## Activity Diagram for the Movie Ticket Booking System

Create some activity diagrams for the movie ticket booking system problem.

We'll cover the following

- The customer makes a booking for the movie
  - States
  - Actions
- Activity challenge: Admin cancels a show

An activity diagram is a great way to visualize the flow of messages from one activity to the other in the system. There can be different activity diagrams that we can create for our movie ticket booking system. In this lesson, we will create activity diagrams for the following two activities:

- The customer makes a booking for the movie.
- Activity challenge: The admin cancels a show.

## The customer makes a booking for the movie

The following are the states and actions that will be involved in this activity diagram.

#### **States**

**Initial state:** The customer opens a search for a movie.

Final state: The customer receives a ticket for the movie.

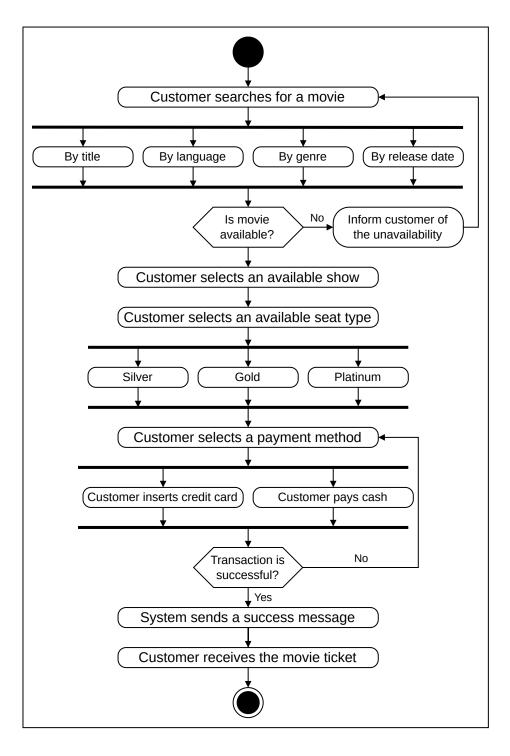
### Actions

The customer searches for a movie by specific criteria and selects their movie. The customer then selects their required seat and pays according to their seat type. The

payment is carried out either through cash or a credit card. After successful payment, the customer receives the movie ticket.

Based on the order above, the activity diagram of a customer making a booking for the movie is given below.

Note: Here we assume that the customer is purchasing a single cinema seat.

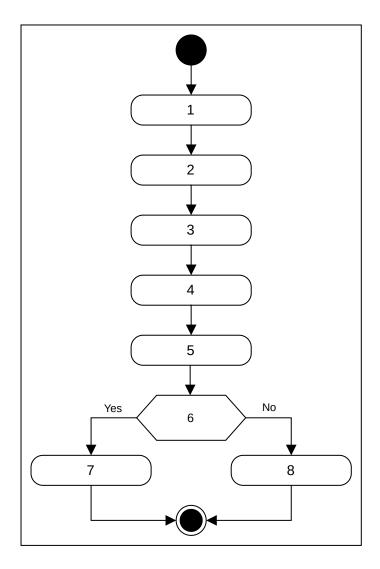


The activity diagram for the customer making a booking

# Activity challenge: Admin cancels a show

You will create an activity diagram of an admin canceling a show for a movie.

A skeleton of the activity diagram is given below.



The activity diagram for an admin cancelling a show

Notice that the actions in the diagram above are numbered from 1 to 8. The slots shown below represent the activities and the arrows represent the flow from one activity to the other.

Can you rearrange the given slots in the correct order they should appear in the activity diagram above?

**Note:** If you get stuck, just click the "Show Solution" button to check out the correct answer.

Fill the missing slots with the correct actions for an admin canceling a show.

Admin searches a movie title

Admin clicks the appropriate movie

Admin selects the show they want to delete.

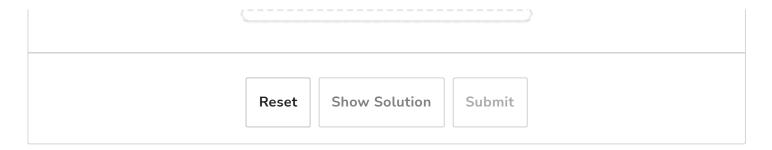
Admin deletes show

Cancelation notification email is sent to all users who made a booking of that show

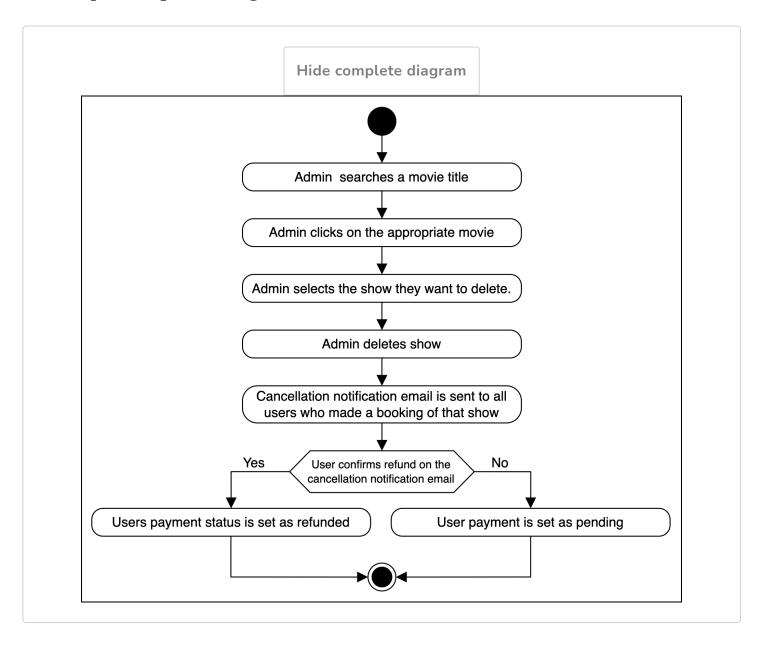
User confirms refund

Users payment status is set as refunded

User payment is set as pending



Alternatively, you can also click the "Show complete diagram" button below to see the complete sequence diagram.



We've looked at some of the activity diagrams of our movie ticket booking system. In the next lesson, we will present the code for our designed classes in some of the most popular languages.



Sequence Diagram for...

Next →

Code for the Movie Tic...

☐ Mark as Completed