GeneticAlgorithm

elitism : bool journey_manager mutation_rate : float tournament_size : int

crossover()
evolvePopulation()
mutate()
tournamentSelection()

EvChargePoint

charge_time_required charge_type id location occupied time_occupied

Population

available_stops initialise journey_allocations: list journey_manager population_size

get_fittest()
get_journey()
save_journey()
size_of_population()

JourneyStop

arrival_time charge_time departure_time ev_point_id wait_time

Fitness

TotalTime

Journey

current_location
end_point
start_time
starting_point
stop : list
total_journey_time

distance_in_minutes() distance_in_minutes_2() journey_distance() journey_distance_2() set_journey_stop()

Journey Allocation

available_stops journey_allocation : list journey_manager

generate_individual()
get_allocation()
get_fitness()
journey_allocation_size()
save_allocation()
set_allocation()
set_individual()

JourneyStops

calculate_stops_waits()
total_time_of_stop()
total_time_of_stops()

JourneyManager

stops: list

add_journey()
get_journey()
number_of_stops()

Benchmark

journey_manager random_allocation : list stops_available

get_random_fitness()

ElectricVehicle

id max_speed range