

## **Operation Contracts**

**Operation:** searchFlightsInfo(source, destination)

Use Case: Retrieve a list of public flights for a given source-destination pair.

Preconditions:

Instances of Airport for both source and destination exist.

A non-registered user instance is present.

The user is authenticated and their presence is confirmed.

Postconditions:

A list of public flights is returned.

Operation: getFlightDetails(source, destination)

Use Case: Acquire detailed information about flights for a given source-destination pair.

Preconditions:

Relevant Airline instances exist.

Corresponding Flight instances are present.

Postconditions:

Flight details for the existing Flight instances are returned.

The details are displayed to the user.

Operation: searchFlightsInfoFull(source, destination)

Use Case: Obtain a comprehensive list of public flights for a specific source-destination pair.

Preconditions:

Airport instances for both source and destination are established.

A non-registered user instance is available.

The user is authenticated and visible.

Postconditions:

A complete list of public flights is provided.

**Operation:** getFlightDetails(source, destination)

Use Case: Fetch full flight details for a specified source-destination pair.

Preconditions:

Airline instances are already in place.

Flight instances are available.

Postconditions:

Comprehensive flight details of the Flight instances are returned.

These details are displayed to the user.

Operation: searchFlights(source, destination)

Use Case: Search for both public and private flights from a source to a destination.

Preconditions:

Airport instances for both source and destination exist.

An airport administrator registered user instance is present.

The user is authenticated and visible.

Postconditions:

A list of both public and private flights is returned.

**Operation:** getAirportFlightDetails(source, destination)

Use Case: View detailed flight information for a given source-destination pair.

Preconditions:

Airline instances are in existence.

Flight instances are established.

Postconditions:

Detailed flight information for the Flight instances is returned.

The flight information is displayed to the user.

This reformulation provides a clear and structured presentation of the operations, ensuring that the preconditions and postconditions are distinctly outlined for each operation within the flight system.