

Operation Contracts

UC1: Load file

Actors: Admin

Preconditions:

- File path exists
- A ConnectionCatalog has been instantiated

Postconditions:

- System accesses CSV file
- System reads each line and creates Connections
- ConnectionCatalog is populated with a list of Connection objects

UC2: Search for Trips

Actors: User

Preconditions:

- A departure and arrival city is provided by user
- A ConnectionCatalog exists and is populated

Postconditions:

- System finds all direct and indirect connections that match search parameters
- System calculates total prices and durations for trips
- SearchResult object is created with a list of all matching Trips

UC3: Search for Trips

Actors: User

Preconditions:

- A SearchResult exists

Postconditions:

- The system sorts the list of Trips according to specified sort logic
- The SearchResult is updated