Online Theater Ticketing Software Design Specification

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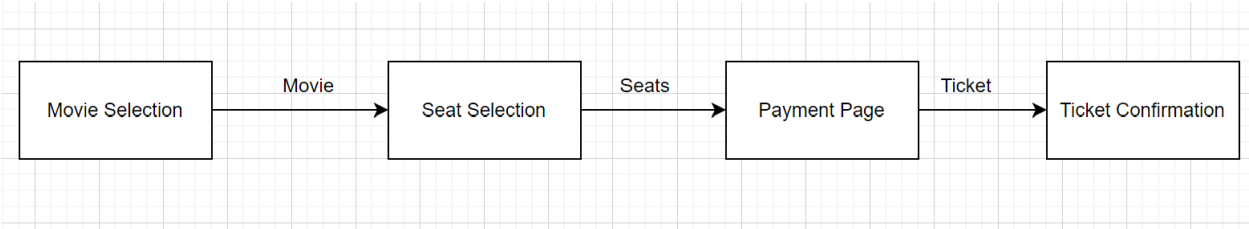
https://github.com/amom1053/Software-Design-Specification

(Please commit any changes onto this repository)

System Description (Brief overview of system)

Architectural diagram

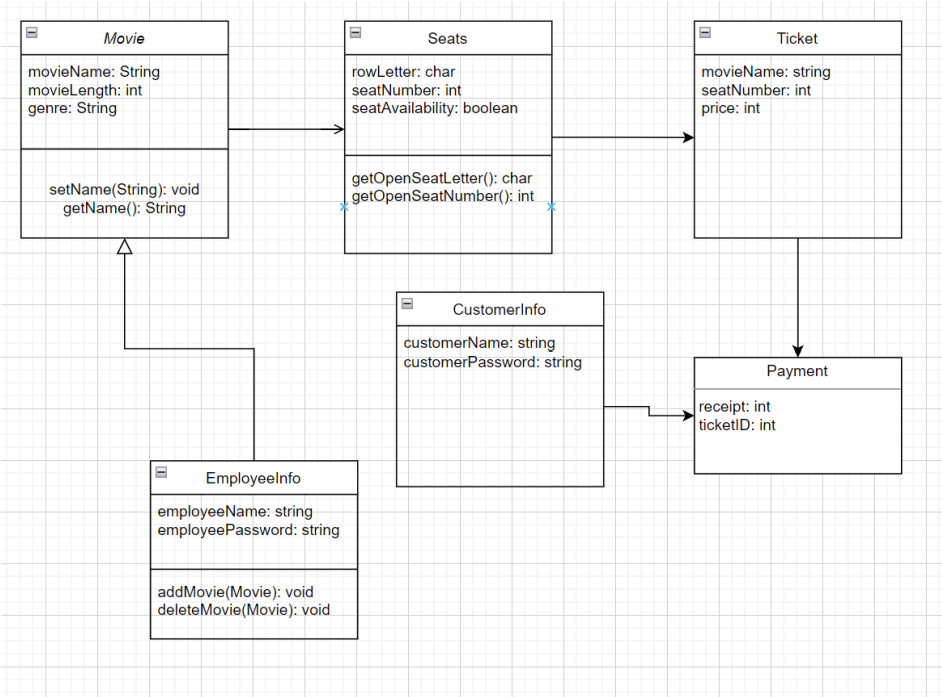


https://drive.google.com/file/d/1GczHMnxtBrQLPHaztREFe_aUGopSOfZG/view?usp=sharing

Architectural Diagram Description

The architectural diagram shows how a normal customer would view the system. All customers would start at the movie selection page. After they choose a movie it would move on to the seat selection page so they can choose their seat. After choosing a seat it would show the payment page. After purchasing the ticket, they will receive a ticket confirmation page. A customer can not access the seat, payment, and ticket confirmation page without first clicking on the movie selection page. Hence, why the diagram is linear.

UML Class Diagram



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Description of classes:

Movie Class:

-Parent Class to Employee Info class, derived from Seats class

-Has three variables: movieName(String), movieLength(int), and genre(String)

-Has two functions setName(String) and getName()

Seats Class:

-Parent class to Movie class, derived from Ticket class

-Has three variables: rowLetter(char), seatNumber(int), and seatAvailabiltiy(boolean)

-Has two functions getOpenSeatLetter() and getOpenSeatNumber()

Ticket Class:

-Parent class to Seats class, derived from Payment class

-Has three variable: movieName(String), seatNumber(int), price(int)

Payment Class:

-Parent class to Ticket Class and Customer Info Class

-Has two variables: receipt(int) and ticketID(int)

Customer Info Class

-Derived from Payment class

-Has two variables: customerName(String) and customerPassword(String)

Employee Info Class:

-Derived from Movie Class

-Has two variables: employeeName(String) and employeePassword(String)

-Has two functions: addMovie() and deleteMovie()

Description of attributes:

Movie Class:

- movieName this is what the name of the movie is and it is a String data type.
- movieLength this is how long the movie is and it is represented as an integer.
- genre this is what genre the movie belongs to and it is a String.

Seats Class:

- rowLetter is a character data type that is used to hold the row letter that a given seat is in.
- seatNumber this is the seat number for a given seat and it is represented as an integer.
- seatAvailability this attribute determines whether a seat is available or not and it is a boolean data type.

Ticket Class:

- movieName from the movie class this attribute says what the name of the movie is and is a string data type.
- seatNumber from the seats class this attribute says what the seatNumber is for a given seat and is an integer.
- price this is an integer data type that says what the price is.

Payment Class:

- receipt this attribute is an integer and has the receipt for the payment.
- ticketID is an integer data type that holds the ticket identification.

Customer Info Class

- customerName this attribute is a string that holds the name of the customer.
- customerPasswords holds the customer's password and is represented as a string data type.

Employee Info Class:

- employeeName this attribute holds the name of the employee and is a string data type.
- employeePassword is a string that holds the password for an employee.

Description of operations

Movie Class:

setName(String): void – Sets the variable MovieName based on the user input from getName()

getName(): String –Gets the name of the movie from the user.

Seats Class:

getOpenSeatLetter(): char -- Returns an open seat letter from the user.

getOpenSeatNumber(): int -- Returns an open seat number from the user

Employee Info Class:

addMovie(Movie): void – Takes movie as a parameter, and adds it

deleteMovie(Movie): void – Takes movie as a parameter, and deletes it

* descriptions should be detailed and specify datatypes, function interfaces, parameters, etc..

Development plan and timeline

Angelina Mom: Architectural Diagram, UML Class Diagram, and Architectural Diagram Description

Brandon Slusser: Description of Attributes

Vincent Huynh:

Conor Murphy: Class Description and Attributes of Operations