

# Activity Diagram for the Airline Management System

Create some activity diagrams for the airline management system.

We'll cover the following

- Create an itinerary
  - States
  - Actions
- Activity challenge: The user receives confirmation notification after payment

Activity diagrams are 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 the airline management system. In this lesson, we will create activity diagrams for the following two activities:

- Creating an itinerary
- Activity challenge:** The user receives a confirmation notification after making the payment.

## Create an itinerary

The states and actions that will be involved in this activity diagram are provided below.

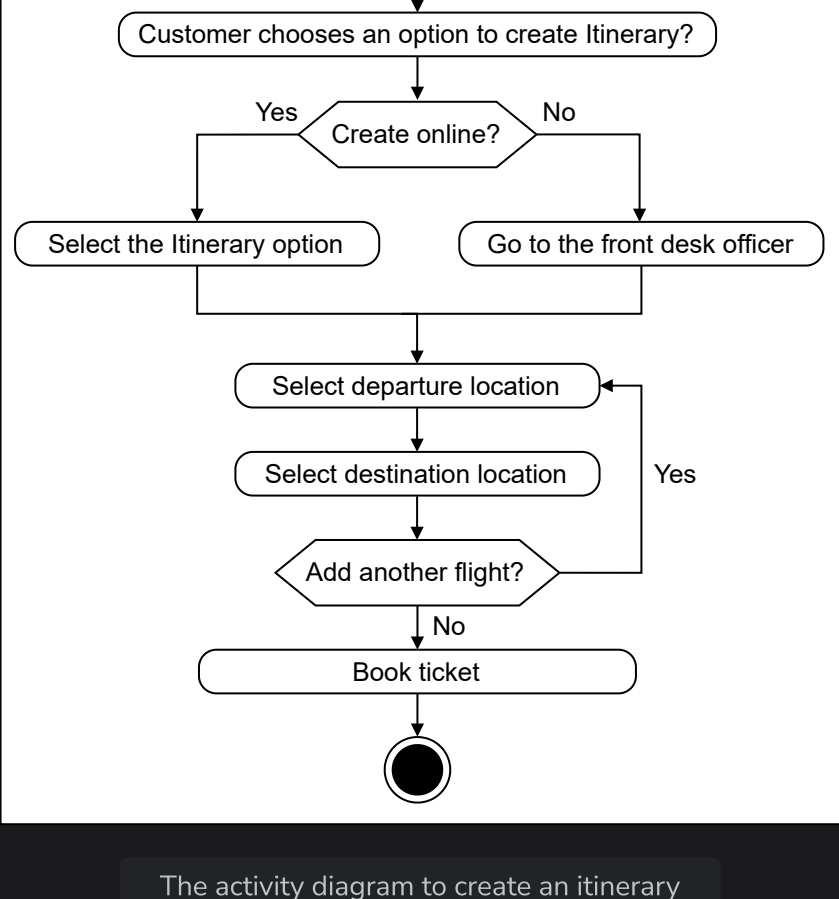
### States

**Initial state:** The customer chooses an option to create the itinerary.

**Final state:** A customer books their ticket.

### Actions

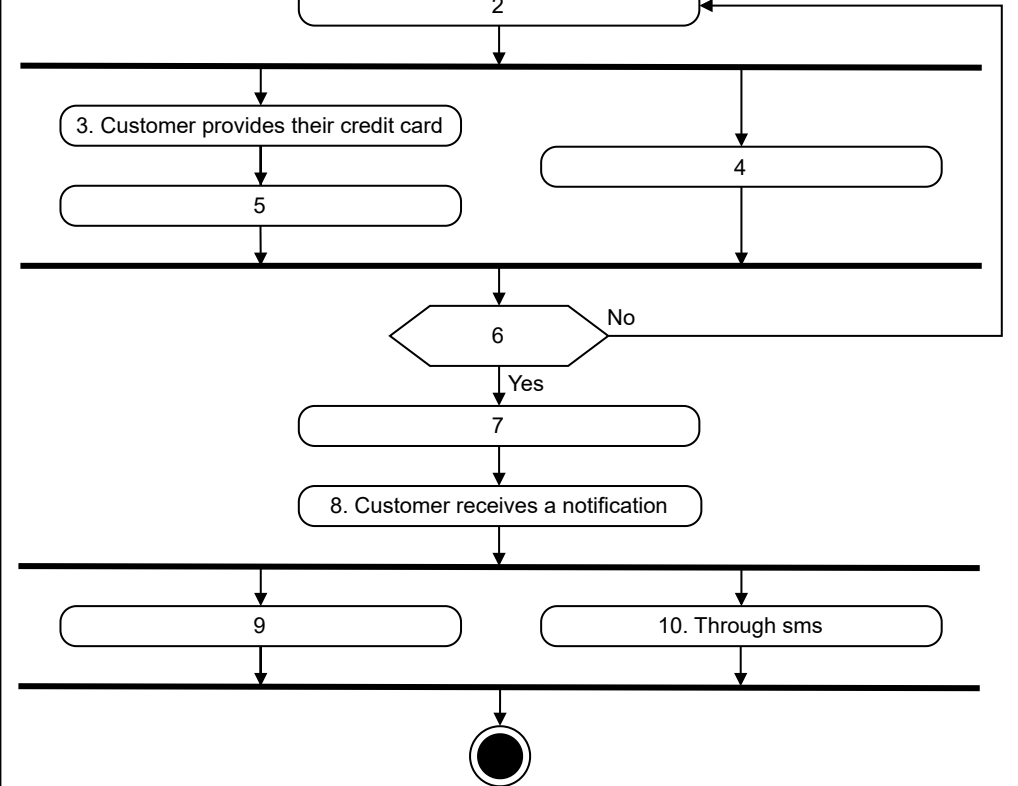
The customer selects an option to create an itinerary online themselves or through the front desk officer. The customer then selects their flights. Finally, the customer books their ticket.



The activity diagram to create an itinerary

## Activity challenge: The user receives confirmation notification after payment

Let's create an activity diagram of a user receiving a confirmation notification after making the payment. A skeleton of the activity diagram is given below:



The activity diagram for a user receiving a confirmation notification after the payment

Notice that the actions in the diagram above are numbered from 1 to 10. The slots below represent the activities, and the arrows represent the flow from one activity to the other. Can you rearrange the slots below in the correct order they should appear in the activity diagram given above?

**Note:** If you're unsure, click the "Show Solution" button to check the correct answer.

Fill the missing slots with the correct actions for a user receiving a confirmation notification after payment.

The customer initiates the payment

The system asks for the payment

3. The customer provides their credit card

The customer pays cash

The customer enters the PIN

Is the Transaction successful?

Flight reservation is completed

8. The customer receives a notification

Through email

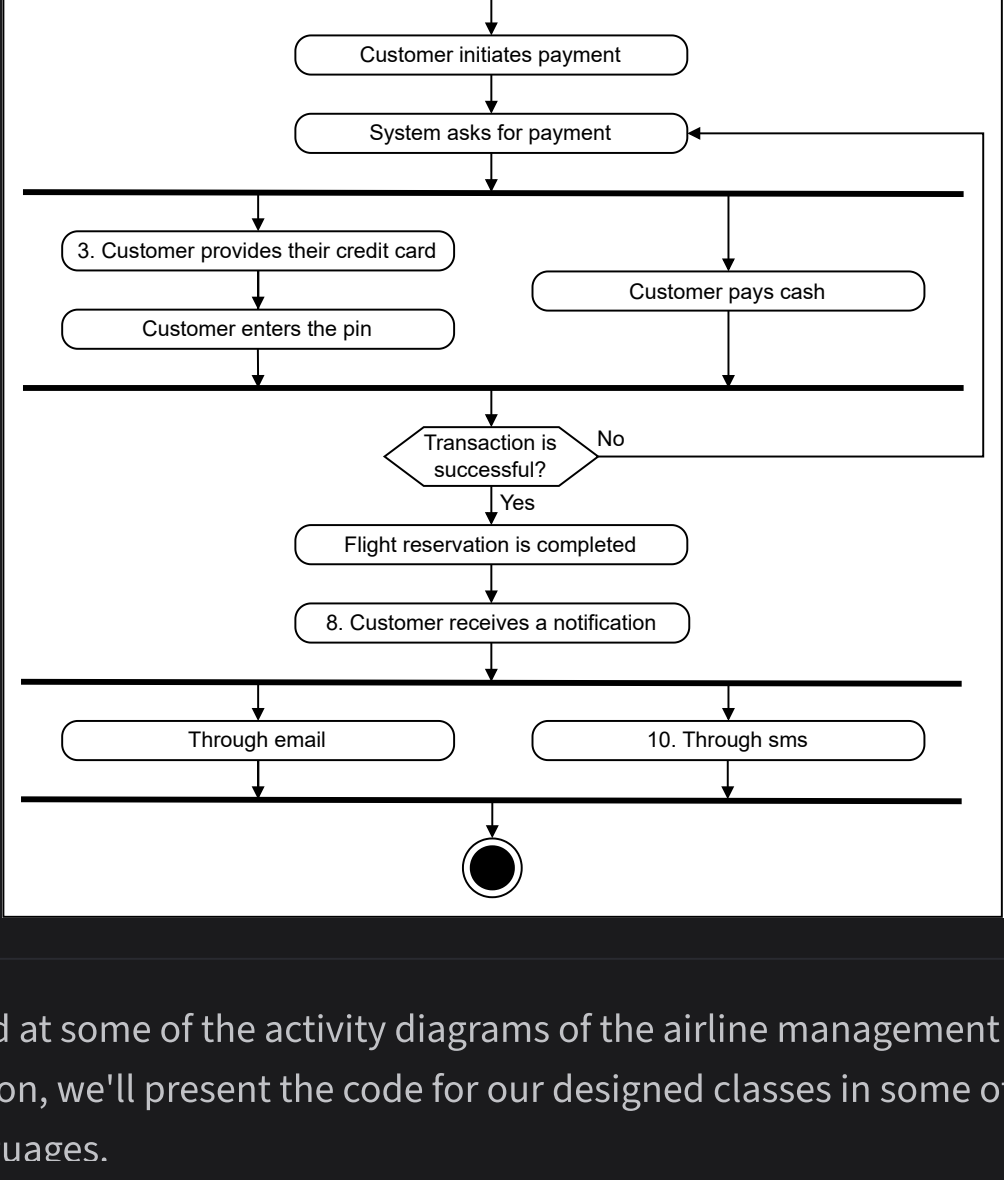
10. Through sms

Reset

Show Solution

Submit

Alternatively, click the "Show complete diagram" button below to see the complete activity diagram.



We've looked at some of the activity diagrams of the airline management system. In the next lesson, we'll present the code for our designed classes in some of the most popular languages.