DATA MANAGEMENT FOR DATA SCIENCE - CPSC 5071

MILESTONE-1

CENTRALIZED MOVIE SYSTEM

Team-03

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Mission Statement:

The mission involves making it convenient for people to discover and enjoy movies. A centralized database powered by SQL is being utilized to simplify the ticketing process, and it aims to assist users in finding their nearest movie theaters. The overarching objective is to enhance the overall entertainment experience for users, creating a more accessible and enjoyable way for them to access and enjoy movies.

Research on Potential Problems:

1. Parking Availability: The team investigated the availability of parking spots and the possibility of monthly usage.
2. Centralized Movie Ticket System: Research focused on simplifying the movie ticketing process through a centralized system.
3. Hospital Health Records Management: The team explored ways to enhance the management of health care records in hospitals for improved patient care.

Description of Problem:

In the US, many major cinema chains provide the option to purchase movie tickets online through their websites, and some even offer the same feature through their mobile apps. However, smaller theaters that aren't affiliated with any larger company don't have a convenient platform for buying movie tickets. Our team has discovered that a centralized movie ticket system would offer several advantages, leading to a more efficient, user-friendly, and organized movie-going experience for everyone. The system would benefit both larger chains and independent theaters alike. For independent movie theaters, it will provide an efficient ticketing inventory allowing them to monitor attendance and optimize seating arrangements. The information gathered from a centralized system will be available to large and small participating theaters, providing them with valuable data on user preference and movie choices which in return will allow them to optimize their showings and make better informed decisions. For our users, it will eliminate the need to visit multiple websites and grant them access to a larger catalog of movies, nearby theaters, and better prices.

Key features:

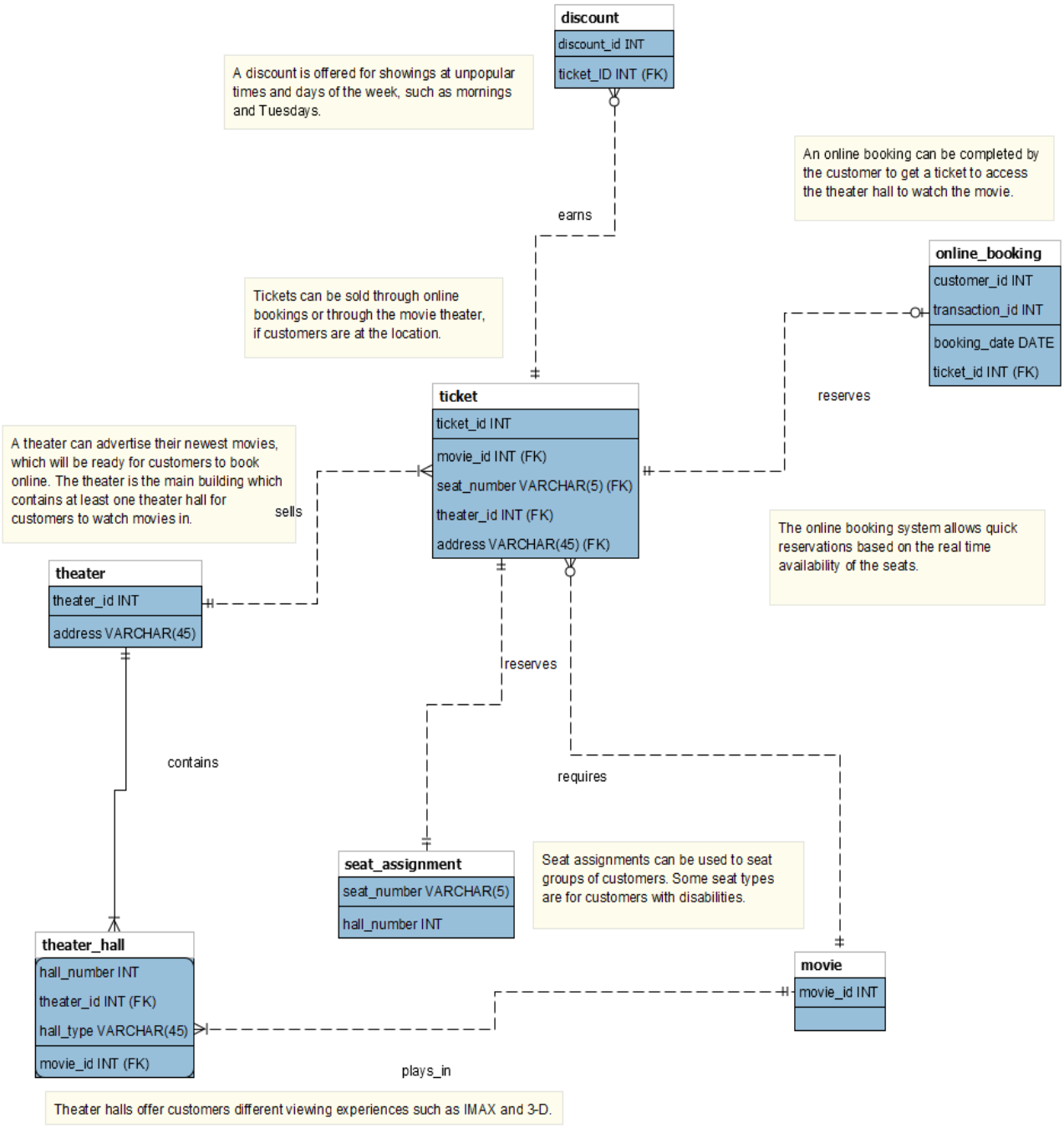
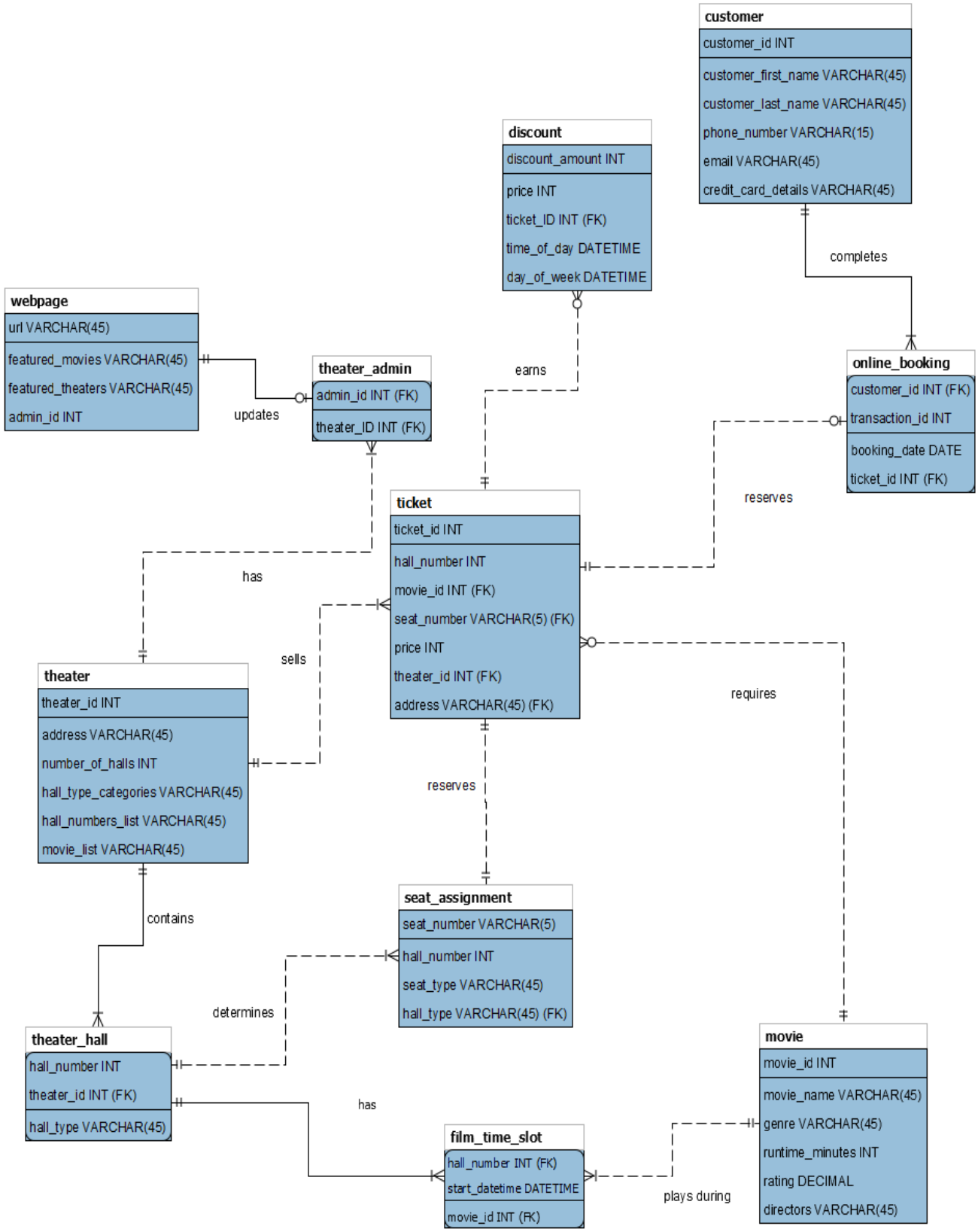
- **Central Website:** A centralized website is platform serves as the primary interface for customers to search for movies, view showtimes, and book tickets across multiple theaters, providing a unified and user-friendly experience.
- **Theater Admin:** Theater administrators have access to a comprehensive dashboard for managing ticket inventory, monitoring attendance, and analyzing sales data, enabling efficient theater operations and decision-making.
- **Theatres:** The system integrates both major cinema chains and smaller, independent theaters, providing a unified platform for ticketing and show management.
- **Customers:** Users benefit from a seamless movie ticket booking experience, with access to a wide range of theaters, showtimes, and movie selections through a centralized website or application.
- **Location:** Users can easily search for nearby theaters based on their location preferences, enabling personalized recommendations and enhancing accessibility to movie venues. Additionally, the system may offer location-based services such as geolocation features for finding the nearest theaters and

directions to the selected movie venue, further enhancing the user experience and convenience.

- **Movie Descriptions:** Detailed movie descriptions, including synopses, cast information, and ratings, are provided to help users make informed decisions when selecting movies, enhancing the overall movie discovery process.
- **Tickets:** Users can easily browse movie listings, select preferred showtimes, and purchase tickets online, streamlining the ticketing process and eliminating the need for physical ticket purchases.
- **Online Booking:** The system facilitates online booking of movie tickets, allowing customers to reserve seats in advance and avoid long queues at theater counters, enhancing convenience and flexibility.
- **Theatre Halls:** The system manages theater halls and seating layouts, optimizing space utilization and ensuring an optimal viewing experience for movie attendees.
- **Discounts:** The system offers various discount options for movie tickets, including promotional deals, loyalty programs, and bulk purchase discounts, enhancing affordability and incentivizing repeat patronage.
- **Seat Assignment:** The system offers customizable seat assignment options, allowing users to choose their preferred seating arrangements based on availability and personal preferences, enhancing the movie-going experience.
- **Transactions:** The system facilitates secure and seamless transactions for purchasing movie tickets, providing multiple payment options and ensuring the privacy and security of customer payment information.

External Model:

Customer and Theaters view



Logical Model: