Airport Traffic Simulator

[Design Document]

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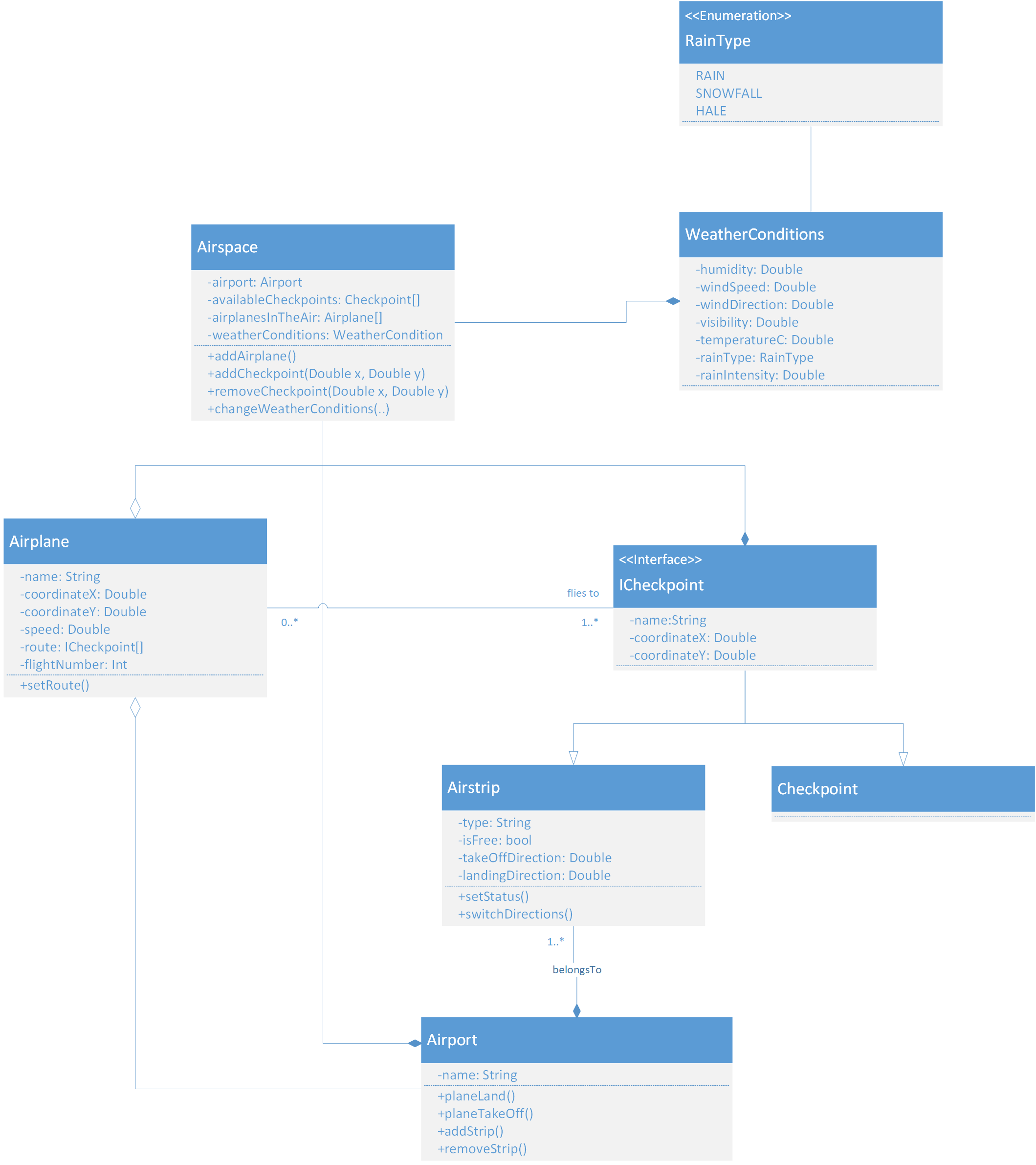
# Overview

Airport Traffic Simulator is an application that is used at the airport, by employees at the Control Tower to regulate air traffic.

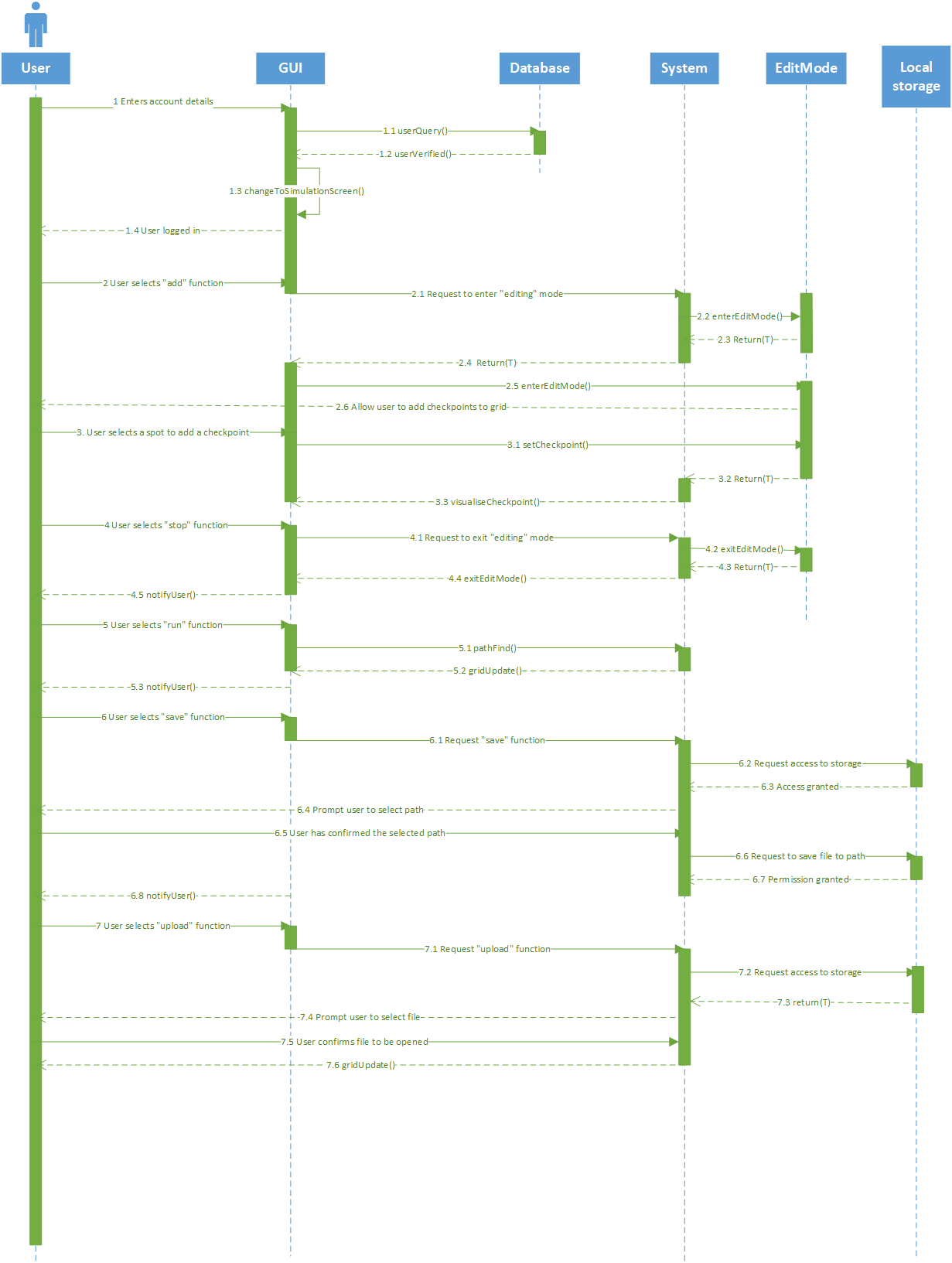
This spec is going to be updated throughout the entire course until realizing the project. The graphics and layout of the screens is shown here merely to illustrate the underlying functionality. The actual look and feel will be developed over time.

This spec discusses what the application will contain visually, how the user can interact with it and how the application is structured behind the visualization.

# Class Diagrams



# Sequence Diagram



# Screen by Screen Specification

The final product will contain a total of 2 screens. Both screens will have the same design despite some changes that are going to be made, which suit the needs of each one so that they achieve their goals.

All of the screens are created in Windows Form Application.

# Log in Screen

The login screen’s purpose is to verify the employee’s data. It is going to be a simple login form where after the data is verified, the screen switches to the Simulation Screen

# Simulation Screen

The simulation screen contains left and right side menus and a grid. Through the left side menu, the user can control the outside variables like weather. On there, the user can also find a play button, when on click, initiates the whole simulation process. On the right side menu, the user can find buttons that implement the “add”, “remove, “save”, “upload”, “probability” functions. The “add” function is used for the user to enter editing mode so that they can add checkpoints. After the user has entered editing mode, the start button is substituted with a stop button that implements a function that exits the editing mode. The “remove” function is used to remove a checkpoint from the grid. “save” and “upload” functions are used to read checkpoints from a file or upload the current state to a file, respectively.