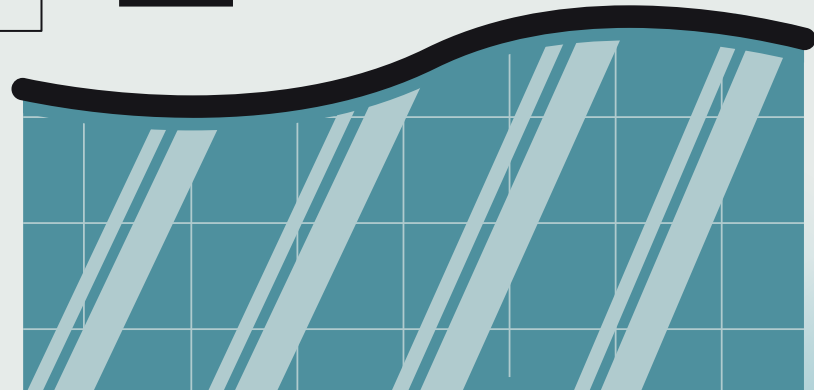


Mphasis Optimization Team 41

Passenger Re-accommodation for a
planned Schedule Change



Agenda

- Goals
- Our Approach
- Learnings

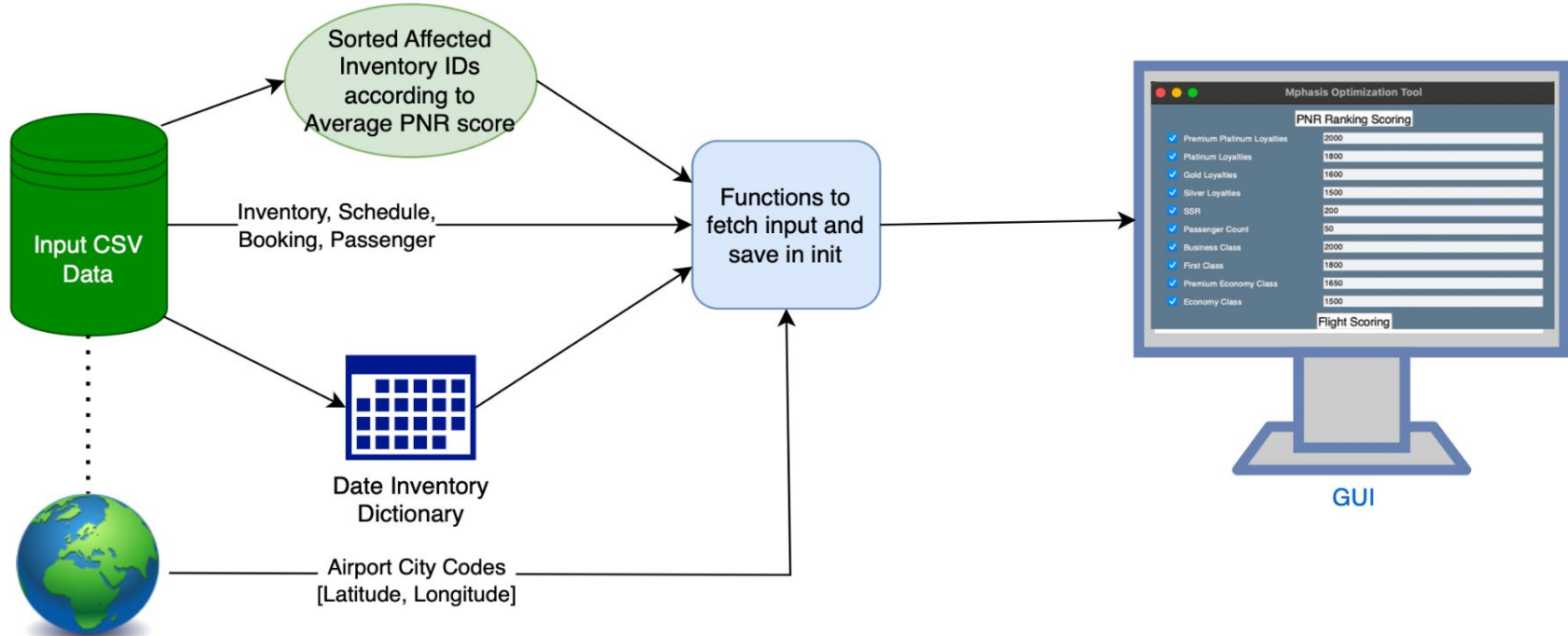
Goals

- Optimize alternate flights for impacted passengers
- Prioritizing based on
 - Special service requests
 - Loyalty levels
 - Class of cabin
 - # of passengers
- Rank solutions based on
 - Source and destination airport real time distances
 - Arrival and departure time delays

Our Approach

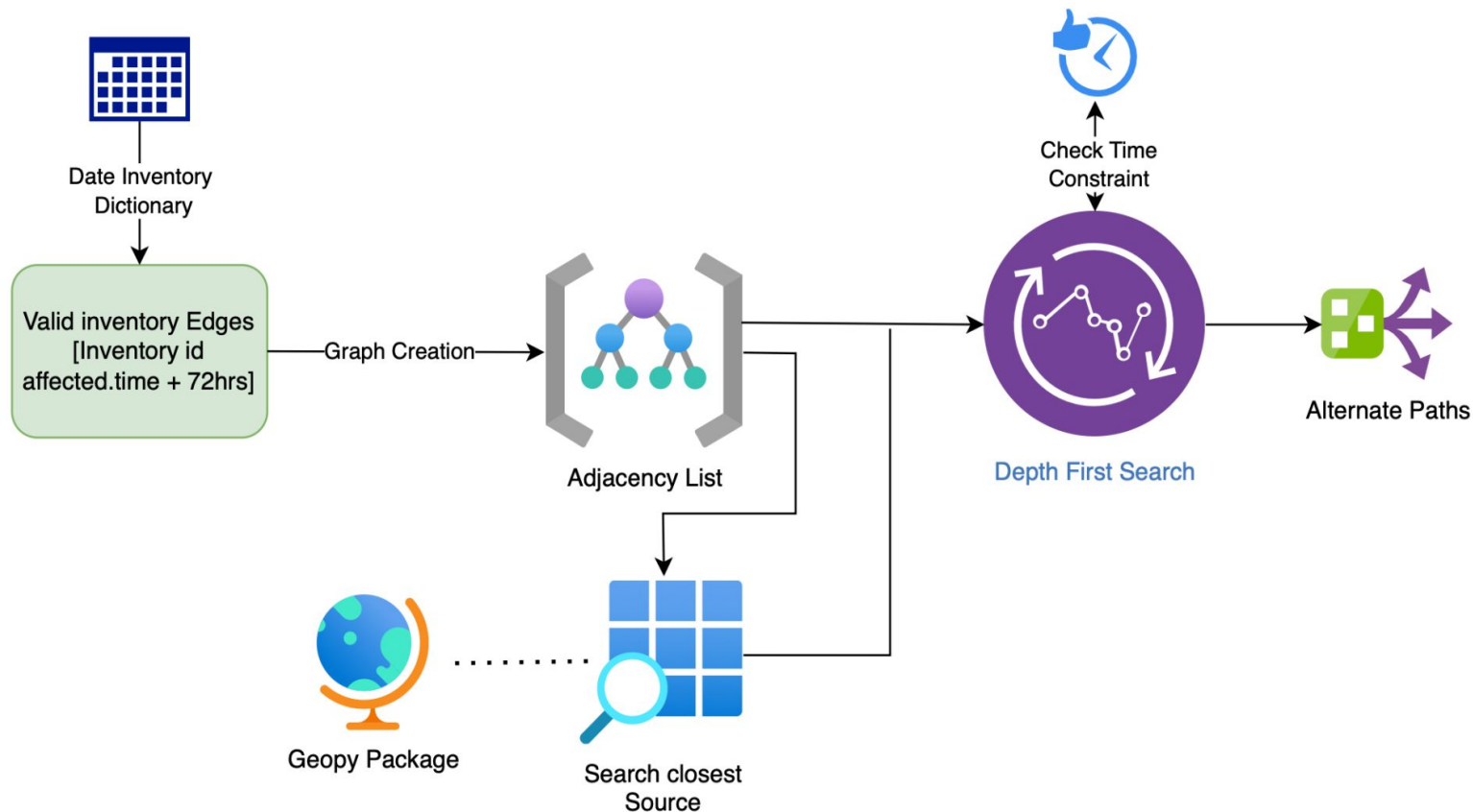
- Pre-processing
- Find Alternate Paths
- Flight Scoring
- Passenger Scoring
- Accommodation
- Output + Bulk Mailing

Pre-processing

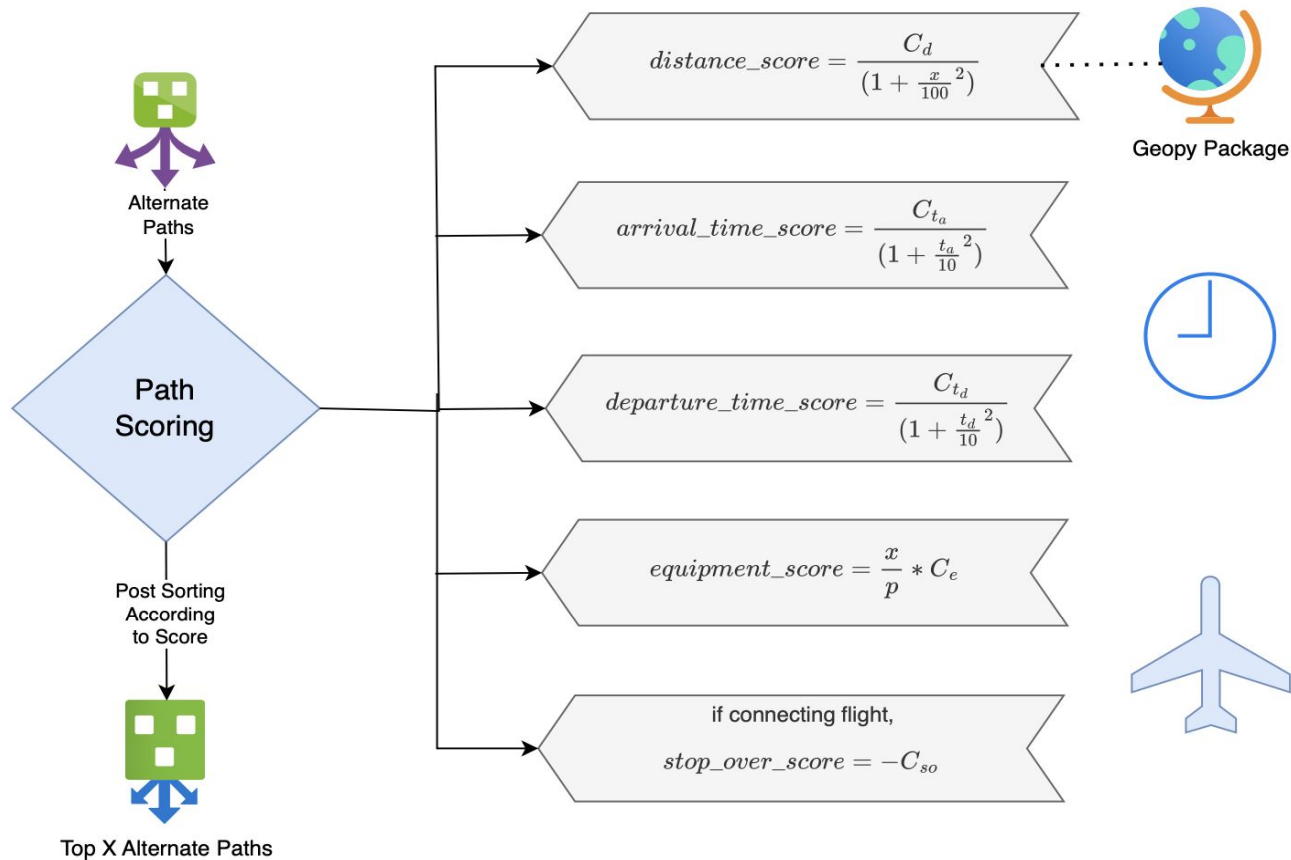


Geographical Co-ordinates

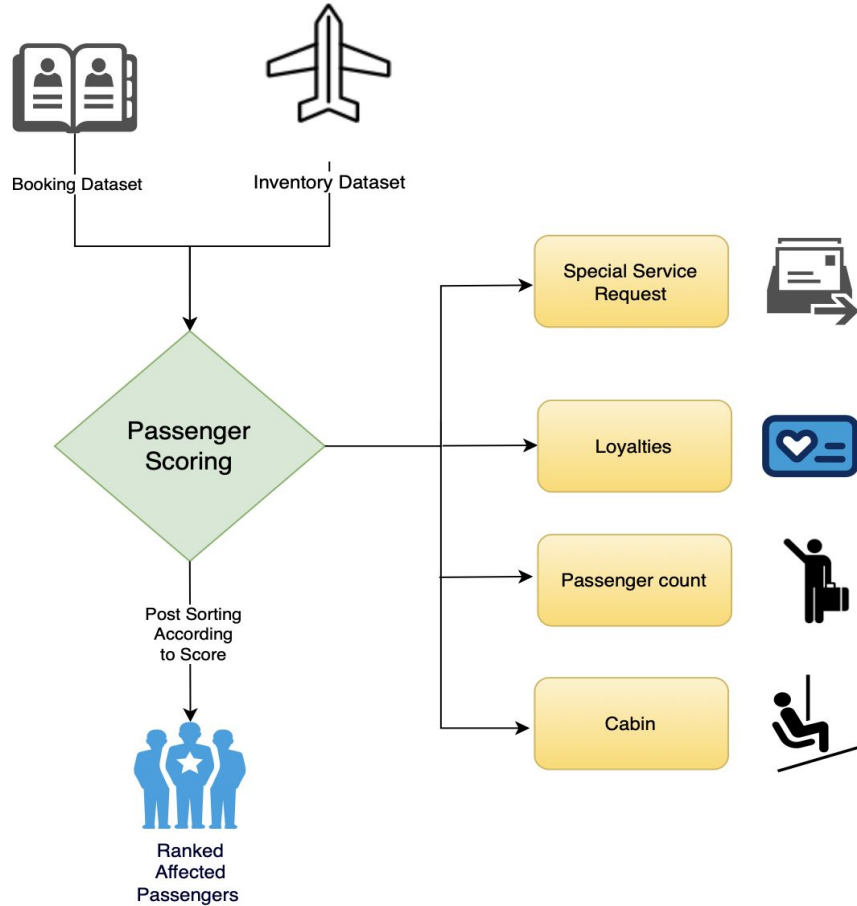
Find Alternate Paths



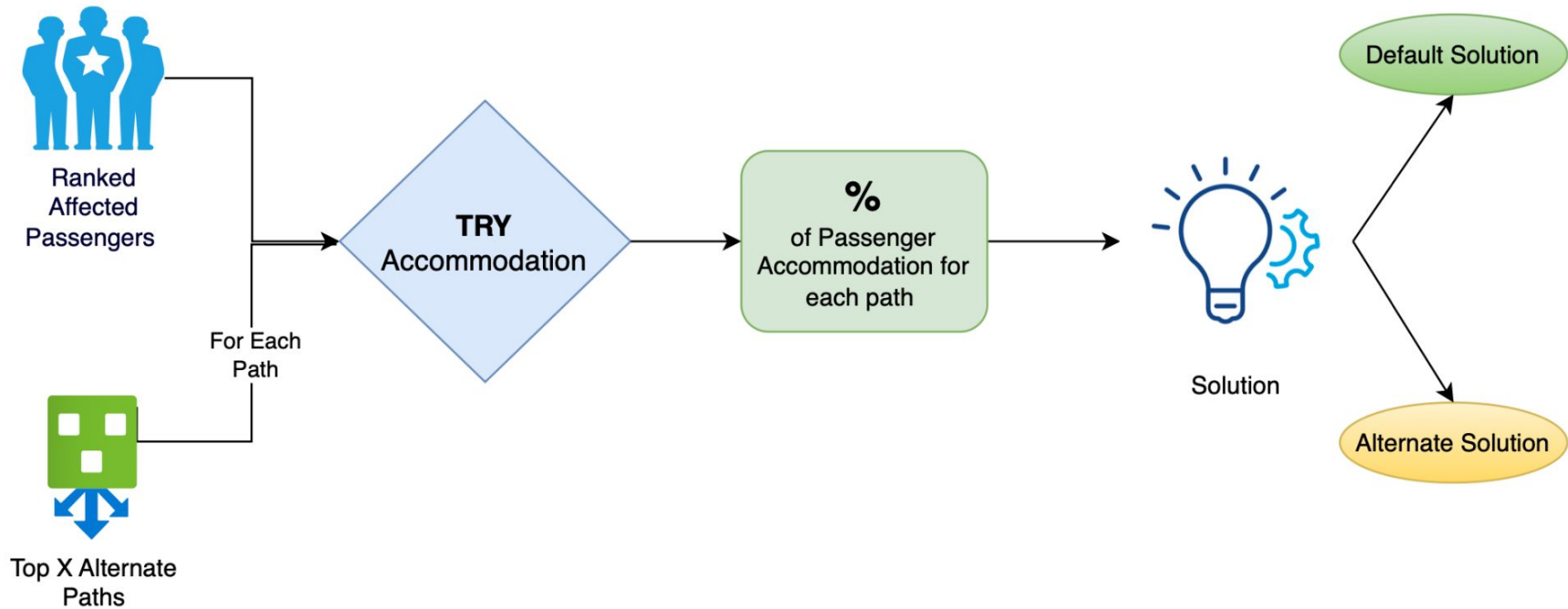
Flight scoring



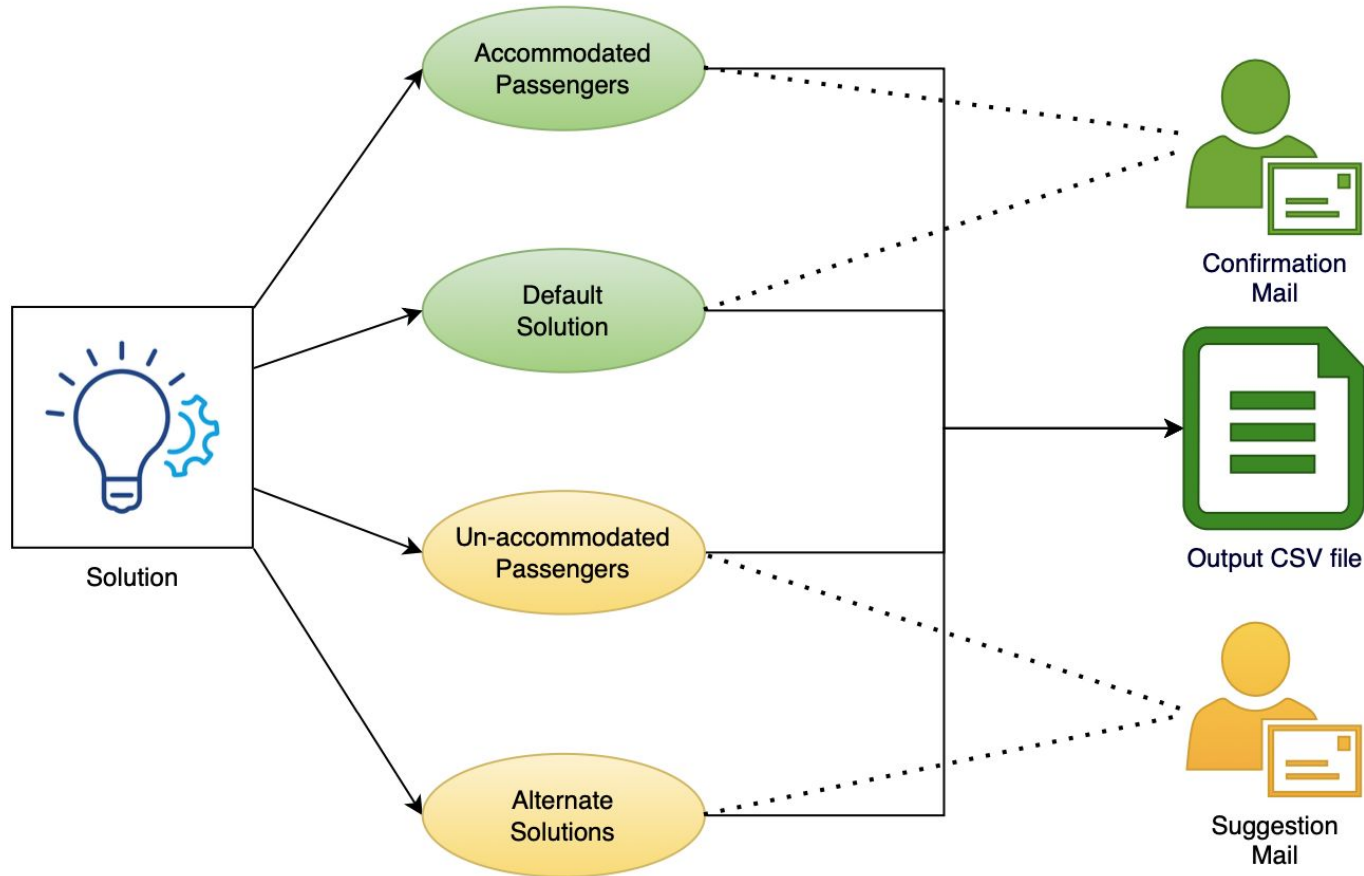
Passenger Scoring



Passengers Accommodation



Solution Output and Bulk Mailing

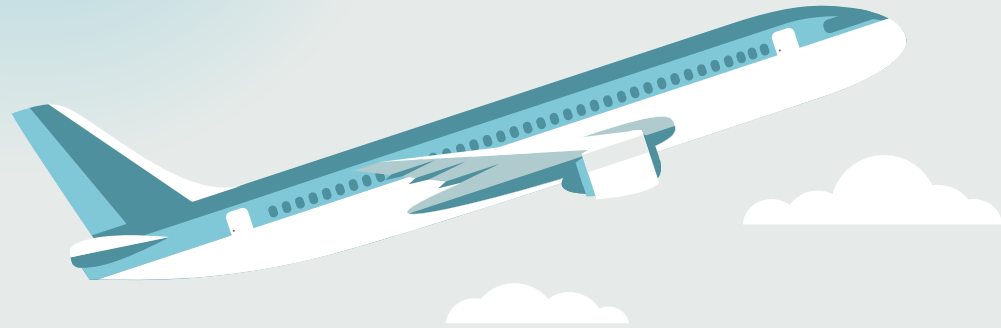


Remarks

- ~ 30 Affected flight solutions found / second (4 core CPU)
- One time pre-processing, Faster searching
- Assumption - # of connecting flights have a low maximum limit: Constant order depth first search
- Flexibility in PNR & Flight scoring
- Continuous scoring functions - Accurate score for filtering the top paths

Three stylized white clouds are positioned horizontally across the upper half of the image. The cloud on the left is the largest, followed by the one on the right, and a smaller one is partially visible behind the 'DEMO' text box.

DEMO



Thank you!



Open for questions,

