

Shana Elizabeth Henry

Week 09\_seating

### Design an algorithm that would seat people more equitably

Description of algorithm:

In order to improve equity, the algorithm can have priority grouping as the first level of assigning seats (with those who pay first, and then those who don't). The second level of assigning seats are those who pay first and then those who don't.

The priority grouping can have sections of the plane designated for large groups, and if these seats are not bought, then they are released, and added to the seats for the group that gets assigned later by randomization.

My descriptions above might affect those who are traveling alone who are choosing to pay for their seat, who get assigned seats after those who didn't pay but are traveling with a group.

Implementation issues that might make the algorithm more practical or more difficult to implement. One possible issue could be how to identify groups. If it is by last name, than it is quite possible to have several travelers with the same last name, but they are not related or traveling together.