# Scenario 2: Customer Browses Movies & Makes Reservation

1- Customer requests to view movies from MovieMenuPage.

2- MovieMenuPage requests movie list from ReservationController.

3- ReservationController fetches movies from MovieDatabase.

4- MovieDatabase returns movie list to ReservationController.

5- ReservationController returns movie list to MovieMenuPage.

6- MovieMenuPage displays movies to Customer.

7- Customer selects movie and showtime on MovieMenuPage.

8- MovieMenuPage sends reservation request to ReservationController.

9- ReservationController executes generateReservationId() method.

10- ReservationController checks seat availability in ReservationDatabase.

11- If seats available, ReservationController saves reservation.

12- ReservationController returns confirmation to MovieMenuPage.

13- Else, ReservationController returns reservationFailed and shows error.

## Sequence diagram



Actor

«boundary»
moviePage:
MovieMenuPage

«control»
resCtrl:
ReservationController

«entity»
movieDB:
MovieDatabase

«entity»
movieDB:
MovieDatabase

(1)<<input>> viewMovies()
Message

(2) getMovies()
Message

(3) fetchMovies()
Message

(4) movieList
Stereotype

(5) movieList
Stereotype

(6) «output» displayMovies()
Stereotype

(7) «input» selectMovie(movieId, showtime)
Message

(8) createReservation
(movieId, showtime, tickets)
Message

generateReservationId()     (9)
execution

(10) checkAvailability()
Message

(11) saveReservation (data)
Message

Alternative

[result = true]

(12) «output»
reservationConfirmed()

[else]

(13) «output» reservationFailed()