One Media
When a patron wishes to check out a media or reserve it the media must be checked by looking through reservations of the database that have the same mediaID and checking the latest checkout dates return date to see if the item has been returned so that the library will know the media is available before handing it out

Late Fees
When a media is not returned on its due date a dollar is added to the late fee, every day after that another dollar is added to that reservation's late fee until the media is returned where the patron must pay the late fee incurred.

Reservation Limit
When a media is being reserved the patrons reservations are checked using a temp variable, if the number of media they have reserved is over 50 they can no longer reserve anymore, a similar process is then used but only for movies and only 10 reservations are allowed for them.

Due Dates
When checking out some media from the library, the media is due back to the library according to the guidelines that books are due back in 3 weeks and that movies are due back in one week. These due dates are calculated based on the number of renewals, the media type (book vs movie), and the initial checkout date. These numbers come from the standard in place in the New York Public Library system.

Since the due dates are based on other things in the database or static numbers, the field DueDate in MediaReservations should be removed from the database as it is a calculated field. Instead, when implementing the database, the DueDate field should be calculated according to the above business rule. Each renewal is an extra 3 weeks or 1 week depending on the media type, which is added to the initial checkout date. Note that this is distinct from the DateReturned field, which records the actual date that the media was returned and is distinct from the expected due date.

Renewals
Each checkout can be renewed twice, according to NYPL standards. However, reservations cannot be renewed if another patron has placed a hold on the media. Holds can be placed on media that another patron has checked out, and the patron with that media should not be able to renew their checkout and must return it.

The IsRenewed field in the MediaReservations table should be restricted to only hold the values of 0, 1, or 2 to indicate the number of times and the field should be renamed to NumberOfTimesRenewed to reflect its data structure. This restriction would be implemented by the use of a validation table. Additionally, there should be a trigger when updating the field to check that another patron has not placed a hold on the media that is going to be renewed. This trigger would prevent the NumberOfTimesRenewed field from being incremented.