<u>Use Case 1:</u> View flights, given a source-destination pair

Identification of system of operations and operation contracts

System of operations:

- searchFlightsInfoBasic(source, destination)
- viewBasicFlightDetails(source, destination)
- searchFlightsInfoFull(source, destination)
- viewFullFlightDetails(source, destination)
- searchFlightsAirport(source, destination)
- viewAirportFlightDetails(source, destination)

Operation Contracts:

Operation: searchFlightsInfoBasic(source, destination) Use Case: View flights, given a source-destination pair

Preconditions:

- 1. Two instances of Airport already exists (one for source, the other destination).
- 2. Non-registered user instance already exists.
- 3. User is authenticated and visible.

Postconditions:

1. Returns list of public flights.

Operation: getBasicFlightDetails(source, destination) Use Case: View flights, given a source-destination pair

Preconditions:

- 1. Airline instances already exists.
- 2. Flight instances already exists.

Postconditions:

- 1. Return flight details of Flight instances.
- 2. Display Flight instances with details.

Operation: searchFlightsInfoFull(source, destination)

Use Case: View flights, given a source-destination pair

Preconditions:

- 1. Two instances of Airport already exists (one for source, the other destination).
- 2. Non-registered user instance already exists.
- 3. User is authenticated and visible.

Postconditions:

1. Returns list of public flights.

Operation: getFullFlightDetails(source, destination)
Use Case: View flights, given a source-destination pair

Preconditions:

- 1. Airline instances already exists.
- 2. Flight instances already exists.

Postconditions:

- 1. Return flight details of Flight instances.
- 2. Display Flight instances with details.

Operation: searchFlightsAirport(source, destination)
Use Case: View flights, given a source-destination pair

Preconditions:

- 1. Two instances of Airport already exists (one for source, the other destination).
- 2. Airport administrator registered user instance already exists.
- 3. User is authenticated and visible.

Postconditions:

1. Returns list of public and private flights.

Operation: getAirportFlightDetails(source, destination) Use Case: View flights, given a source-destination pair Preconditions:

- 1. Airline instances already exists.
- 2. Flight instances already exists.

Postconditions:

- 1. Return flight details of Flight instances.
- 2. Display Flight instances with details.