

**Reutilização de Software 2010/2011**  
**Mestrado em Eng.<sup>a</sup> Informática**  
**Project**

**Description**

A new software tool is required to provide reservation capabilities for customers who want to travel on the flights offered by Uemel Airlines. The company offers sightseeing flights starting from Uemel airport with different paths. The reservation system keeps track of passengers who will be flying in specific seats on various flights, as well as people who will form the crew. Uemel Airlines runs several daily numbered flights on a regular schedule. The airline also keeps a frequent flyer program and accumulated miles can be exchanged for free air trips. Customers can access the system to make a reservation on a flight and obtain a description of the available flights. Customers can cancel a reservation and flights can also be cancelled. In this latter case customers should be notified. The employees of the agency can add, delete and update information about customers and flights. Company management needs, at the end of each month, a report summarizing activity.

The application is to be developed using *Software Design Patterns* to enable future reuse. Customers access the application through a remote graphical user interface. Data should be subjected to persistent storage and redundancy should be avoided.

**Report**

The final report should include a detailed description of the design patterns employed and their potential for application reuse.

**Deadlines**

Class diagram and use cases: Nov. 5<sup>th</sup>

Prototype 1 (text mode) + state diagrams: Nov. 24<sup>th</sup>

Class diagram (with design patterns): Dec. 5<sup>th</sup>

Prototype 2 (with GUI): Dec. 19<sup>th</sup>

Final: Jan. 7<sup>th</sup>