

Design an algorithm that would seat people more equitably.

- Write up a description of your algorithm and save it as week\_03\_seating/seating.pdf. Make sure this description states how it should improve equity and also how it might affect other concerns.

- NO CODE NEEDED HERE just a description but make a note of implementation issues that might make your algorithm more practical or more difficult to implement

In my algorithm:

- People who pay for premium would choose their seats first.
  - This would be allowed up to 24 hours before the flight
- Within 24 hours of flight:
- Those with disabilities would be seated next
- Then families (basic economy) would be allowed to choose next
  - Children are defined as those 16 and under
  - Children must be seated with at least one adult
  - If there is a family traveling with more than 1 adult, then the adults may be split
    - The children will be split amongst the adults
    - They may pay a surcharge to all be seat together
- Then everyone else will be allowed to choose their seat based on when they purchased their ticket
  - First come, first served

In this arrangement, families wouldn't be split apart as much as they are now. This would prevent scenarios where children were far away from their guardians. This algorithm also allows those with special needs to be accommodated first. That population is already highly disadvantaged and this would give them ample time to board first and have their needs met. This arrangement will still split up families, but at least children are being taken care of. Another downside is that airlines would probably lose money from the profits made with the current arrangement. But they make enough already.