Ticket Kings Movie Theater Full Stack Development Project

ENSF 614

Project Documentation

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Group 3

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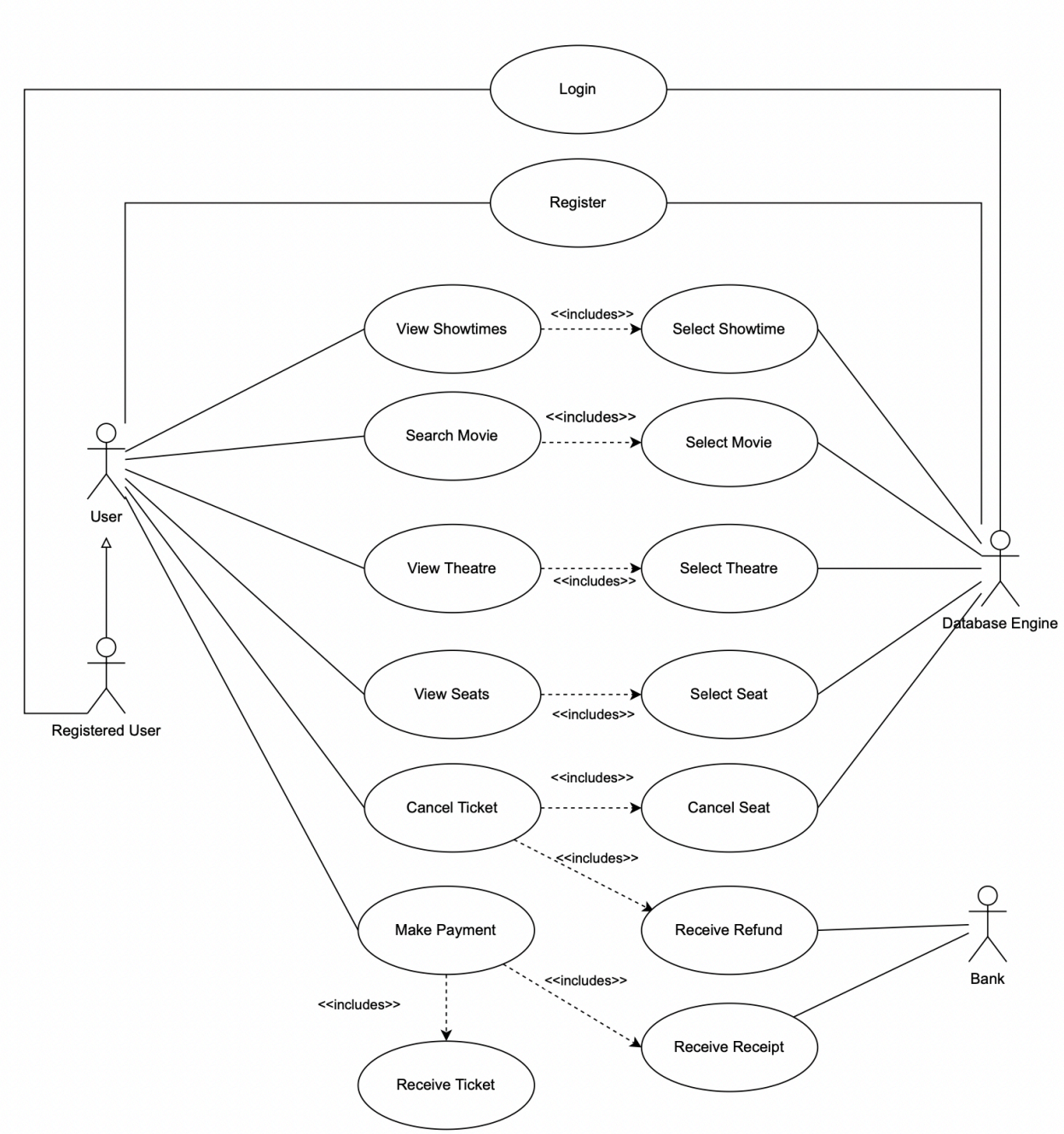

Figure 1: Use-case diagram for ticket king's movie theater app.

2. Use Case Scenarios

Scenario: use case "login registered-user"

This scenario starts on the homepage. The user will click on the login-button. They will be taken to a login-page where they input their registered email and password. If entered correctly, the user will be directed to the homepage as a registered user. If the user is not a registered-user, the user will receive a pop-up error message. They will have to click okay to acknowledge the error, and try to enter their information again, or navigate to the registration page or back to the homepage to continue as a guest user.

Scenario: use case "register"

This scenario starts after the user has navigated to the homepage and wants to become a registered user with Ticket Kings. The user will select on the registration-button in the header. The user will then be taken to a page where they are required to submit in the following information: firstName, emailAddress, homeAddress, password, passwordVerification, creditCardNumber, creditCardExpiry, and CVV. Once the user has entered the information, they will click on the register-button. This creates-an-account for the user, and a confirmation is sent to their email. The newly registered-user will then be directed to the homepage as a logged in registered-user and can search-for-a-movie, view-all-movies, cancel-ticket, view-ticket or log-out.

Scenario: use case "select theater"

This scenario starts after the user has logged-in as a registered-user or continues as a guest-user. The user can then view all the available theaters and select the desired one. Once the user has selected a theater, they will be taken to the homepage for that specific theater where they can then search for a movie, view all movies, cancel a ticket.

Scenario: use case "search movie"

This scenario starts after the user has logged-in as a registered-user or continues as a guest-user and has selected a theater. The user can input the movie-name or any letters belonging in the movie-name and search for it. If the movie is currently playing, the user can then select it, and they will be directed to the individual-movie-page where they can view and select showtime and seat.

Scenario: use case “view all movies”

This scenario starts after the user has logged-in as a registered-user or continues as a guest-user and has selected a theater. The user can select the view-all-movies-button on the homepage to be taken to the movie-page where all the available movies will be listed and displayed. The user can then select a desired movie, which will direct the user to the individual-movie-page, where they can select a showtime and a seat.

Scenario: use case "select movie"

This scenario starts when the user is on the movie page and all available movies are being displayed. The user will then be able to select the movie they want. A detailed, individual movie-page will be displayed, and the user can then view and select a showtime and a seat. Once the showtime and seat are selected, the user can then continue to purchase a ticket by proceeding to the payment-page.

Scenario: use case "select showtimes"

This scenario starts once the user has selected a movie. The user will then be able to view all the showtimes for the selected movie and select one of the showtimes. A graphical representation of the available seats will then be displayed, and the user can select a seat.

Scenario: use case "select seat"

This scenario starts when the user has selected a movie and a corresponding showtime. The user will be able to view all the available seats through a graphical representation, and then can select their desired seat. If a seat is not available, the seat is displayed red. Once the user has selected a seat, then the user can input their credit coupon code and proceed to pay for a ticket. Credit coupon code is not required, only option if the user has one available.

Scenario: use case "make payment"

This scenario starts when the user has selected a showtime and seat for the desired movie. The user will see the price of the ticket, as well as other confirming details. The guest-user will be prompted to enter their payment-information such as name, email, Credit Card Number, CVV, and Expiry Date. If the user is a registered-user, they are not required to enter anything, and the ticket will be confirmed immediately on loading the purchase-page. Once payment-information is entered, the user will receive a ticket and receipt through email. The money for their ticket-purchase will be sent from the bank through their credit card transaction.

Scenario: use case "receive ticket/receipt "

This scenario starts when the user has made a payment for a movie-ticket. The user will receive the ticket as well as the receipt which contains a theater-number, seat-number, movie-time, movie-duration, movie-name, and ticket-price by email. The user will then be directed to the homepage where the user can perform any of the actions on the homepage that has previously been stated in the use-cases above. Specifically, if desired, now that the user has a ticket, they can cancel their ticket by inputting their ticket-code.

Scenario: use case "cancel ticket"

This scenario starts after the user has made a payment, receives the ticket by email, but wants to cancel the ticket. The user will navigate to the Ticket Kings homepage. On the homepage they will be able to enter the cancel ticket-code. If the movie has not yet started, the cancellation request will proceed, and the user will have the money refunded in the form of a Ticket Kings credit, which will be emailed to the user. The user will not receive any refund for a movie that has already started. If the guest user cancels their ticket 72 hours prior to the movie, they will receive a credit-coupon-code with 15% administration fee for future purchase up maximum of one-year expiration date. Registered users do not have to pay 15% admin fee for cancelling their tickets. All coupons and cancelation-confirmations are sent via email.

Note: Admin features that are not included in the use case scenarios.

3. List of Candidate Objects

Noun	Decision
password	filtered(Attribute of registered User)
homepage	candidate object
user	filtered(Generalization of RU and GU)
registered-user	candidate object
guest-user	candidate object
theatre	candidate object
movie-name	filtered(Attribute of movie)
movie	candidate object
showtime	candidate object
seat	candidate object
ticket	candidate object
cost	filtered(Attribute of ticket)
payment	candidate object
payment-information	filtered(Attribute of payment)
credit card number	filtered(Attribute of payment)
CVV	filtered(Attribute of payment)
Expiry Date	filtered(Attribute of payment)
receipt	filtered(Same as payment)
theatre number	filtered(Attribute of ticket)
seat number	filtered(Attribute of ticket)
email	filtered(Attribute of registered user)
cancelation request	filtered(Method in payment)
money	filtered(Same as cost)
credit card	filtered(Attribute of payment)
bank	filtered(Actor)
login-button	filtered(button on homepage)
login-page	candidate object
registration button	filtered(button on homepage)
registration page	candidate object
header	candidate object
firstName	filtered(Attribute of user)
emailAddress	filtered(Attribute of user)
homeAddress	filtered(Attribute of registered user)
passwordVerification	filtered(Attribute of registered user)

creditCardExpiry	filtered(Attribute of user)
individual-movie-page	candidate object
movie-page	candidate object
payment-page	candidate object
credit coupon code	filtered(Attribute of credit)
theatre-number	filtered(Attribute of theatre)
movie-time	filtered(Attribute of movie)
movie-duration	filtered(Attribute of movie)
ticket-price	filtered(Attribute of ticket)
ticket-code	filtered(Attribute of ticket)
credit	candidate object
credit expiration date	filtered(Attribute of credit)

4. Class Diagram v.1

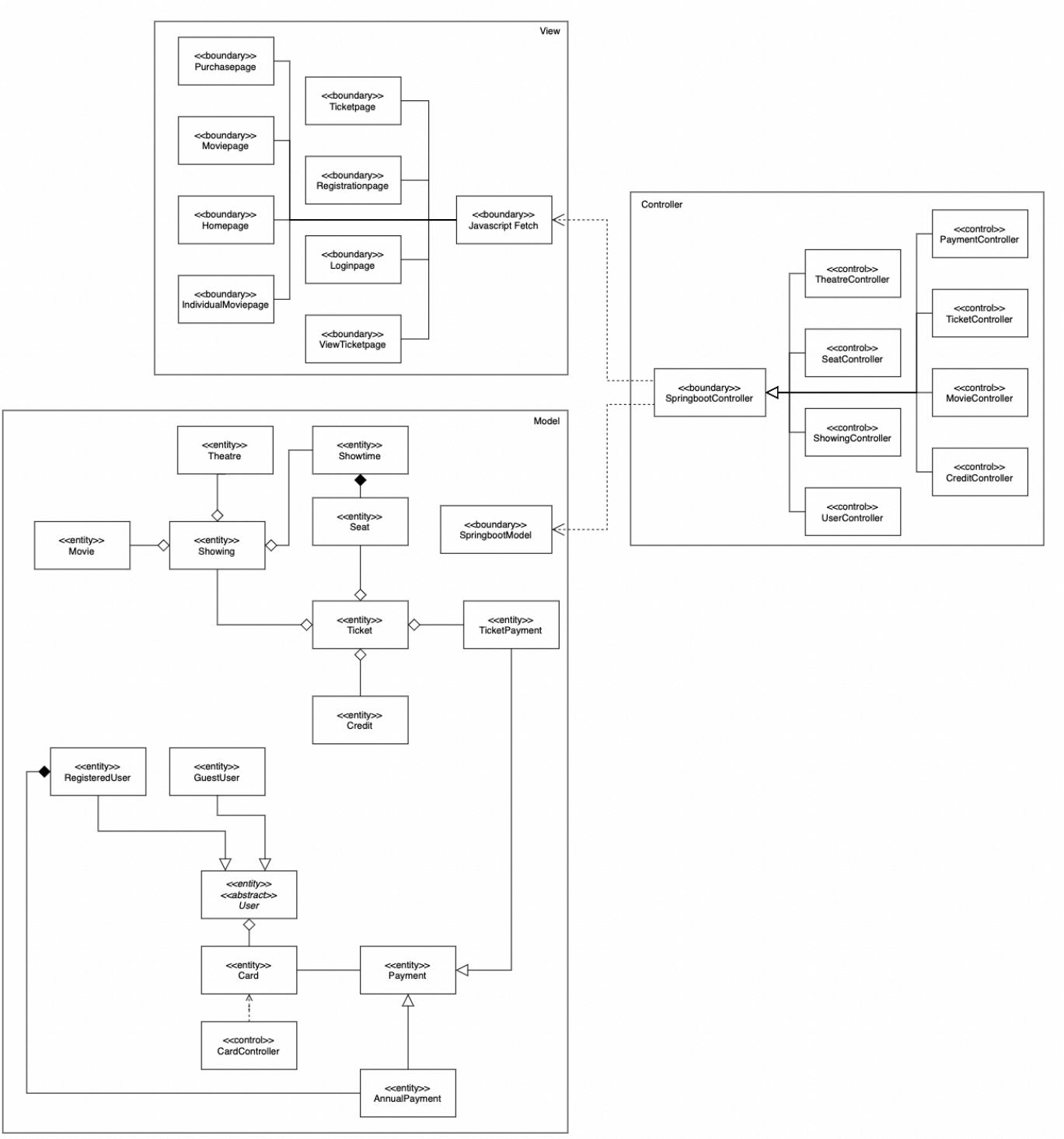

Figure 2: Class diagram representing the relationship between classes

5. Class Diagram v.2

Figure 3: Detailed controller class diagram without relationships

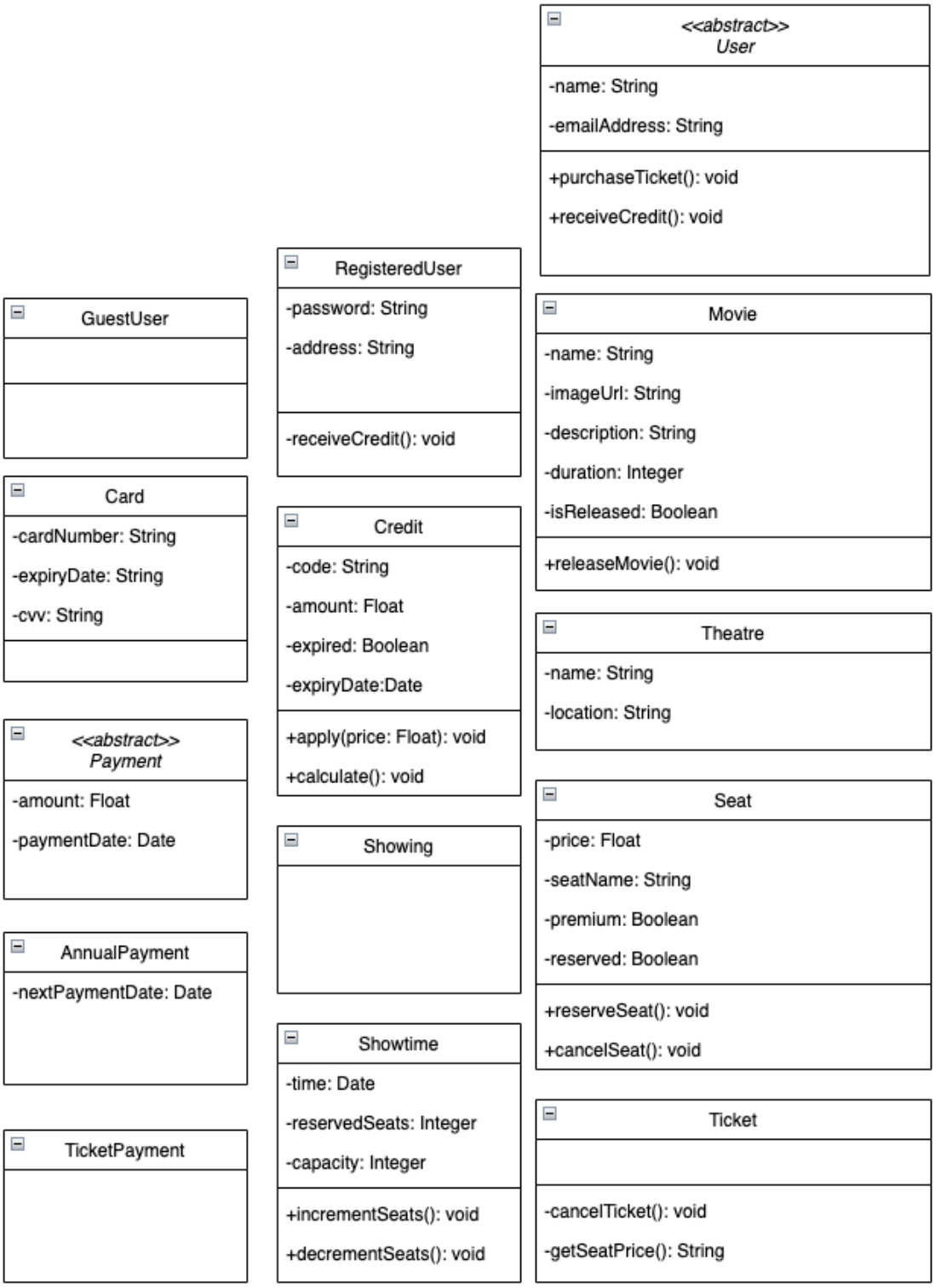

Figure 4: Detailed entity class diagram without relationships

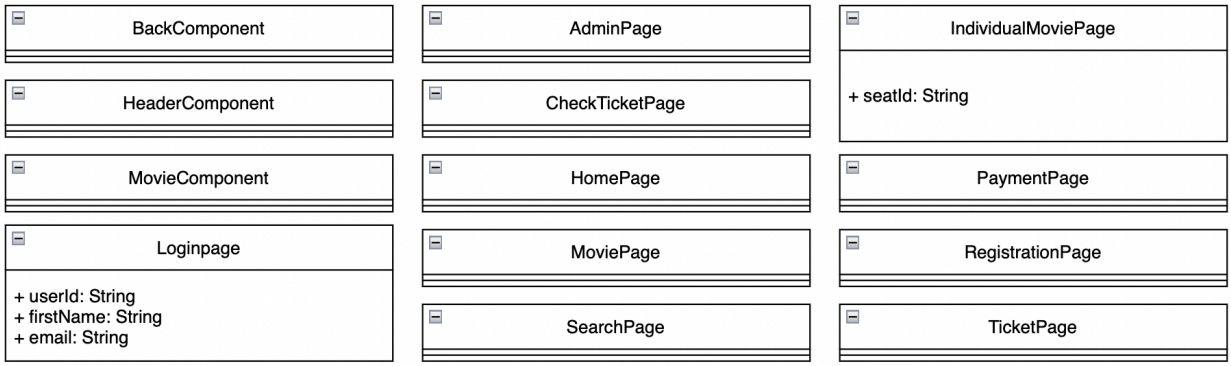

Figure 5: Class diagram for the frontend web development without relationships

6. Sequence Diagrams

Login Use Case:

By Nic Hirschfeld

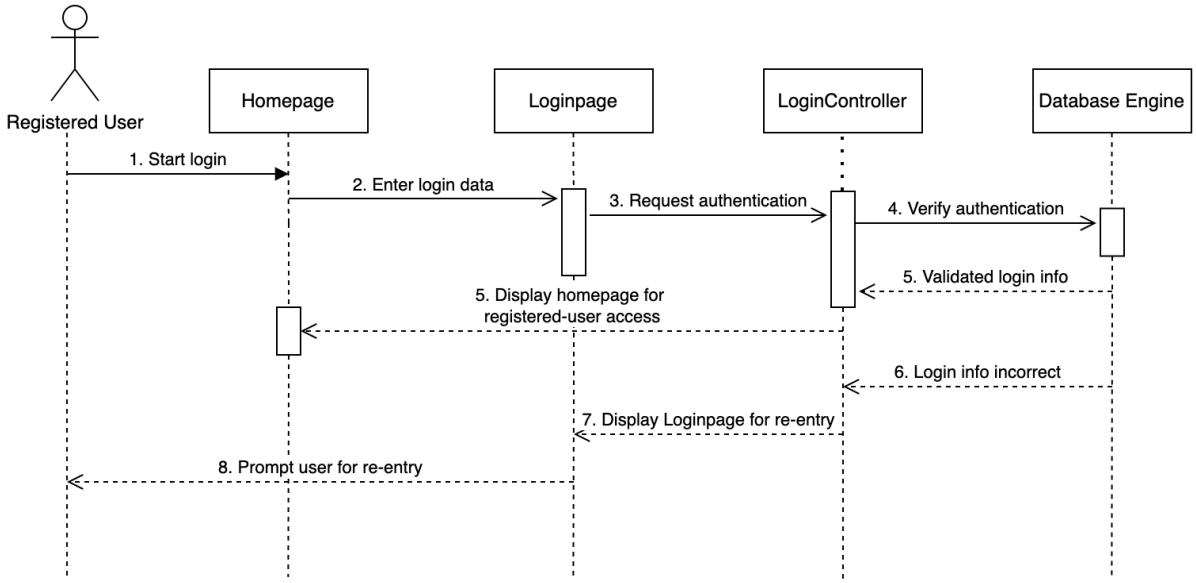

Figure 6: Login use case sequence diagram.

Select Seat Use Case:

By Runze (Bill) Yu

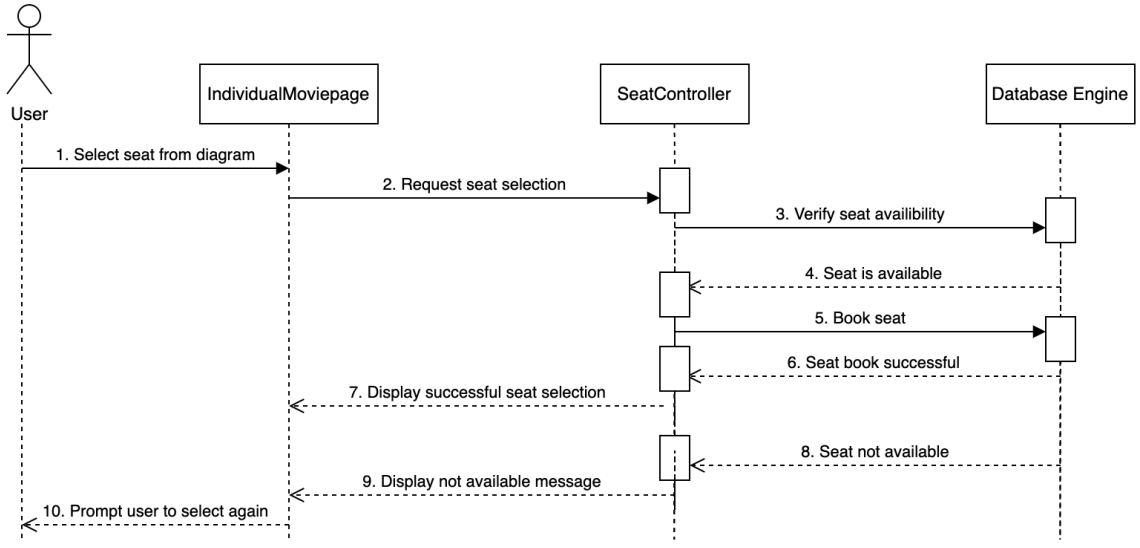

Figure 7: Select seat use case sequence diagram

Select Movie Use Case:

By Trevor Le

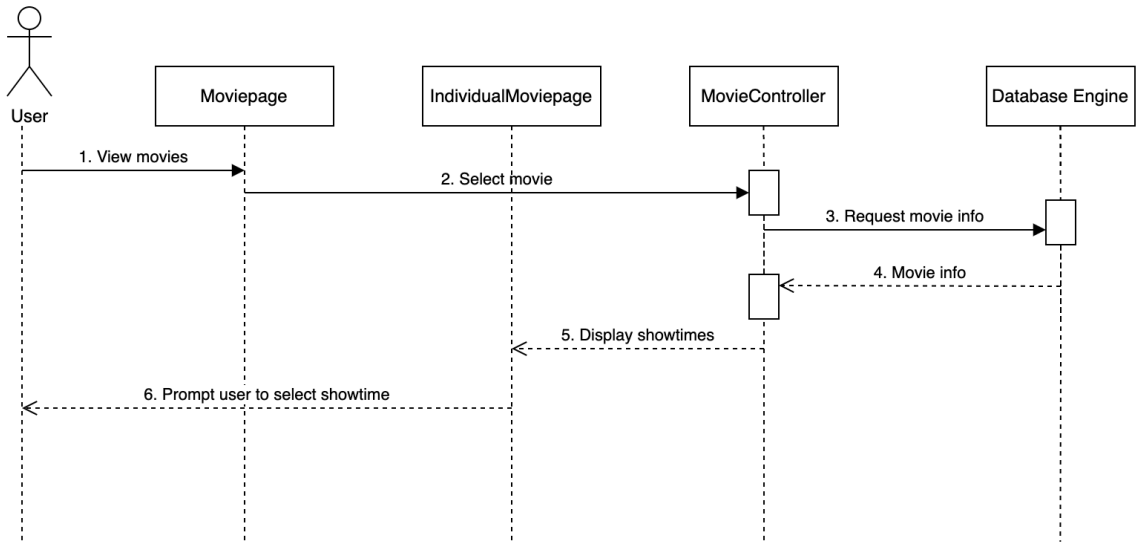

Figure 8: Select movie use case sequence diagram

Make Payment Use Case:

By Geer Ma

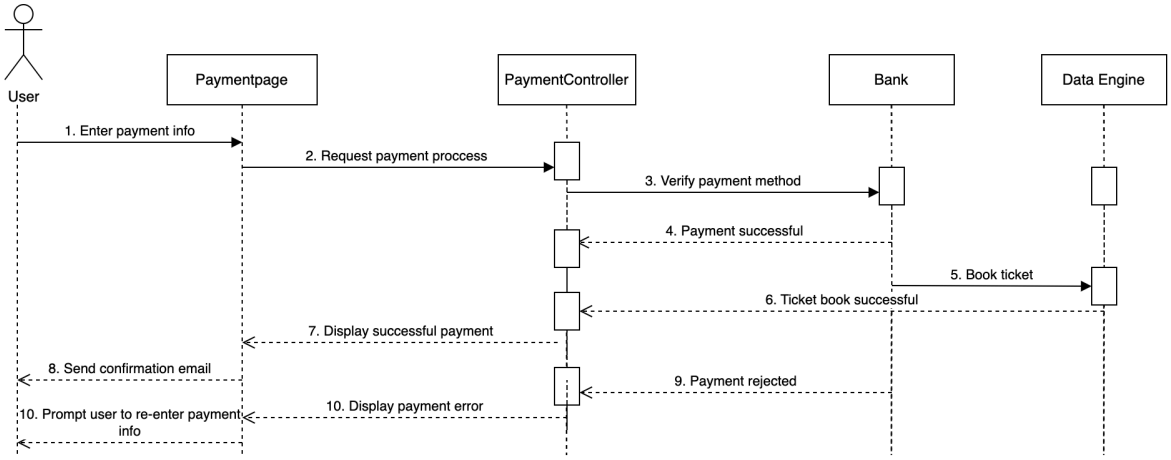

Figure 9: Make payment use case sequence diagram

7. State Transition Diagrams

Ticket Object:

By Runze (Bill) Yu

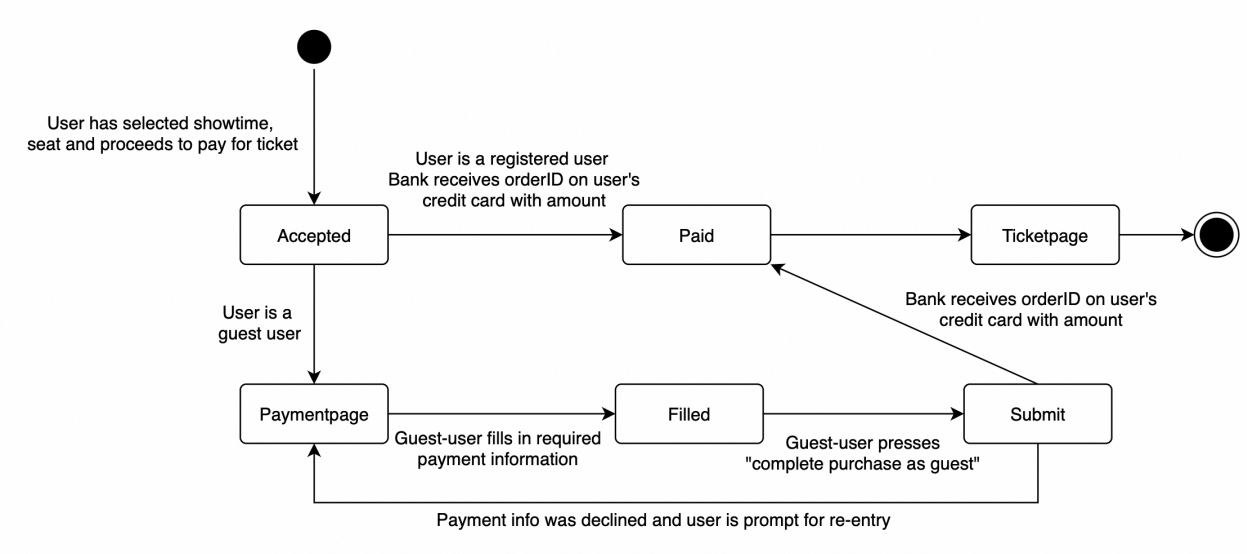

Figure 10: State transition diagram for ticket object

Payment Object:

By Geer Ma

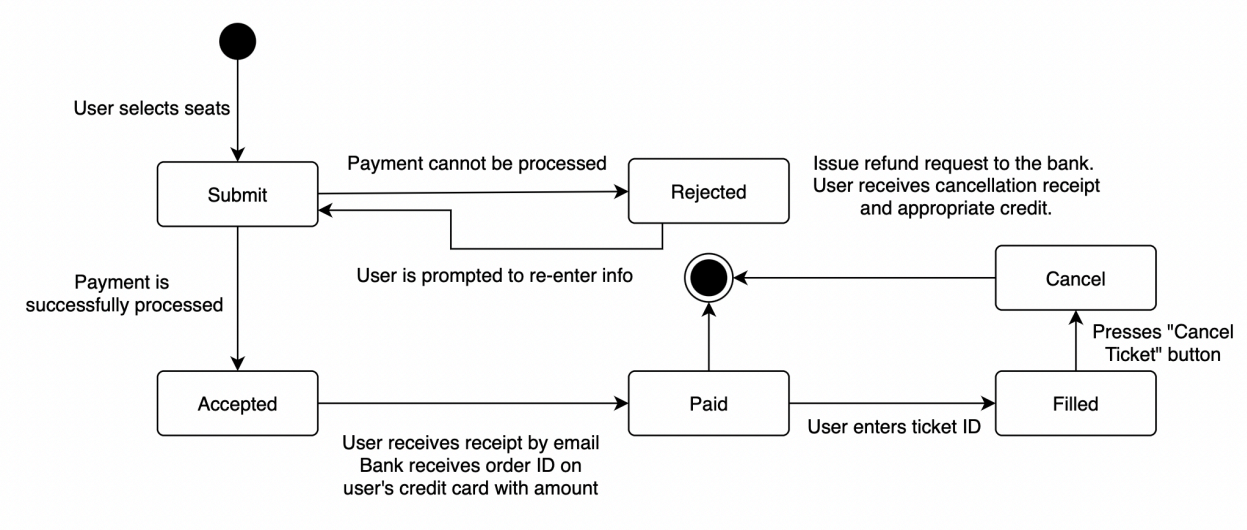

Figure 11: State transition diagram for payment object

Select Movie Use Case:

By Trevor Le

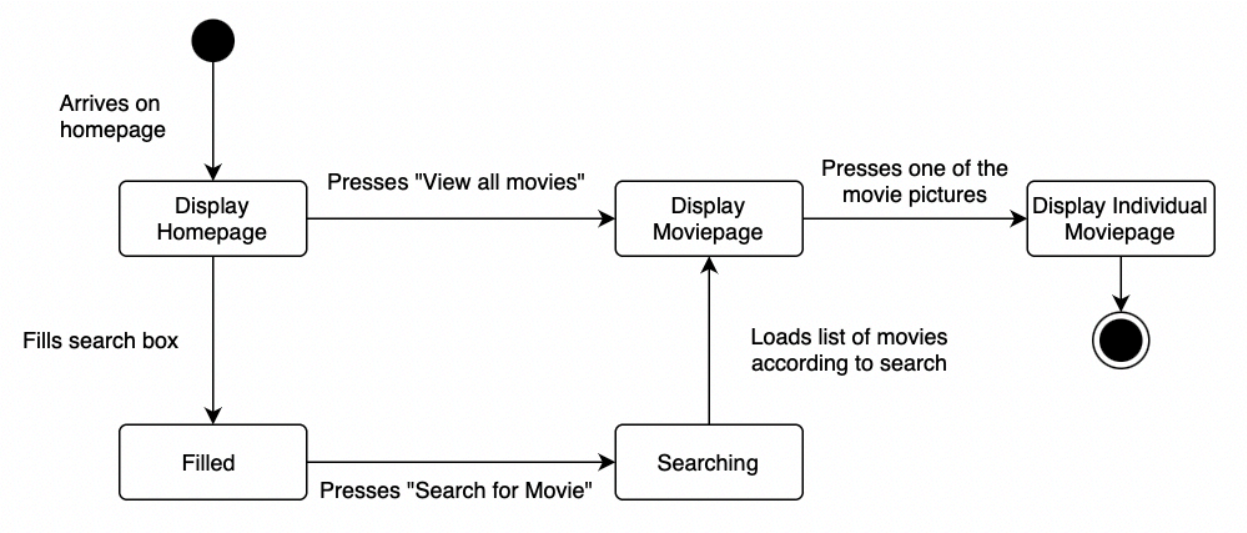

Figure 12: State transition diagram for selecting movie use case

Login Use Case:

By Nic Hirschfeld

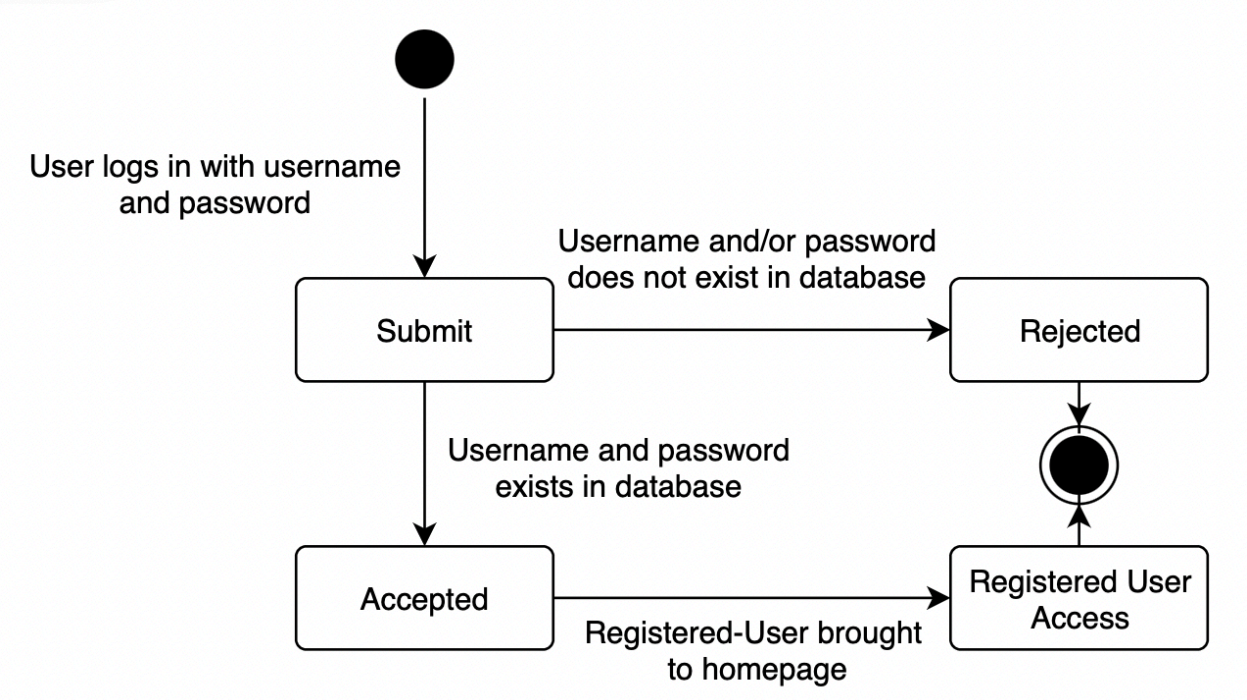

Figure 13: Login use case state transition diagram

8. System Activity Diagrams

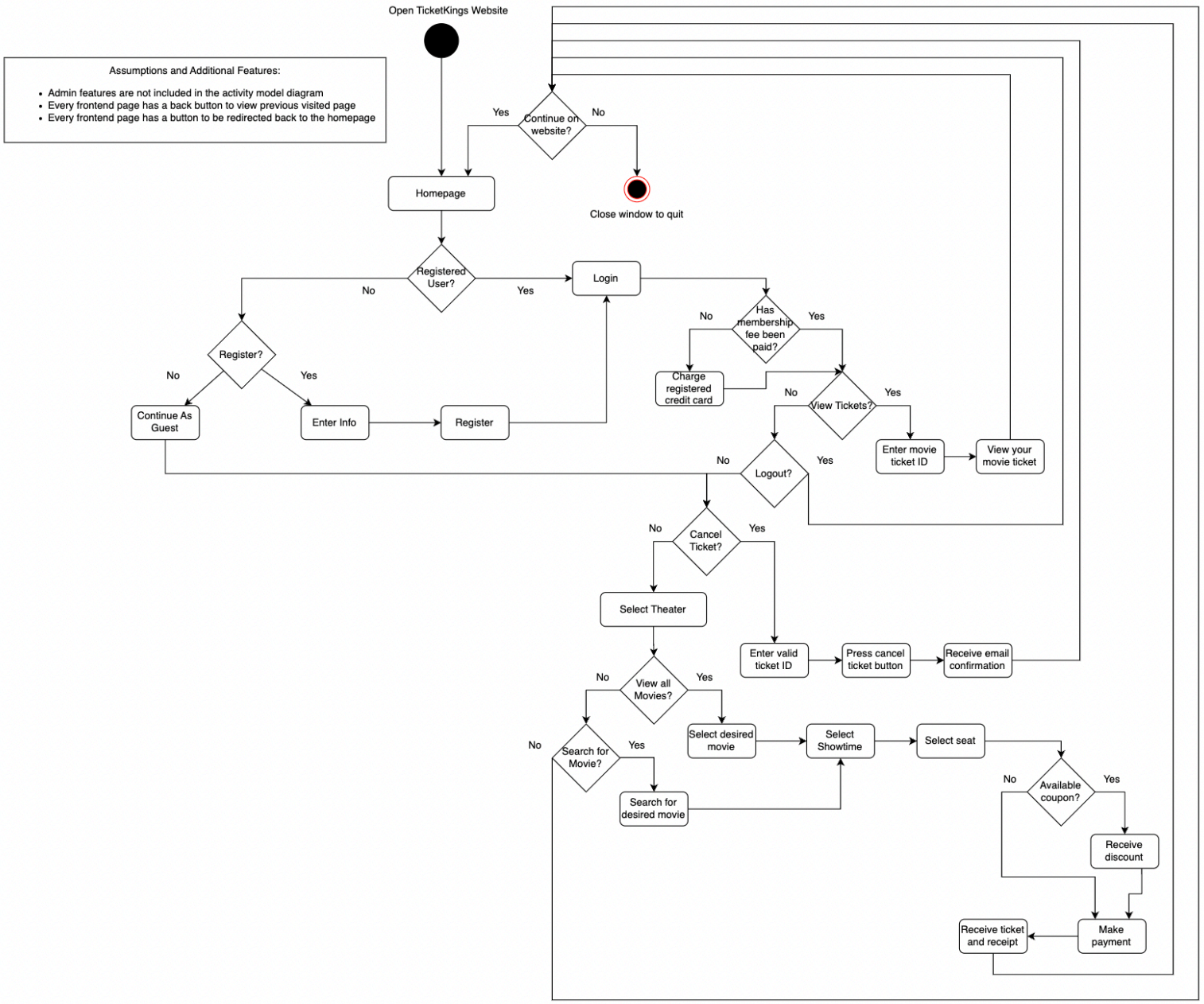

Figure 14: System activity diagram

9. System Package Diagram

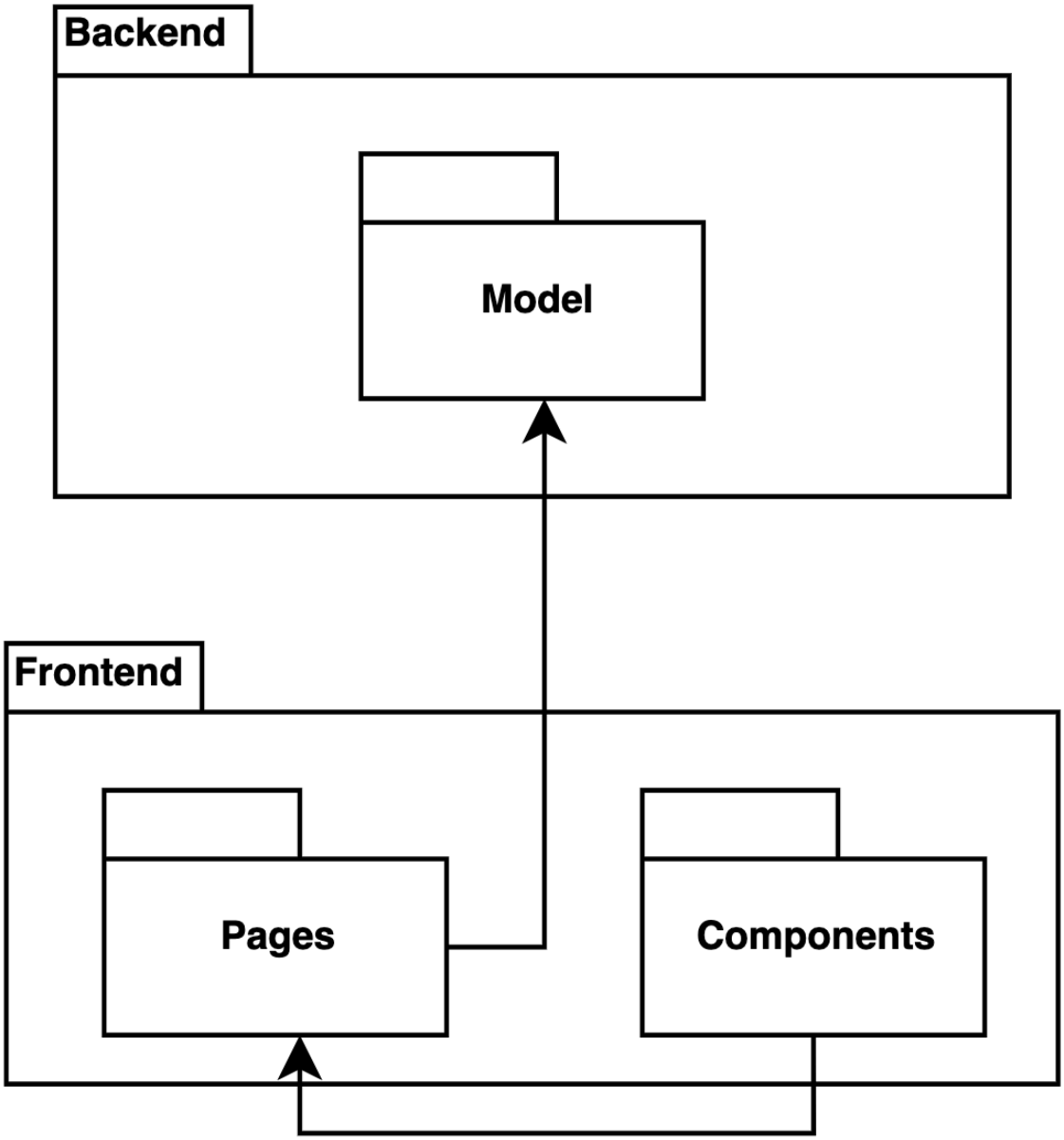

Figure 15: System package diagram

10. System Deployment Diagram

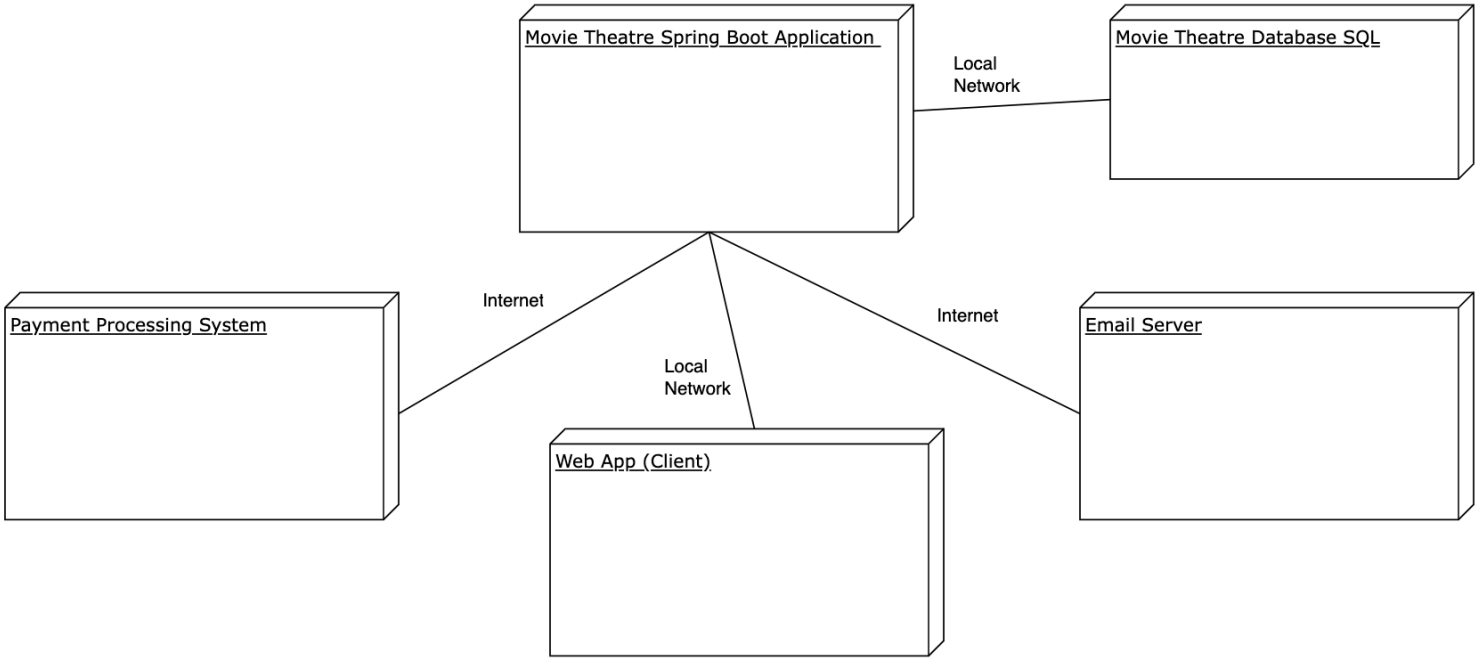

Figure 16: System deployment diagram