**Deconflicting tool**

Requierements for Version 2

This version will work with a list of simple flight plans (flight ID, company, initial and final positions and speed), read from a text file. As in version 1, the tool should anticipate conflicts and recommend speed changes before starting simulation, simulate (step by step or automatically) and visualize flight plans and conflicts and change speeds to avoid conflicts.

Additional requirements:

* The user must be able to select the input file containing the flight plans.
* This version must require the user to introduce his username and password to use the tool. You need a database of users to authenticate. Moreover, the tool must allow a new user to register in the system. The user must choose a username and a password.
* During simulation, the user must be able to undo the last simulation step.
* In any moment during simulation, the user must be able to save the flight plan list into a text file, so that these plans can be loaded later and simulation can be restarted from the last position simulated in the previous simulation session.
* Optional: Consider the possibility to use a generic list to implement the flight list you will need in this version.

Assessment

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| **Criteria** | **Description** |  |
| Complete | Implements all the requirements | 50% |
| Robust | The tool never hangs, even if user inputs wrong data | 15% |
| User friendly | The tool is visually attractive and realistic. It is easy to use.  User never doubts on how to interact with the tool. | 10% |
| Efficient | The best algorithms are used always | 10% |
| Well organized and documented | Good organization of code into classes and forms. Enough comments in every block of code. Good use of indentation. | 15% |