Flight booking program report

Pseudocode:

```
WHILE True DO
DISPLAY_MENU()
choice = GET_USER_CHOICE()
IF choice == 1 THEN
  DISPLAY_AVAILABLE_FLIGHTS()
  cityChoice = GET_USER_CHOICE()
 IF cityChoice BETWEEN 1 AND 4 THEN
   DISPLAY_FLIGHT_INFORMATION(cityChoice)
  ELSE
   PRINT "Invalid choice, please choose a number between 1 and 4."
ELSE IF choice == 2 THEN
  DISPLAY_AVAILABLE_FLIGHTS_FOR_BOOKING()
  bookFlight = GET_USER_CHOICE()
  IF bookFlight BETWEEN 1 AND 4 THEN
   confirmBooking = GET_USER_CONFIRMATION()
   IF confirmBooking == 1 THEN
      PRINT "Flight booked successfully!"
      BREAK # Exit the loop after successful booking
   ELSE
      PRINT "Booking canceled."
  ELSE
   PRINT "Invalid choice, please choose a number from the list."
```

ELSE IF choice == 3 THEN

PRINT "Exiting program. Goodbye!"

BREAK # Exit the loop and end the program

ELSE

PRINT "Invalid choice, please choose a number between 1 and 3."

END WHILE

Testing table for the code

Test Case	Input (user's choice)	Expected Output	Comments
1	1	List of available flights	Checks if the list of flights is shown when choosing option 1.
2	2	List of available flights for booking	Checks if the list of flights is shown for booking when choosing option 2.
3	3	"Exiting program. Goodbye!"	Checks if the program exits correctly when choosing option 3.
4	4	"Invalid choice, please choose a number from 1 to 3."	Checks if an invalid choice is handled.
5	1.5	"Invalid choice, please choose a number from 1 to 3."	Checks if non-integer input is handled.
6	2, 6	"Invalid choice, please choose a number from 1 to 4."	Checks if an invalid city choice is handled.
7	2, 2	List of available flights for booking	Checks if the list of flights is shown for booking after an invalid city choice.
8	2, 5	"Invalid choice, please choose a number from 1 to 4."	Checks if an invalid booking choice is handled.
9	2, 1, 0	"Booking canceled."	Checks if an invalid confirmation is handled.
10	2, 1, 1	"Flight booked successfully!"	Checks if a successful booking is confirmed.
11	One	"Invalid choice, please choose a number from 1 to 3."	Checks if non-numeric input is handled.

Summary

My flight booking program lets users check flight options, book flights, and quit. But it's not perfect yet. It doesn't handle invalid city choices or non-numeric user inputs. To fix that, I'll add error handling. I'll also make it more user-friendly by adding clearer messages and prompts. And to add more features, I'll let users search by date and departure time, add more airlines and destinations, and give users a login system for managing bookings.

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