**

Can accept or reject new movie listings according to the library database

**2.2.1.3**

Can get a status report on the seat plan

**2.2.1.4**

Can feed back if the screen time of the movie is fully booked

**2.2.1.5**

Add or edit movies and arrange movies by genre and motion picture content rating

**2.2.1.6**

Clerk can manage screen, seat plan and sell tickets.

**2.2.1.7**

Database will have certain privileges for the two users (Admin & Clerk).

**2.2.2 Normal Users (Clerk)**

**2.2.2.1**

The clerk should be provided with the updated information about the movie catalogue.

**2.2.2.2**

Clerks are given a access to check the movie theatre seat information and change it.

**2.2.2.3**

Clerks have the ability to search through movies by screens, genre, title or any other.information related to the movie.

**2.2.2.4**

Can re-allocate or refund according to theatre policy.

**2.2.2.5**

The customer may suggest a movie ticket to be bought and booked for a later time/date.

**2.3 Operating Environment**

The Movie Theatre Managements System is application and shall operate on any system that supports .NET Framework.

**2.4 User Characteristics**

Users of this Movie Theatre Management System are Employees(Clerks), Management and the administrators who maintain the application working in the/a theatre. Clerks are assumed to have basic knowledge of computers and internet Browsing. Administrators of the system should have mre knowledge of internal modules of the system and are able to rectify small problems that may arise dues to disk crashed power failures and other catastrophes.

**2.5 Design and implementation**

**2.5.1**

The information of all users, movies and theatres must be stored in a database that is accessible by the application.

**2.5.2**

MS SQL Server will be used as SQL engine and database.

**2.5.3**

The database is available during work times 9am – 11pm – 14 hours a day.

**2.5.4**

Users must have their correct usernames and passwords to enter into their accounts and do actions.

**2.6 Assumptions and Dependencies**

**2.6.1**

The product needs the following third party products.

**2.6.2**

Microsoft SQL server to store the database.

**2.6.3**

Asp.net to develop the product.

**3. External Interfaces Requirements**

**3.1 User Interfaces**

**3.1.1 Login interface:**

In case the user is not registered yet, he can enter the details and register. This asks the user to type his username and password. If the user entered either his username or password incorrectly then an error message occurs.

**3.1.2 Search:**

The admin or clerk can enter the genre of the movie he/she is looking for and the title he is interested in, then he can search for the required movie by entering the movie name.

**3.1.3 Genre view:**

Genre view shows the movies genres view with ability to let admin to add/edit or delete category from the list.

**3.1.4 Admins Control Panel**

This control panel will allow admins to add, confirm or remove users/clerks; add edit or remove a movie. And manage Movie theatre listings.

**3.2 Hardware Interfaces**

**3.2.1**

Only the recommended configuration (basic requirements of a computer system) no other specific hardware is needed to run the application.

**3.3 Software Interfaces**

**3.3.1**

Operating system that supports .NET Framework.

**4. Functional Requirements**

**4.1 Administrator:**

**4.1.1 Add Movie:**

This action is done to add a new movie to Movie theatre database.

**4.1.2 Edit Movie:**

This event is to modify movies information.

**4.1.3 Delete Movie:**

This event is to delete an existing movie.

**4.1.4 Manage Movie Screen:**

This action is to view, edit or add to the seat plan of the screen.

**4.1.5 Sell tickets:**

This action is to sell tickets to customers.

**4.1.6 View currently showing films:**

View movie showing times and screens.

**4.1.7 Access:**

Administrator has all rights of access to the database

**4.2 Clerk:**

**4.2.1 Manage Movie Screen:**

This action is to view, edit or add to the seat plan of the screen.

**4.2.2 Sell tickets:**

This action is to sell tickets to customers.

**4.2.3 View currently showing films:**

View movie showing times and screens.

**4.3 Common Functions:**

**4.3.1 Login:**

Both Admin and Clerks must be logged in before they modify any information

**4.3.2 Search for movie:**

When administrator or clerk wants to search movie by genre or name

**5. Behavioural Requirements**

**Use Case Diagram**

**6. Non-Functional Requirements**

**6.1 Error Handling**

* Movie theatre management system shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period.

**6.2 Performance Requirements**

* The system shall accommodate high number of movies and users without any fault.

**6.3 Safety Requirements**

* System user shall not cause any harm to human users.

**6.4 Security Requirements**

* System will use a secured database
* Normal users/clerks can just read information. Add or edit reservations to the seat booking plan.
* System will have 2 different types of users. Administrators will have unrestricted access and clerks/users have access constraints.