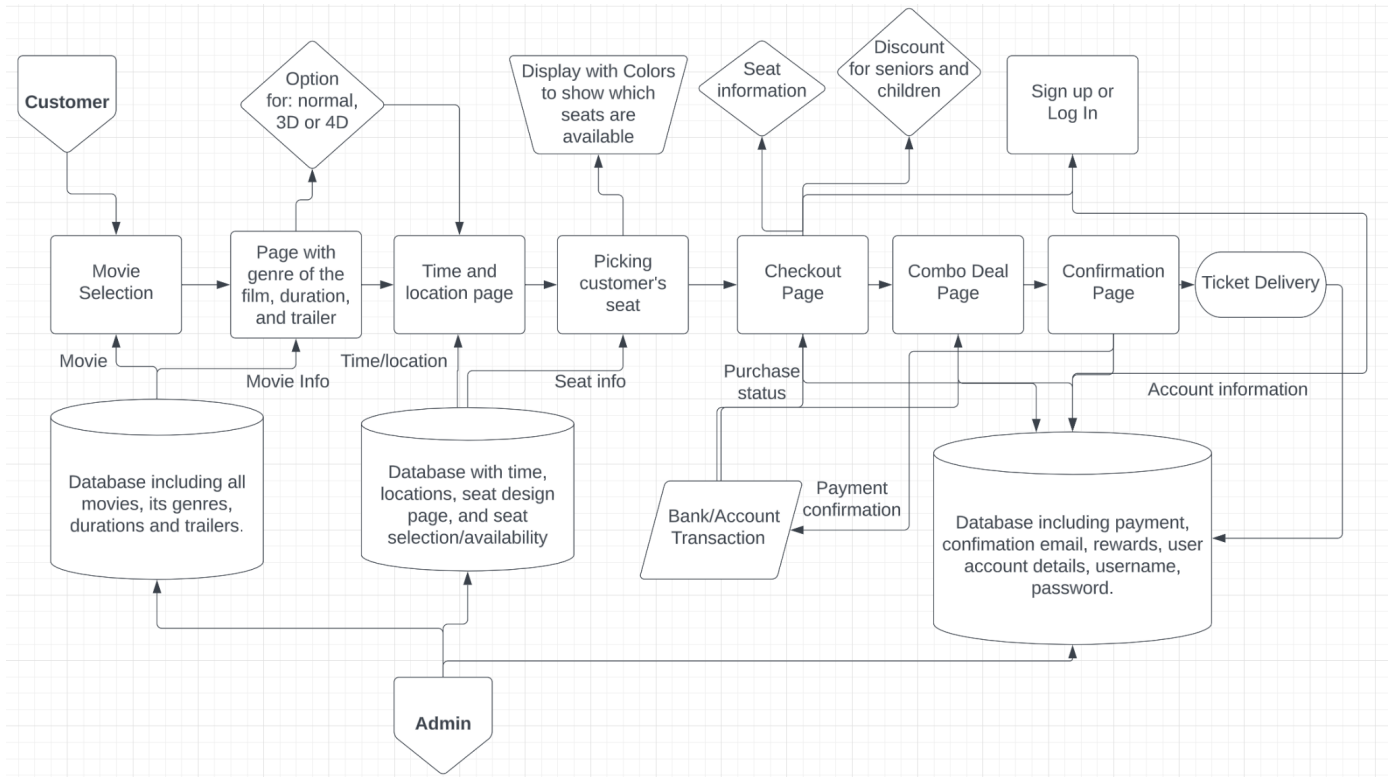


Movie Booking

By: Drew Kulischak, Blaise Duncan, Eric Ribeiro

SWA Diagram:



SWA Description:

Movie Selection: Customers will be able to select from a variety of movies, choosing what they want to watch.

Page with genre of the film, duration, and trailer: Once the user selects the film he desires, this page will show all details of the movie, including the genre, its duration, rating, trailer, and the options to watch it in normal, 3D or 4D.

Time and location page: This page will show to the user the times and locations available for the selected movie.

Picking customer's seat: This page will display a screen with all the seats available, and the seats already selected that will be identified with different colors. It will also contain wheelchair spaces for people with disabilities. The theater's screen will also be laid out in the page design so that the customer can choose his preferred seat (closer or further away from the movie screen).

Checkout Page: Once the customer selects its preferred seat, the checkout page pops up. This page will contain options for an adult, child or senior ticket. It will contain the option to sign in/log in or just provide your email address to continue. It will contain

your payment method and information that will be inserted by the customer. The page will also contain gift cards, vouchers, rewards for those who want to redeem them or even want to become a part of any of these catalogs.

Combo deal page (NEW): This page pops just before the customer's order is confirmed. It prompts the user with a "Would you like to add a combo?" that comes with a 'Popcorn + Drink' that the customer is able to buy with their movie ticket. This page was added to ensure more money will be spent and that the profit of the movie theater website is maximized. Lastly, a purchase button to confirm the order.

Confirmation Page: This page will contain the confirmation that the order/transaction worked displayed on the screen, and where to find the customer's ticket (in this case, via email).

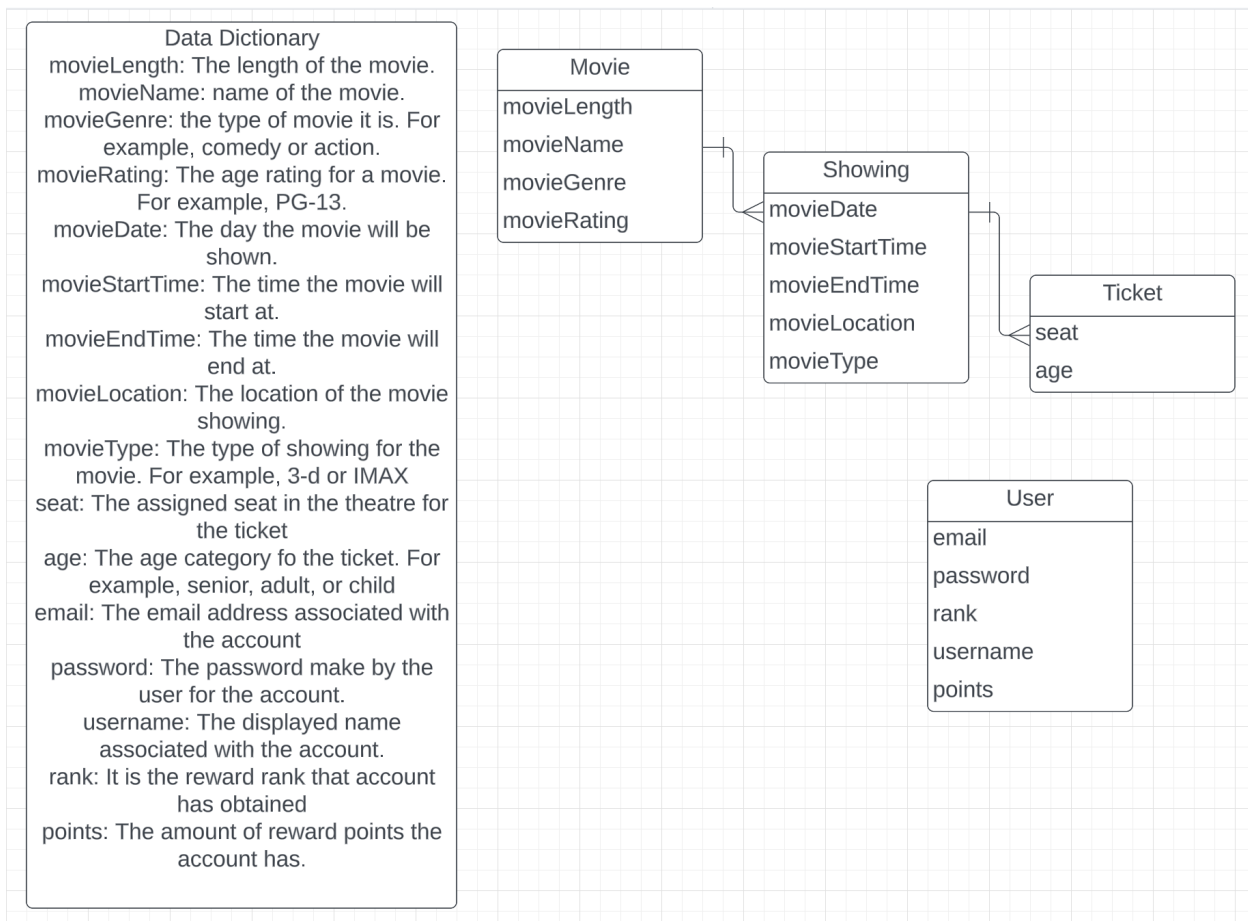
Ticket Delivery: Tickets will be sent via email to the customer.

Databases: This will be used to store and retrieve all needed information from booking tickets in large volumes. It supports an organized collection of structured data.

Admin: This person will have access to all the databases of the website. He will be able to add any components to any database such as movies, seats, time, locations, and others as well as make changes to any user accounts, emails or even rewards.

Data Management Strategy:

Diagram:



Description:

Movie: Movie will not access any information from any databases but rather share information.

Showing: Showing will use SQL logic in order to access some information from the movie database. We are choosing to do this in order to not make repeated information in databases.

Ticket: Ticket will access information from both the movie and showing databases.

User: User will not share or access any information. The reasoning for this is the security of the user. Keeping our users information is very important to making sure that our users feel safe to use our products. So we want to limit what databases will have access to the user database.

Why SQL:

The data management strategy used is SQL. We chose this strategy because we want our databases to be able to access information from other databases. For example, for the Ticket class we want the ability to access the movieName and movieRating which are in the Movie class. No-SQL would mean that we would have to constantly repeat data that is already in other databases.

Trade Offs:

The tradeoff with the current data management strategy is that It is highly susceptible to cyber security attacks. If a person is able to get access to the movie, showing, or ticket database they would have access to all of these databases.

Database:

| | | | | | | | | |
|---------|---------------------|-------------------------|------------------|---------------|---------------|-----------|--------|--|
| Movie | movieName | movieGenre | movieLength | movieRating | | | | |
| | Mario Movie | Comedy/Animation | 92 min | PG | | | | |
| | Up | Comedy/Animation | 96 min | PG | | | | |
| | Mission: Impossible | Action/Thriller | 110 min | PG-13 | | | | |
| | Lord of the Rings | Adventure/Fantasy | 178 min | PG-13 | | | | |
| Showing | movieName | movieDate | movieStartTime | movieEndTime | movieLocation | movieType | | |
| | Mario Movie | 4/14/23 | 1:00 PM | 2:32 PM | Mira Mesa | IMAX | | |
| | Up | 4/17/23 | 12:00 AM | 1:36 PM | Mira Mesa | Standard | | |
| | Mario Movie | 4/15/23 | 11:00 AM | 12:32 PM | Mira Mesa | 3-D | | |
| | Lord of the Rings | 4/18/23 | 7:00 PM | 9:58 PM | Mira Mesa | Standard | | |
| Ticket | movieName | movieDate | movieStartTime | movieLocation | movieType | seat | age | |
| | Mario Movie | 4/14/23 | 1:00 PM | 2:32 PM | IMAX | A-16 | Child | |
| | Up | 4/17/23 | 12:00 AM | 1:36 PM | Standard | D-5 | Adult | |
| | Mario Movie | 4/15/23 | 11:00 AM | 12:32 PM | 3-D | H-20 | Child | |
| | Lord of the Rings | 4/18/23 | 7:00 PM | 9:58 PM | Standard | B-9 | Senior | |
| User | username | email | password | rank | points | | | |
| | LuigiTall | LuigiBro@gmail.com | | Bronze | 32 pts | | | |
| | DougBestDog | DougTenisBall@gmail.com | Squirrel1! | Silver | 60 pts | | | |
| | SamPotatoes | SamHobitHole@gmail.com | TheRingofPower#1 | unRanked | 15 pts | | | |
| | PeachLover | BowserCastle@gmail.com | Bowser.JR#5 | Gold | 325 pts | | | |