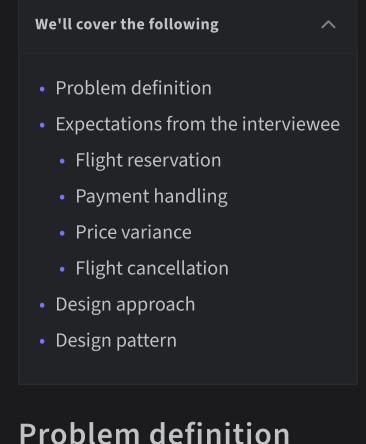
Getting Ready: The Airline Management System

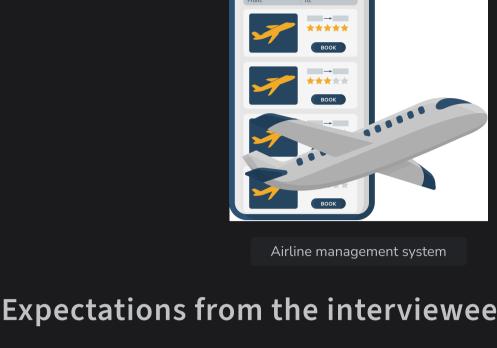
Understand the airline management system problem and learn the questions to simplify this problem further.



An airline management system is a software used to manage all activities of the

airline system efficiently. Nowadays, every airline has a management system to digitize the process of scheduling flights, managing staff, ticket reservations, and performing other necessary airline management tasks. Moreover, the system keeps track of the number of aircraft, pilots, and their availability at airports. The system provides customers the complete flight information so they can view the available flights and schedule them online. Similarly, the admin can manage all the airline activities with the help of this system. Therefore, the airline management system facilitates its customers as well as admins and controls all the operations of the airline company.

BOOK A TICKET



specific constraints and requirements. The following provides an overview of some of the main things that the interviewer will want to hear you discuss in more detail,

Flight reservation

Flight reservation

Flight reservation is an essential part of the airline management system. The system

has to ensure that no two people should be mapped to the same seat. The interviewer

There are several components present in the airline management system, each with

expects you to ask questions to identify how the system will complete flight reservations:

How will the system ensure that multiple users do not have the same seat on the aircraft?
Can one itinerary reserve multiple flights?

- Can the customer reserve the whole aircraft?
- One of the airline management system's most significant attributes is its payment

the questions listed below:

Price variance

Payment handling

 How does the customer make the payment? Does the customer pay online or in persone?

What payment methods can the customer use, for example, credit card or cash?

structure for its customers. This can vary, so the interviewer would expect you to ask

- Will the customer be able to pay in advance for a flight booking, or is a just-in-time (JIT) payment method available?
- let's ask the interviewer about the pricing model. You may ask the questions listed below:

Does every seat has the same price, or is it calculated based on the seat type?
Does the weekdays and weekends affect the price of the flight?

Is the price set manually, or does the system calculate the price for each flight?

Now that we've discussed the payment methods of the airline management system,

In the airline management system, the customer may want to cancel the flight after booking it. Therefore, you can ask the following questions:

Is the price of the flight affected by an increase in demand?

How does the duration of the flight affect the payment?

• Which type of users are allowed to request a flight cancellation?

• Identify and design the smallest components first, including seat, flight, etc.

Design pattern

(i)

purpose, we will follow the steps below:

advanced concepts of object-oriented design.

Design approach

Flight cancellation

• Can the customer cancel a flight?

What is the time limit to cancel the flight?

aircraft that can be composed of multiple seats, etc.
Repeat the steps above until we design the whole airline management system.

We'll design this airline management system using the bottom-up approach. For this

• Use these small components to design bigger components, including airport,

During an interview, it is always a good practice to discuss the design patterns that an airline management system falls under. Stating the design patterns gives the

interviewer a positive impression and shows that the interviewee is well-versed in the

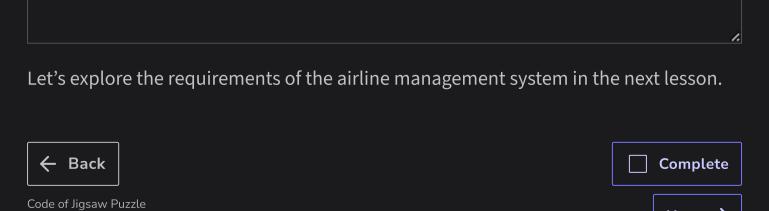
questions like, "Define design patterns."

Which design pattern(s) should be used to design an airline management system? Please elaborate on your choice(s).

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Try to answer the following question. If you are not familiar with

design patterns, don't worry! You can learn about them by asking



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Requirements for the Airline Management ...