

GeneticAlgorithm		
m	calculateDistance(Short[])	Double
m	createNextGeneration(Int)	Population
m	run()	Unit
m	calculateTime(Short[])	Double
p	crossoverType	CrossoverType
p	random	Random
p	k	Int
p	cities	List<City>
p	elitismValue	Int
p	populationSize	Int
p	onNewPopulation (Population, Boolean) -> Unit	
p	maxGen	Int
p	mutationRate	Double
p	mutationType	MutationType
p	crossoverRate	Double

Population		
m	add(Chromosome)	Unit
m	iterator()	Iterator<Chromosome>
m	populate(List<City>)	Unit
m	size()	Int
p	calculateDistance (Short[]) -> Double	
p	mostFit	Chromosome
p	calculateDuration (Short[]) -> Double	
p	averageDistance	Double
p	generationNumber	Int
p	chromosomes	PriorityQueue<Chromosome>

data City		
p	travelDurations	List<Double>
p	cityRegion	Int
p	id	Int
p	huge	Boolean
p	small	Boolean
p	lon	Double
p	travelDistances	List<Double>
p	coatOfArms	String
p	lat	Double
p	selected	Boolean

data Chromosome		
m	compareTo(Chromosome)	Int
p	distance	Double
p	cities	Short[]
p	calculateDistance (Short[]) -> Double	

Selection		
m	getBestChromosome(List<Chromosome>)	Chromosome
m	getChromosome(List<Chromosome>, Random)	Chromosome
m	tournamentSelection(Population, Int, Random)	Chromosome
m	getKChromosomesSorted(PriorityQueue<Chromosome>, Int, Random)	ist<Chromosome>

AlgoRepository		
m	observeSelectedCities()	Flow<List<City>>
m	processCurrentSelection(List<City>, (Population, List<City>) -> Unit	
p	bestPopulation	MutableLiveData<ObservablePopulation>

CityExtensionsKt		
m	timeTo(City, City)	Double
m	distanceTo(City, City)	Double
p	cityIdToStringResource	HashMap<Int, Int>

Mutation		
m	displacementMutation(Chromosome, Random)	Chromosome
m	mutate(Chromosome, Random, Random)	Chromosome
m	exchangeMutation(Chromosome, Random)	Chromosome

CrossoverType		
m	valueOf(String)	CrossoverType
m	values()	CrossoverType[]

MutationType		
m	values()	MutationType[]
m	valueOf(String)	MutationType

Crossover		
m	orderCrossover(Chromosome, Chromosome, Random)	Chromosome

					ГУИР.893551-01 СД					
					Генетический алгоритм. Схема данных	Лит.		Масса	Масштаб	
							Т			
Изм.	Л.	№ докум.	Подп.	Дата		Лист		Листов 1		
Разраб.		Драгун О.В.				ИиТП, гр.893551				
Пров.		Рогов М.Г.								
Т. Контр.		Рогов М.Г.								
Реценз.										
Н. Контр.		Гриценко Н.Ю.								
Утверд.		Волорова Н.А.								