Online Movie Booking System

Group MLB_05.2_2

Hypothetical scenario

Today, people need to perform their activities at a high speed by their own. In an environment like that, booking movies when they arrive at the venue can be frustrating. And also, people might need to know the details of the movies before they book a movie ticket. Because of above mentioned reasons, online movie booking systems are used to provide reliable, efficient and user-friendly environment to both users and theater staff.

When users enter to the system, they can view details about both now showing and upcoming movies. Movie show times and ticket prices are also displayed with movie details. In order to book a movie, users should select a movie first. Then they have to enter the no of tickets they need and select the desired seating positions. After that users are proceeded to payments section, which is displayed only for registered users. If the users are not registered in the system, they have to register in the system in order to confirm their payment methods. The system allows both cash and card payments done by the customers. The cash payments should be done in the preferred movie theater.

Requirement analysis

Purpose

The purpose of this document is to show the requirements needed to develop the system. This document includes the functional and non-functional requirements necessary to build the system.

Scope and overview

The required system is an online movie booking system. The main objective of this system is to make the movie ticket booking process easier and more efficient. This system will allow users (customers) to search for present and upcoming movies, watch movie trailers, view movie details, and book tickets online. Furthermore, it will provide the capability of updating and deleting theater details, updating seat details, updating and deleting movie details for the administrators. Apart from these functions, the system will also provide the user the capability of registering and logging in to the system.

Functional and Non-functional requirements
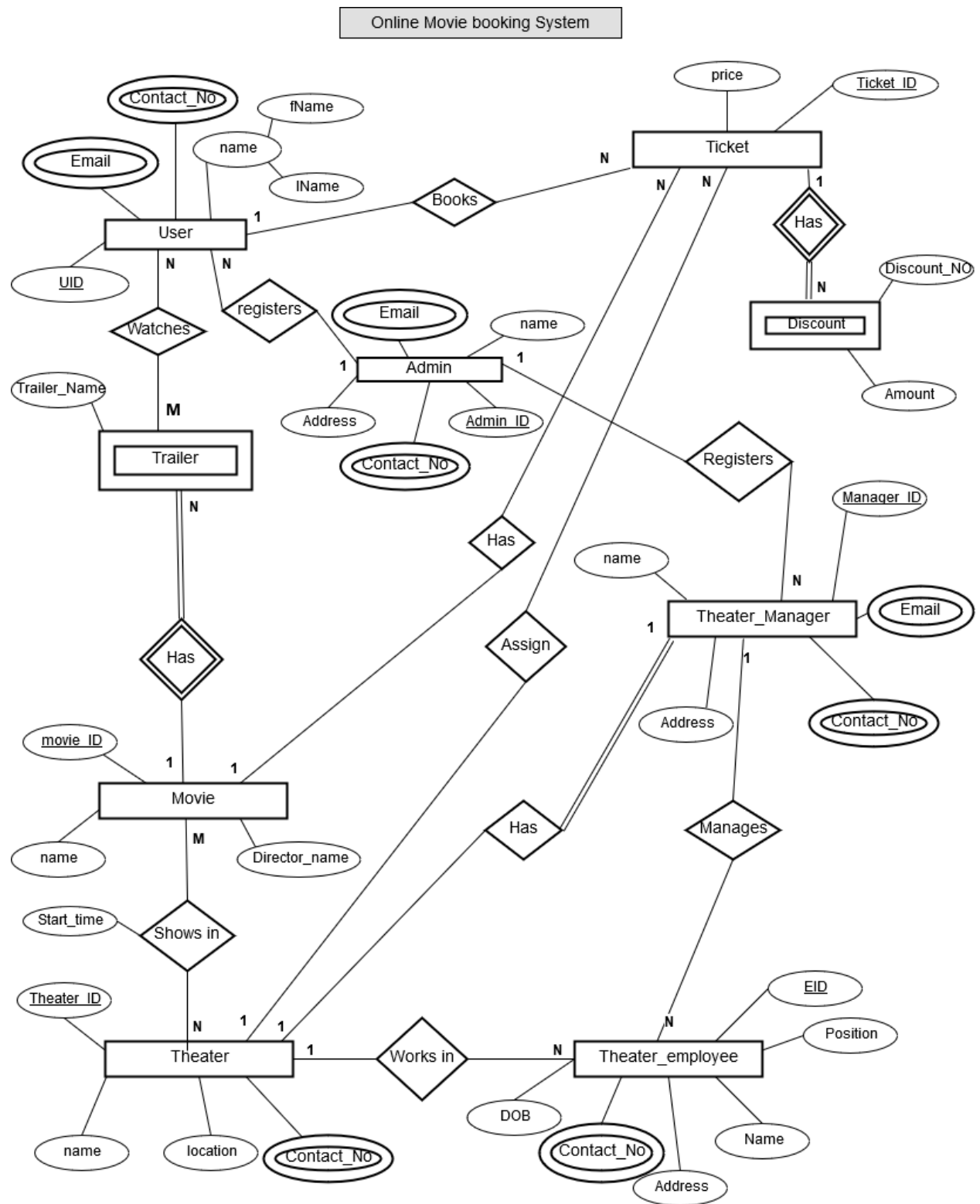
Functional requirements

These requirements are the features that are expected from the system, the features that the customer or the client wants.

- Search for movies
    - When the customer searches for a movie, the system should display the relevant movie, if it is available in theaters or if it is an upcoming movie.
- View movie details
    - When the customer selects this option, the system should display the details of the movie, the show times of the nearest movie theaters and the ticket prices.
- Watch movie trailer
    - When the customer selects this option, the system should play the movie trailer.
- Book tickets online
    - By selecting this option, the customer can pay and book movie tickets for the required show time from any movie theater.
- Updating and deleting theater details and movie details
    - The administrators should be able to update, delete the theater details and the movie details.
- Updating seat details
    - The system should update the seat availability after every booking made and display the available seats.

Non-functional requirements

These requirements are the features that are used to judge the functionality of the system. Although, the clients do not directly request these features, they are necessary for a system.

- User-friendliness
  - The system should be easy to use. The user should be able to navigate through the system easily. The given details or instructions should be easy to understand.
- Speed
  - The system should be able to respond to the user requests very quickly. It should be free from lagging.
- Security
  - Only legal users should be able to access the system. The system is only accessible to those who have a username and password.
- Quality
  - The system should be very clear and good in quality.

ER Diagram

Online Movie booking System

Special Security Requirements

Since Online movie booking system is a transaction based system, few security requirements are used when creating the system.

- **Using a QR code to confirm the payment at the movie theater:** Customers who are choosing the payment method as cash will be given a QR code relevant to the payment made by them. This code can be scanned at the movie theater and can be used to confirm their booking details.

- **Using special login credentials for different stakeholders:** Special login credentials will be provided to system administrators and theater staff to avoid unauthorized users login to the system as system administrators.

- **Granting different access privileges to different user levels:** Different access privileges will be granted to different use levels. I.e. An unregistered user can't proceed to the payment section without having a proper user account.

- **Confidentiality:** Users' sensitive data such as credit card details will not be disclosed through the system for any reason.