INDIVIDUALS

fx: update_choices

PERSON

orig, dest

Trip opts:

(choose from)
- [drive]
- [ondemand]
- [walk,transit,walk]
- [walk,transit,ondemand]
- [ondemand,transit,walk]
- [ondemand,transit,ondemand]
- [drive,transit,walk]
- [drive,transit,ondemand]

Preference Factors

Relative pt & weight factor
- time
- money
- switching
- convenience
- (other)

fx: makeTrip
queryTrip
querySeg

WORLD

fx: world_of_drive
world_of_walk
world_of_ondemand
world_of_transit_graph
world_of_gtfs

DRIVE NETWORK

Trip Segments (many)
- (sources,target)
- costs

edge flows, edge costs

Algorithm: Dijkstra, A*

WALK NETWORK (same as DRIVE)

fx: planDijkstraSeg

TRANSIT NETWORK

Trip Segments
- (sources,target)
- costs

edge flows, edge costs

Algorithm: RAPTOR

fx: planGTFSSeg
raptor_shortest_path
get_trip_ids_for_stop
get_trip_profile
stop_times_for_kth_trip
compute_footpath_transfers
get_trip_lists
create_chains
list_inbetween_stops

ONDEMAND NETWORK

Trip Segments (many)
- (sources,target)
- costs

edge flows, edge costs

Algorithm:
divideTrips, orderTrip, TSP

fx: planDelivSegs
divideDelivSegs
kmeans_nodes

segment_pickups
current_pickups
next_node
order_pickups

GRAPHS

GRAPHS

osmnx,networkx
- drive
- walk
- ondemand
- transit (graph)

gtfs feed
- transit

fx: removeMassFromEdges
addTripMassToEdges
createEdgeCosts

NODES

NODE DATAFRAME
- drive
- walk
- ondemand
- transit (graph)
- gtfs

Implemented: pandas

fx: nearest_nodes
convertNode
findNode
find_close_node
find_close_node_gtfs_to_graph
find_close_node_graph_to_gtfs
gtfs_to_transit_nodesNedges
addNodeToDF
updateNodesDF
drop_duplicates

bus_stop_nodes
bus_stop_nodes_wgraph
bus_connection_nodes