Erik Ayavaca-Tirado 10/14/18 CSC 450 Python project

Overview:

In this project the use of the python programming language will be used to simulate a simulation of Airport take off time. This program will keep track of information that is needed for airstrip scheduling such as request identifier, request submission time, time slot requested, length of time requested, actual start time, actual end time. This information will be read in by a file. A queue detailing the airplanes waiting before they can take off. A print out the status of the queue as time moves along will be the output produced.

Design:

Iteration 1:

A python class named flightSimulations.py is created that contains 4 different functions. The first function reads in a file specifically a cvs file. A second file printQueue holds the items from the file that will be used in a different function and also printout the queue at each time. The third function simulate_Airport simulates an actual airport, so adding/removing planes based on request time. (this will be the priority queue). The last function named takeOffPrint prints out the queue at the end. The priority queue will not be implemented during this iteration.

Iteration 2:

Implement the priority queue using heapq.