

Exercise 4_4 – 25 mins.

PTFL-4.2.3 (K4) Analyze operational profiles for system usage

Scenario:

An international travel website has embarked on a project to upgrade the flight booking functionality of its website. The current booking engine is slow and cumbersome.

Use Case – Book a Flight

Actor – Customer

Pre-Conditions

- Airline inventory and pricing is available
- Currency conversion service is available
- Customer has valid payment method

Main Course

1. Customer selects origin and destination
2. Customer inputs dates of travel
3. Customer performs search for available flights
4. Customer selects desired flight
5. Customer provides payment information (credit card)
6. Customer completes purchase
7. Customer receives confirmation screen and e-mail

Post-conditions

Flight is booked correctly

Payment method is charged correctly

Exceptional Courses

- Airline inventory service is unavailable
- Currency conversion service is unavailable
- Payment method declined
- Customer cancels without booking
- Customer's session times out due to inactivity

Analyze the above information for the operational profiles in this scenario to answer the following questions:

Where might performance bottlenecks occur?

1. Waiting on credit card authorization
2. A problem with the website that interferes with the booking and payment process (such as a billing address mismatch)
3. Problems with APIs and services

Exercise 4_4 Solution

What impact could the designed process have on overall performance?

The main flow of the process looks good. Problems in dealing with exceptions could degrade performance.

Can you identify any other tasks a customer might perform in the booking process not documented above?

1. Adding another person to the itinerary
2. Booking a one-way trip
3. Booking a multi-city trip