Short description about each actor

* An ordinary (or regular) user is someone who employs the movie theater ticket reservation app to search for a movie, select a specific theater, view available showtimes and seats, select a seat, make their payment and receive tickets and confirmation, but does not have their information registered on the system’s database.
* A registered user is an ordinary user who has had their information saved on the system’s database and is therefore entitled to certain attendant perquisites contingent upon their payment of an annual account fee.
* A financial institution is a corporation that is responsible for processing and finalizing transactions related to the purchasing of movie tickets in the reservation app.
* A database engine is a system that interacts with the application in order to perform the actions needed to communicate data to and from the database.
* A manager is responsible for coordinating all of the activities occurring within the system of the movie theater ticket reservation app.

Use Case Scenario: Reserve Seats

When the user has picked a theater, a film, and a showtime, indicated how many tickets they would like to request, and been shown the current seating availability, they will have the opportunity to reserve one or more specific seats. That is when this use case begins. The system will, following some prescribed pattern, select a number of (preferably contiguous) available seats corresponding to the number of tickets requested, highlight these spots and then ask the user to choose which seats they would like to reserve. Any available seat selected by the user will be highlighted and If a user selects a seat that has already been reserved and confirmed, the system will display a message to user and ask them to pick another seat. After the correct seats have been highlighted, the user will confirm their selection with the system. After the user confirms that these seats are the ones they want to reserve, the system will immediately ensure that said seats may no longer be accessed by future users. The user will then be informed that they have successfully selected their preferred seat(s) and can move forward with the process. The system will update in real time to mark seats that have been successfully reserved by others viewing the same room. If there are no more or not enough seats available, the system will inform a user that the show is sold out and encourage them to consider another film. The database engine will craft an update with this new information and both the available seat count and images displayed in the app will change accordingly.

Use Case Scenario: Purchase Tickets

After a user has already chosen the theater they would like to attend, the film they would like to see, the specific showtime that best fits their needs, the number of tickets they would like to receive, chosen the seats to reserve for the performance, and proceeded to checkout, this use case commences. First, the system will show the user a summary of the ticket costs including taxes. The system will also inform the user at this point that, if they so wish, they may now apply any existing points, codes, credits, or gift cards towards the purchase price. If the user opts to do so, they will need to enter in the relevant information and apply it here. The system will accept this and modify the summary accordingly. If there is still an outstanding balance, the system will then prompt user to proceed to selecting a method of payment. The system will apprise the user of any time limits in place during the course of the ticket purchasing process. Next, the system will determine which type of user it is dealing with. If a user is registered, they will be given the option to skip immediately to final confirmation of their booking details. An ordinary user will at this point be asked by the system to select their financial institution of choice, enter relevant personal information such as name, address, and date of birth, and to enter credit card number, expiry date, and security code (if credit card was chosen as form of payment) or other pertinent payment information. The system will communicate with the appropriate institution to establish the validity of the given information to accept payment. Then, for both ordinary, and registered users, the payment will be submitted. After the payment has been submitted, the system will confirm the completion of the payment process within the application and end the interaction with the user, shuttling them back to the application’s landing page. The system will update the database with the concluded purchase’s information through the database engine. The system will then dispatch a copy of the tickets purchased, a transaction confirmation, and a receipt to the user’s specified email address.