

1 Description

In this project you will develop a program, which provides airport information. We provide a CSV file with lots of detailed information. The goal of the program is to allow a user to get information about specific airports.

2 Work plan

The work consists of the following units:

- ✓ Implement a console program, which loads the airport CSV file. The program should use appropriate data structures to allow fast information retrieval by the user. The user may do different queries after each other. The program should support this, without needing to restart it.
- ✓ Allow the user to get information about a specific airport by giving the airport code (for example the user types ZRH and the program outputs coordinates, the city name and other information).
- ✓ Allow the user to find all airports of a specific country.
- ✓ Allow the user to find the closest airport given its coordinates
- ◇ Compute the distance between two airports. The user will type the start airport and the destination airport at the console. The program computes the distance. The user may want to compute the distance between two other airports, without needing to restart the program.
- ◇ Assume a plane can fly at most at 800km/h and for at most 10 hours. Assume the user wants to do a trip from a start airport to a destination airport. Let the program choose an intermediate airport where the user/plane has to land.

3 Scope

The project counts as completed if the system can be demonstrated implementing the functionality of all ✓-items. The ◇-items are optional items for extra points.