

- 1) Take user input for ticket information (name, age, nationality, disability, dietary restrictions)
- 2) Ask if there are co-travelers, and if so, take in same user input in 1) for the co-travelers
- 3) If there are co-travelers:
 - a. Nudge user towards “normal” seats at elevated price for choice of seats by warning them that the airline cannot guarantee and is unlikely to provide adjacent seating with economy tickets.
- 4) Else:
 - a. Also nudge user towards “normal” seats at elevated price but by appealing to sense of autonomy (e.g. comfort of aisle, view of window, ease of access in front of the plane, etc.)
- 5) If user chooses economy, book the ticket but provide no seating until day of flight.
- 6) If user chooses “normal,” book the ticket and guarantee the seat(s) chosen.
- 7) On day of flight:
 - a. Seat senior citizens, customers with disabilities, and non-accompanied minors in aisle seats close to the front of the plane but not in an emergency row.
 - b. Show one randomly selected economy user the least appealing seat (gathered from prior data on what is least likely to be chosen by “normal” customers) as their assigned seat remaining seats via notification to “economy” customers and offer them another chance to upgrade for the original price difference between “normal” and economy.
 - i. If upgrade: guarantee chosen seat
 - ii. Else: give least appealing seat
 - c. Repeat step b for the next least appealing seat until everyone is seated

Discarded Idea: If there are left-over “normal” upper-class seats, hold lottery (price per entry will depend on size of plane and profit margin; this would require a sub-algorithm that is not fully developed yet) for people who want to participate in it for that seat.