DIT636 / DAT560 - Partial Solution for Exercise 2

This solution omits some aspects, such as international vs domestic transfer times, but can help if you get stuck on this exercise.

Parameter: FlightA

Choice: Flight code:

- Malformed (string that does not follow stated formatting convention) [error]
- not in database [error] (Note: I assumed here that there was a flight database too. State any assumptions you make in your answer.)
- valid

Choice: Originating airport code:

- malformed (not a three-letter string) [error]
- not in database [error]
- valid city

Choice: Scheduled departure time:

- malformed (not following formatting convention) [error]
- out of legal range (not a valid time) [error]
- legal

Choice: Destination airport (transfer airport - where connection takes place):

- malformed (not a three-letter string) [error]
- not in database [error]
- valid city

Choice: Scheduled arrival time (tA):

- malformed (not following formatting convention) [error]
- out of legal range (not a valid time) [error]
- legal

Parameter: FlightB

Choice: Flight code:

- Malformed (string that does not follow stated formatting convention) [error]
- not in database [error]
- valid

Choice: Originating airport code:

- Malformed (not a three-letter string) [error]
- not in database [error]
- differs from transfer airport [error]
- same as transfer airport

Choice: Scheduled departure time:

- malformed (not following formatting convention) [error]
- out of legal range (not a valid time) [error]
- before arriving flight time (tA) [error]
- between tA and tA + minimum connection time (CT) [error]
- equal to tA + CT [single]
- greater than tA + CT

Choice: Destination airport code:

- malformed (not a three-letter string) [error]
- not in database [error]
- valid city

Choice: Scheduled arrival time:

- malformed (not following formatting convention) [error]
- out of legal range (not a valid time) [error]
- legal

Parameter: Database record

This parameter refers to the database record corresponding to the transfer airport.

Choice: Airport country:

- null [error]
- blank [error]
- not a country [error]
- valid

Choice: Minimum connection time:

- blank [error]
- < 0 [error]
- 0 [single]
- > 0