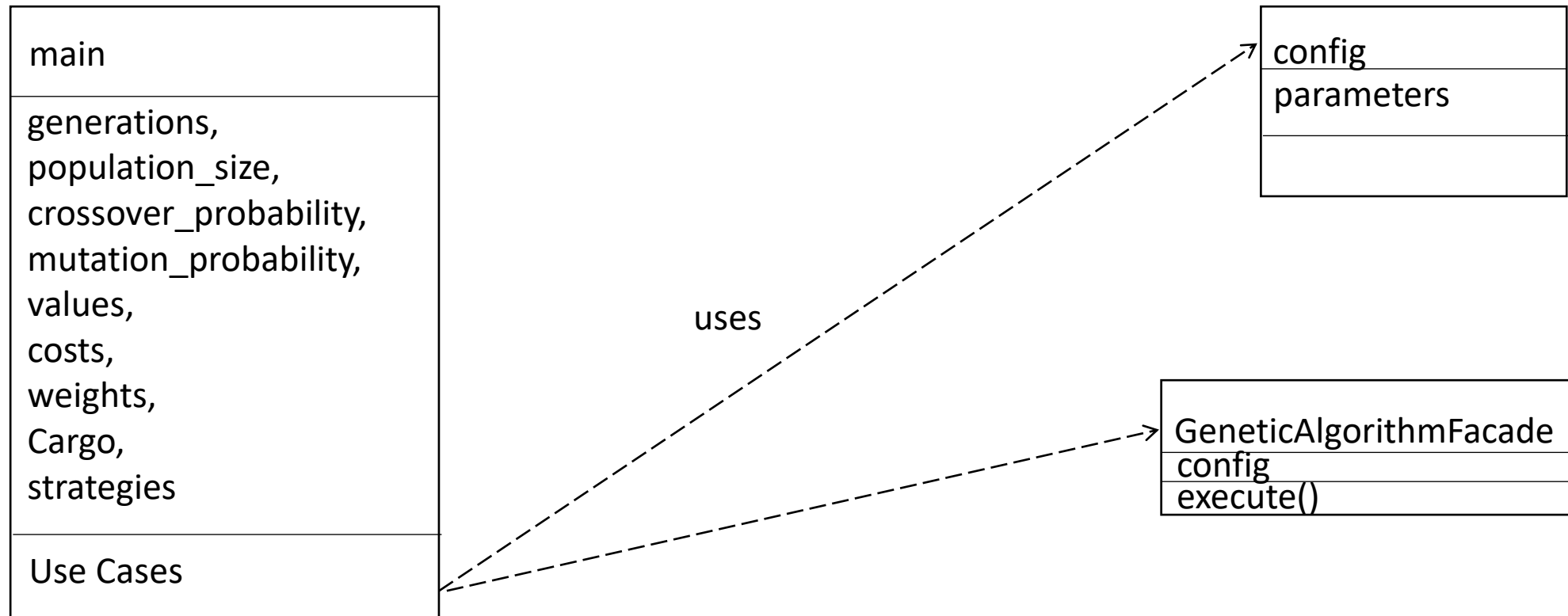


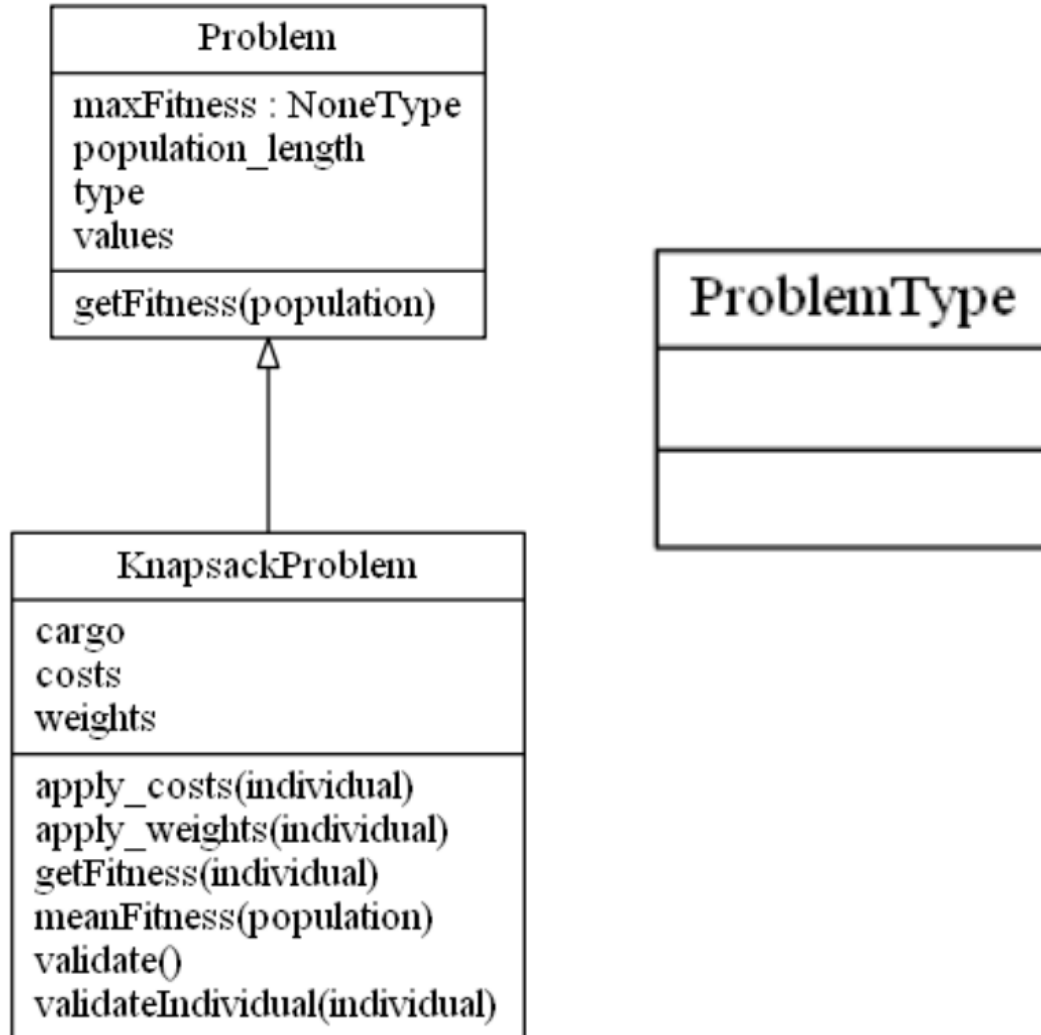
# project2.ipynb



# Genetic\_algorithm.py

GeneticAlgorithmFacade
config
execute()

# problem.py



# reproduction.py

Reproduction
rate strategy
crossover_double_points(individual_a, individual_b) crossover_single_point(individual_a, individual_b) duplication(individual) execute(individual_a, individual_b) invalid()

ReproductionStrategy

# selection.py

Selection
problem strategy
battle_royale_tournament(population) execute(population, population_size, single) invalid() playoff_tournament(population) roulette(population) roulette_pick(population) tournament_pick(population, tournament)

SelectionStrategy

# reproduction.py

Reproduction
rate strategy
crossover_double_points(individual_a, individual_b) crossover_single_point(individual_a, individual_b) duplication(individual) execute(individual_a, individual_b) invalid()

ReproductionStrategy

# mutation.py

Mutation
rate strategy
execute(individual) generative(individual) invalid() sequence_swap(individual) swap(individual)

MutationStrategy

# stop\_criteria.py

StopCriteriaType

StopCriteriaType
type, num_generations Fitness quorum
__init__(type, num_generation, fitness, quorum)