

## Package Route

- Based on predetermined vehicle routes
- Each route is repeated some time in the future (which is called "journey")
- The system seeks and shows all possible "journeys" for each package
- Commercial aviation
  - The flights are already created based on "business demand"
  - Passengers are added to different flights doing connections between their origin and destination

### Choosing Routes

- After discovering the viable paths, the system looks for each "journey" capacity
- Selection algorithm is implemented in terms of **weight** or **distance**

This means that not always the shortest path is the best path

# PostTracking System

## Postal Management System

### Focus

- Package Routing
- Package by passing "down" nodes.

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## Metrics and Measurement

Metric	Measure	Iteration 1	Iteration 2	Iteration 3
Number of classes	Working classes	12	25	25
Number of tables	Tested tables	4	7	7
Seconds	Time of response of the algorithm	N.A.	<1	<1

## Lessons Learned

- Divide and Conquer;
- Remember that someone will maintain the software;
- Recognize that planning is iterative

### Software Engineering Process

- Be Ready to Adapt
- Establish mechanisms for communication and coordination
- Manage Change

Questions

Distribution Center - Facility where packages are handled, delivered or temporarily storage.

Vehicle - Used for transporting packages between Distribution Centers.

Routes - A predetermined itinerary for vehicle which will repeat consistently in the future.

Journey - Representation of a single route.

Package - The artifact to be carried and delivery.

Customer - The owner of the package(s).

# PostTracking System

Postal Management System

Focus

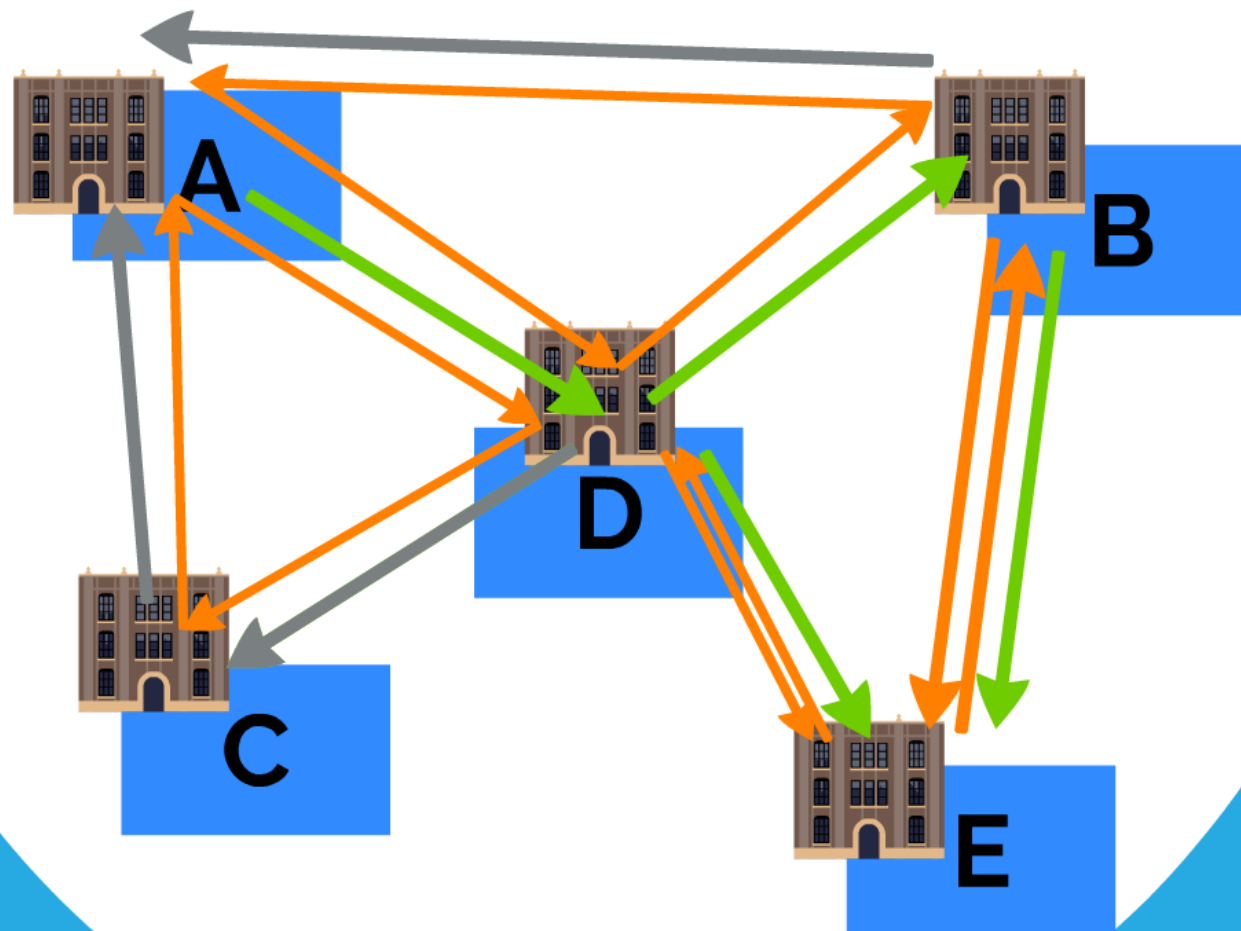
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# How it Works



# Choosing Routes

- After discovering the viable paths, the system looks for each "journey" capacity.
- Vehicle capacities are expressed in terms of Weight and Volume

That means that not always the smallest path is the best path!



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Metric	Measure	Iteration 1	Iteration 2	Iteration 3
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