

Assignment #3 - Airport Queuing Algorithms and Datastructure

Marjahan Begum and Anders Kalhauge

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In groups:

Implement a prioritized queueing system for an airport. You can use any priority queue algorithm, but you must be able to argue that the time complexity is no worse than $O(\log n)$ for enqueue and dequeue respectively.

You should implement the priority queue in a setup that simulates passengers arriving to an airport, and passengers passing security.

Passenger priority can be derived from the passenger category and arrival time:

1. Late to flight
2. Business class
3. Disabled
4. Family
5. Monkey

A template for such a setup can be found here:

<https://github.com/cphbus-algorithms/airport-template.git>

- Create a priority queue instead of the `NotPrioritisingPassengerArrayQueue` used there
- Experiment with other values for producer and consumer
- Try to add more than one consumer

The solution accompanied with a description in a README.md file should be uploaded (pushed) to a git repository, and a link should be handed in, in Moodle no later than Wednesday March 15. 12:00.