Contents

Chapter 1

Package soundGenetic.jgap.imp

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1.1 Interfaces

1.1.1 Interface IChromosomeExt

Declaration

public interface IChromosomeExt
implements org.jgap.IChromosome

Methods

- *getTest*
  `public String` **getTest**`( )`

1.2 Classes

1.2.1 Class SoundChromosome

Declaration

public class SoundChromosome
extends org.jgap.Chromosome
implements IChromosomeExt

Constructors

- *SoundChromosome*
  `public` **SoundChromosome**`( )`
- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration** `)`
- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration**`,`
  `org.jgap.Gene []` **genes** `)`
- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration**`,`
  `org.jgap.Gene []` **genes**`, org.jgap.IGeneConstraintChecker` **checker** `)`
- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration**`,`
  `org.jgap.Gene` **gene**`, int` **size** `)`

- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration**`, int` **size** `)`
- *SoundChromosome*
  `public` **SoundChromosome**`( org.jgap.Configuration` **a_configuration**`, java.lang.String` **representatuion** `)`

Methods

- *getTest*
  `public String` **getTest**`( )`

Methods inherited from class `org.jgap.Chromosome`

- *cleanup*
  `public void` **cleanup**`( )`
- *clone*
  `public synchronized Object` **clone**`( )`
- *compareTo*
  `public int` **compareTo**`( java.lang.Object` **arg0** `)`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *getApplicationData*
  `public Object` **getApplicationData**`( )`
- *getConstraintChecker*
  `public IGeneConstraintChecker` **getConstraintChecker**`( )`
- *getFitnessValue*
  `public double` **getFitnessValue**`( )`
- *getFitnessValueDirectly*
  `public double` **getFitnessValueDirectly**`( )`
- *getMultiObjectives*
  `public List` **getMultiObjectives**`( )`
- *hashCode*
  `public int` **hashCode**`( )`
- *isCompareApplicationData*
  `public boolean` **isCompareApplicationData**`( )`
- *isHandlerFor*
  `public boolean` **isHandlerFor**`( java.lang.Object` **arg0**`, java.lang.Class` **arg1** `)`
- *isSelectedForNextGeneration*
  `public boolean` **isSelectedForNextGeneration**`( )`
- *perform*
  `public Object` **perform**`( java.lang.Object` **arg0**`, java.lang.Class` **arg1**`, java.lang.Object` **arg2** `)`
- *randomInitialChromosome*
  `public static IChromosome` **randomInitialChromosome**`( org.jgap.Configuration` **arg0** `)`
- *setApplicationData*
  `public void` **setApplicationData**`( java.lang.Object` **arg0** `)`
- *setCompareApplicationData*
  `public void` **setCompareApplicationData**`( boolean` **arg0** `)`

- *setConstraintChecker*
  `public void` **setConstraintChecker**`( org.jgap.IGeneConstraintChecker` **arg0** `)`
- *setFitnessValue*
  `public void` **setFitnessValue**`( double` **arg0** `)`
- *setFitnessValueDirectly*
  `public void` **setFitnessValueDirectly**`( double` **arg0** `)`
- *setGenes*
  `public void` **setGenes**`( org.jgap.Gene [] arg0 )`
- *setIsSelectedForNextGeneration*
  `public void` **setIsSelectedForNextGeneration**`( boolean` **arg0** `)`
- *setMultiObjectives*
  `public void` **setMultiObjectives**`( java.util.List` **arg0** `)`
- *toString*
  `public String` **toString**`( )`

Methods inherited from class `org.jgap.BaseChromosome`

- *clone*
  `public abstract Object` **clone**`( )`
- *getAge*
  `public int` **getAge**`( )`
- *getBusinessKey*
  `public String` **getBusinessKey**`( )`
- *getConfiguration*
  `public Configuration` **getConfiguration**`( )`
- *getGene*
  `public synchronized Gene` **getGene**`( int` **arg0** `)`
- *getGenes*
  `public synchronized Gene` **getGenes**`( )`
- *getGenesPersistentRepresentation*
  `public StringBuffer` **getGenesPersistentRepresentation**`( )`
- *getGenesPersistentRepresentation*
  `public void` **getGenesPersistentRepresentation**`( java.lang.StringBuffer` **arg0** `)`
- *getPersistentRepresentation*
  `public String` **getPersistentRepresentation**`( )`
- *increaseAge*
  `public void` **increaseAge**`( )`
- *increaseOperatedOn*
  `public void` **increaseOperatedOn**`( )`
- *operatedOn*
  `public int` **operatedOn**`( )`
- *resetAge*
  `public void` **resetAge**`( )`
- *resetOperatedOn*
  `public void` **resetOperatedOn**`( )`
- *setGene*
  `public void` **setGene**`( int` **arg0**`, org.jgap.Gene` **arg1** `)`
- *setGenes*
  `public void` **setGenes**`( org.jgap.Gene [] arg0 )`
- *setValueFromPersistentRepresentation*
  `public void` **setValueFromPersistentRepresentation**`( java.lang.String` **arg0** `)`
- *size*
  `public int` **size**`( )`

1.2.2 Class **SoundConfiguration**

Declaration

public class SoundConfiguration
extends org.jgap.Configuration

Serializable Fields

- private IChromosomeExt m_sampleChromosome

  –

- private int m_chromosomeSize

  –

Constructors

- *SoundConfiguration*
  `public` **SoundConfiguration**`( java.lang.String` **a_id**`, java.lang.String` **a_name** `)`

Methods

- *setSampleChromosome*
  `public void` **setSampleChromosome**`( soundGenetic.jgap.imp.IChromosomeExt` **a_sampleChromosomeToSet** `)`

Methods inherited from class `org.jgap.Configuration`

- *addGeneticOperator*
  `public synchronized void` **addGeneticOperator**`( org.jgap.GeneticOperator` **arg0** `)`
- *addNaturalSelector*
  `public void` **addNaturalSelector**`( org.jgap.NaturalSelector` **arg0**`, boolean` **arg1** `)`
- *clone*
  `public Object` **clone**`( )`
- *compareTo*
  `public int` **compareTo**`( java.lang.Object` **arg0** `)`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *getBreeder*
  `public IBreeder` **getBreeder**`( )`
- *getBulkFitnessFunction*
  `public synchronized BulkFitnessFunction` **getBulkFitnessFunction**`( )`

- *getChromosomePool*
  `public IChromosomePool` **getChromosomePool**`( )`
- *getChromosomeSize*
  `public int` **getChromosomeSize**`( )`
- *getConfigurationHandler*
  `public ConfigurationHandler` **getConfigurationHandler**`( )`
- *getEventManager*
  `public IEventManager` **getEventManager**`( )`
- *getFitnessEvaluator*
  `public FitnessEvaluator` **getFitnessEvaluator**`( )`
- *getFitnessFunction*
  `public synchronized FitnessFunction` **getFitnessFunction**`( )`
- *getGenerationNr*
  `public int` **getGenerationNr**`( )`
- *getGeneticOperators*
  `public List` **getGeneticOperators**`( )`
- *getId*
  `public String` **getId**`( )`
- *getJGAPFactory*
  `public IJGAPFactory` **getJGAPFactory**`( )`
- *getMinimumPopSizePercent*
  `public int` **getMinimumPopSizePercent**`( )`
- *getName*
  `public String` **getName**`( )`
- *getNaturalSelector*
  `public synchronized NaturalSelector` **getNaturalSelector**`( )`
- *getNaturalSelector*
  `public synchronized NaturalSelector` **getNaturalSelector**`( boolean` **arg0**`, int` **arg1** `)`
- *getNaturalSelectors*
  `public ChainOfSelectors` **getNaturalSelectors**`( boolean` **arg0** `)`
- *getNaturalSelectorsSize*
  `public int` **getNaturalSelectorsSize**`( boolean` **arg0** `)`
- *getPopulationSize*
  `public synchronized int` **getPopulationSize**`( )`
- *getRandomGenerator*
  `public synchronized RandomGenerator` **getRandomGenerator**`( )`
- *getSampleChromosome*
  `public IChromosome` **getSampleChromosome**`( )`
- *getSelectFromPrevGen*
  `public double` **getSelectFromPrevGen**`( )`
- *incrementGenerationNr*
  `public void` **incrementGenerationNr**`( )`
- *isKeepPopulationSizeConstant*
  `public boolean` **isKeepPopulationSizeConstant**`( )`
- *isLocked*
  `public boolean` **isLocked**`( )`
- *isPreserveFittestIndividual*
  `public boolean` **isPreserveFittestIndividual**`( )`
- *lockSettings*
  `public synchronized void` **lockSettings**`( )`

- *newInstance*
  `public Configuration` **newInstance**`( java.lang.String` **arg0**`, java.lang.String` **arg1** `)`
- *removeNaturalSelectors*
  `public void` **removeNaturalSelectors**`( boolean` **arg0** `)`
- *reset*
  `public static void` **reset**`( )`
- *reset*
  `public static void` **reset**`( java.lang.String` **arg0** `)`
- *resetProperty*
  `public static void` **resetProperty**`( java.lang.String` **arg0** `)`
- *resetProperty*
  `public static void` **resetProperty**`( java.lang.String` **arg0**`, java.lang.String` **arg1** `)`
- *setBreeder*
  `public void` **setBreeder**`( org.jgap.IBreeder` **arg0** `)`
- *setBulkFitnessFunction*
  `public synchronized void` **setBulkFitnessFunction**`( org.jgap.BulkFitnessFunction` **arg0** `)`
- *setChromosomePool*
  `public void` **setChromosomePool**`( org.jgap.IChromosomePool` **arg0** `)`
- *setEventManager*
  `public void` **setEventManager**`( org.jgap.event.IEventManager` **arg0** `)`
- *setFitnessEvaluator*
  `public void` **setFitnessEvaluator**`( org.jgap.FitnessEvaluator` **arg0** `)`
- *setFitnessFunction*
  `public synchronized void` **setFitnessFunction**`( org.jgap.FitnessFunction` **arg0** `)`
- *setJGAPFactory*
  `public void` **setJGAPFactory**`( org.jgap.IJGAPFactory` **arg0** `)`
- *setKeepPopulationSizeConstant*
  `public void` **setKeepPopulationSizeConstant**`( boolean` **arg0** `)`
- *setMinimumPopSizePercent*
  `public void` **setMinimumPopSizePercent**`( int` **arg0** `)`
- *setName*
  `public void` **setName**`( java.lang.String` **arg0** `)`
- *setNaturalSelector*
  `public synchronized void` **setNaturalSelector**`( org.jgap.NaturalSelector` **arg0** `)`
- *setPopulationSize*
  `public synchronized void` **setPopulationSize**`( int` **arg0** `)`
- *setPreservFittestIndividual*
  `public void` **setPreservFittestIndividual**`( boolean` **arg0** `)`
- *setRandomGenerator*
  `public synchronized void` **setRandomGenerator**`( org.jgap.RandomGenerator` **arg0** `)`
- *setSampleChromosome*
  `public void` **setSampleChromosome**`( org.jgap.IChromosome` **arg0** `)`
- *setSelectFromPrevGen*
  `public void` **setSelectFromPrevGen**`( double` **arg0** `)`
- *toString*
  `public String` **toString**`( )`
- *verifyStateIsValid*
  `public synchronized void` **verifyStateIsValid**`( )`

1.2.3 Class **SoundGenotype**

Declaration

public class SoundGenotype
extends org.jgap.Genotype

Serializable Fields

- private SoundPopulation m_population
  –

Constructors

- *SoundGenotype*
  `public` **SoundGenotype**`( org.jgap.Configuration` **a_configuration** `)`
- *SoundGenotype*
  `public` **SoundGenotype**`( org.jgap.Configuration` **a_configuration**`,`
  `org.jgap.IChromosome []` **chromosomes** `)`
- *SoundGenotype*
  `public` **SoundGenotype**`( org.jgap.Configuration` **arg0**`,`
  `soundGenetic.jgap.imp.SoundPopulation` **arg1** `)`

Methods

- *getFittestChromosome*
  `public synchronized IChromosomeExt` **getFittestChromosome**`( )`
- *getPopulation*
  `public SoundPopulation` **getPopulation**`( )`
- *randomInitialGenotype*
  `public static SoundGenotype` **randomInitialGenotype**`(`
  `soundGenetic.jgap.imp.SoundConfiguration` **a_configuration** `)`

Methods inherited from class org.jgap.Genotype

- *applyGeneticOperators*
  `public void` **applyGeneticOperators**`( )`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *evolve*
  `public synchronized void` **evolve**`( )`
- *evolve*
  `public void` **evolve**`( int` **arg0** `)`
- *fillPopulation*
  `public void` **fillPopulation**`( int` **arg0** `)`

- *getChromosomes*
  `public synchronized IChromosome` **getChromosomes**`( )`
- *getConfiguration*
  `public Configuration` **getConfiguration**`( )`
- *getEvolves*
  `public List` **getEvolves**`( org.jgap.impl.job.IPopulationSplitter` **arg0** `)`
- *getFittestChromosome*
  `public synchronized IChromosome` **getFittestChromosome**`( )`
- *getFittestChromosome*
  `public synchronized IChromosome` **getFittestChromosome**`( int` **arg0**`, int` **arg1** `)`
- *getFittestChromosomes*
  `public synchronized List` **getFittestChromosomes**`( int` **arg0** `)`
- *getPopulation*
  `public Population` **getPopulation**`( )`
- *getStaticConfiguration*
  `public static Configuration` **getStaticConfiguration**`( )`
- *hashCode*
  `public int` **hashCode**`( )`
- *mergeResults*
  `public void` **mergeResults**`( org.jgap.distr.IPopulationMerger` **arg0**`,`
  `org.jgap.impl.job.EvolveResult [] arg1 )`
- *randomInitialGenotype*
  `public static Genotype` **randomInitialGenotype**`( org.jgap.Configuration` **arg0** `)`
- *run*
  `public void` **run**`( )`
- *setStaticConfiguration*
  `public static void` **setStaticConfiguration**`( org.jgap.Configuration` **arg0** `)`
- *toString*
  `public String` **toString**`( )`

1.2.4 Class SoundPopulation

Declaration

public class SoundPopulation
extends org.jgap.Population

Constructors

- *SoundPopulation*
  `public` **SoundPopulation**`( )`
- *SoundPopulation*
  `public` **SoundPopulation**`( soundGenetic.jgap.imp.SoundConfiguration` **a_config** `)`

- *SoundPopulation*
  `public` **SoundPopulation**`( soundGenetic.jgap.imp.SoundConfiguration` **a_config**`, org.jgap.IChromosome` **a_chromosome** `)`
- *SoundPopulation*
  `public` **SoundPopulation**`( soundGenetic.jgap.imp.SoundConfiguration` **arg0**`, org.jgap.IChromosome []` **arg1** `)`
- *SoundPopulation*
  `public` **SoundPopulation**`( soundGenetic.jgap.imp.SoundConfiguration` **a_config**`, int` **a_size** `)`

Methods inherited from class `org.jgap.Population`

- *addChromosome*
  `public void` **addChromosome**`( org.jgap.IChromosome` **arg0** `)`
- *addChromosomes*
  `public void` **addChromosomes**`( org.jgap.Population` **arg0** `)`
- *clear*
  `public void` **clear**`( )`
- *clone*
  `public Object` **clone**`( )`
- *compareTo*
  `public int` **compareTo**`( java.lang.Object` **arg0** `)`
- *contains*
  `public boolean` **contains**`( org.jgap.IChromosome` **arg0** `)`
- *determineFittestChromosome*
  `public IChromosome` **determineFittestChromosome**`( )`
- *determineFittestChromosome*
  `public IChromosome` **determineFittestChromosome**`( int` **arg0**`, int` **arg1** `)`
- *determineFittestChromosomes*
  `public List` **determineFittestChromosomes**`( int` **arg0** `)`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *getChromosome*
  `public IChromosome` **getChromosome**`( int` **arg0** `)`
- *getChromosomes*
  `public List` **getChromosomes**`( )`
- *getConfiguration*
  `public Configuration` **getConfiguration**`( )`
- *getGenome*
  `public List` **getGenome**`( boolean` **arg0** `)`
- *getPersistentRepresentation*
  `public String` **getPersistentRepresentation**`( )`
- *isChanged*
  `public boolean` **isChanged**`( )`
- *isSorted*
  `public boolean` **isSorted**`( )`
- *iterator*
  `public Iterator` **iterator**`( )`

- *keepPopSizeConstant*
  `public void` **keepPopSizeConstant**`( )`
- *setChromosome*
  `public void` **setChromosome**`( int` **arg0**`, org.jgap.IChromosome` **arg1** `)`
- *setChromosomes*
  `public void` **setChromosomes**`( java.util.List` **arg0** `)`
- *setValueFromPersistentRepresentation*
  `public void` **setValueFromPersistentRepresentation**`( java.lang.String` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *sortByFitness*
  `public void` **sortByFitness**`( )`
- *toChromosomes*
  `public IChromosome` **toChromosomes**`( )`

Chapter 2

Package soundGenetic.jgap

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Classes

2.1 Classes

2.1.1 Class ConfigFitness

Declaration

public class ConfigFitness
extends java.util.HashMap

Serializable Fields

- private ConfigFunction configFunction

  –

Constructors

- *ConfigFitness*
  `public` **ConfigFitness**`( )`

Methods

- *getConfigFunction*
  `public ConfigFunction` **getConfigFunction**`( )`

  – **Returns** -

- *getFitnessFrequencyPitchDistributionWeight*
  `public double` **getFitnessFrequencyPitchDistributionWeight**`( )`
- *getFitnessFrequencyWeight*
  `public double` **getFitnessFrequencyWeight**`( )`
- *getFitnessGeometricWeight*
  `public double` **getFitnessGeometricWeight**`( )`
- *getFitnessTonalityWeight*
  `public double` **getFitnessTonalityWeight**`( )`
- *getGeometricJumpRecoverWeight*
  `public double` **getGeometricJumpRecoverWeight**`( )`
- *getGeometricRibattutaWeight*
  `public double` **getGeometricRibattutaWeight**`( )`
- *getJumpDirectionWeight*
  `public double` **getJumpDirectionWeight**`( )`

- *getJumpDistance*
  `public double` **getJumpDistance**`( )`
- *getJumpDistanceWeight*
  `public double` **getJumpDistanceWeight**`( )`
- *getJumpWeight*
  `public double` **getJumpWeight**`( )`
- *getMaxJump*
  `public double` **getMaxJump**`( )`
- *getMaxJumpFunction*
  `public int` **getMaxJumpFunction**`( )`
- *getPeakCountWeight*
  `public double` **getPeakCountWeight**`( )`
- *getPeakDistributionWeight*
  `public double` **getPeakDistributionWeight**`( )`
- *getPeakNumber*
  `public double` **getPeakNumber**`( )`
- *getTonalitaNota*
  `public int` **getTonalitaNota**`( )`
- *getTonalitaScala*
  `public int` **getTonalitaScala**`( )`
- *getTonalityExternalPitchScale*
  `public double` **getTonalityExternalPitchScale**`( )`
- *getTonalityExternalScalePitchWeight*
  `public double` **getTonalityExternalScalePitchWeight**`( )`
- *getTonalityPitchWeight*
  `public double` **getTonalityPitchWeight**`( )`
- *getTonalityScalePitchWeight*
  `public double` **getTonalityScalePitchWeight**`( )`
- *setConfigFunction*
  `public void` **setConfigFunction**`( soundGenetic.jgap.ConfigFunction` **config** `)`
  - **Parameters**
    * `config -`
- *setFitnessFrequencyPitchDistributionWeight*
  `public void` **setFitnessFrequencyPitchDistributionWeight**`( double` **value** `)`
- *setFitnessFrequencyWeight*
  `public void` **setFitnessFrequencyWeight**`( double` **value** `)`
- *setFitnessGeometricWeight*
  `public void` **setFitnessGeometricWeight**`( double` **value** `)`
- *setFitnessTonalityWeight*
  `public void` **setFitnessTonalityWeight**`( double` **value** `)`

- *setGeometricJumpRecoverWeight*
  `public void` **setGeometricJumpRecoverWeight**`( double` **value** `)`
- *setGeometricRibattutaWeight*
  `public void` **setGeometricRibattutaWeight**`( double` **value** `)`
- *setJumpDirectionWeight*
  `public void` **setJumpDirectionWeight**`( double` **value** `)`
- *setJumpDistance*
  `public void` **setJumpDistance**`( double` **value** `)`
- *setJumpDistanceWeight*
  `public void` **setJumpDistanceWeight**`( double` **value** `)`
- *setJumpWeight*
  `public void` **setJumpWeight**`( double` **value** `)`
- *setMaxJump*
  `public void` **setMaxJump**`( double` **jump** `)`
- *setPeakCountWeight*
  `public void` **setPeakCountWeight**`( double` **value** `)`
- *setPeakDistributionWeight*
  `public void` **setPeakDistributionWeight**`( double` **value** `)`
- *setPeakNumber*
  `public void` **setPeakNumber**`( double` **value** `)`
- *setTonalita*
  `public void` **setTonalita**`( int` **scala**`, int` **nota** `)`
- *setTonalityExternalPitchScale*
  `public void` **setTonalityExternalPitchScale**`( double` **value** `)`
- *setTonalityExternalScalePitchWeight*
  `public void` **setTonalityExternalScalePitchWeight**`( double` **value** `)`
- *setTonalityPitchWeight*
  `public void` **setTonalityPitchWeight**`( double` **value** `)`
- *setTonalityScalePitchWeight*
  `public void` **setTonalityScalePitchWeight**`( double` **value** `)`

Methods inherited from class `java.util.HashMap`

- *clear*
  `public void` **clear**`( )`
- *clone*
  `public Object` **clone**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`

- *entrySet*
  `public Set` **entrySet**`( )`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *values*
  `public Collection` **values**`( )`

Methods inherited from class `java.util.AbstractMap`

- *clear*
  `public void` **clear**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public abstract Set` **entrySet**`( )`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *hashCode*
  `public int` **hashCode**`( )`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *toString*
  `public String` **toString**`( )`
- *values*
  `public Collection` **values**`( )`

2.1.2 Class **ConfigFunction**

Declaration

public class ConfigFunction
extends java.util.HashMap

Constructors

- *ConfigFunction*
  `public` **ConfigFunction**`( )`

Methods

- *getFrequencyPitchDistributionWeight*
  `public double` **getFrequencyPitchDistributionWeight**`( )`
- *getGeometricjumpCountMalus*
  `public double` **getGeometricjumpCountMalus**`( )`
- *getGeometricjumpCountReference1*
  `public double` **getGeometricjumpCountReference1**`( )`
- *getGeometricjumpCountReference2*
  `public double` **getGeometricjumpCountReference2**`( )`
- *getGeometricjumpCountWeight1*
  `public double` **getGeometricjumpCountWeight1**`( )`
- *getGeometricjumpCountWeight2*
  `public double` **getGeometricjumpCountWeight2**`( )`
- *getGeometricjumpCountWeight3*
  `public double` **getGeometricjumpCountWeight3**`( )`
- *getGeometricJumpDirectionWeight*
  `public double` **getGeometricJumpDirectionWeight**`( )`
- *getGeometricjumpDistanceWeight*
  `public double` **getGeometricjumpDistanceWeight**`( )`
- *getGeometricJumpRecoverWeight*
  `public double` **getGeometricJumpRecoverWeight**`( )`
- *getGeometricPeakCountWeight*
  `public double` **getGeometricPeakCountWeight**`( )`
- *getGeometricRibattuteWeight1*
  `public double` **getGeometricRibattuteWeight1**`( )`

- *getGeometricRibattuteWeight2*
  `public double` **getGeometricRibattuteWeight2**`( )`
- *getNoteCheckTemplateWeight1*
  `public double` **getNoteCheckTemplateWeight1**`( )`
- *getNoteCheckTemplateWeight2*
  `public double` **getNoteCheckTemplateWeight2**`( )`
- *getNoteExternalScalePitchMalus1*
  `public double` **getNoteExternalScalePitchMalus1**`( )`
- *getNoteExternalScalePitchMalus2*
  `public double` **getNoteExternalScalePitchMalus2**`( )`
- *getNoteScalePitchMalus1*
  `public double` **getNoteScalePitchMalus1**`( )`
- *getNoteScalePitchMalus2*
  `public double` **getNoteScalePitchMalus2**`( )`
- *getNoteScalePitchMalus3*
  `public double` **getNoteScalePitchMalus3**`( )`
- *getNoteScalePitchWeight*
  `public double` **getNoteScalePitchWeight**`( )`
- *setFrequencyPitchDistributionWeight*
  `public void` **setFrequencyPitchDistributionWeight**`( double` **value** `)`
- *setGeometricjumpCountMalus*
  `public void` **setGeometricjumpCountMalus**`( double` **value** `)`
- *setGeometricjumpCountReference1*
  `public void` **setGeometricjumpCountReference1**`( double` **value** `)`
- *setGeometricjumpCountReference2*
  `public void` **setGeometricjumpCountReference2**`( double` **value** `)`
- *setGeometricjumpCountWeight1*
  `public void` **setGeometricjumpCountWeight1**`( double` **value** `)`
- *setGeometricjumpCountWeight2*
  `public void` **setGeometricjumpCountWeight2**`( double` **value** `)`
- *setGeometricjumpCountWeight3*
  `public void` **setGeometricjumpCountWeight3**`( double` **value** `)`
- *setGeometricJumpDirectionWeight*
  `public void` **setGeometricJumpDirectionWeight**`( double` **value** `)`
- *setGeometricjumpDistanceWeight*
  `public void` **setGeometricjumpDistanceWeight**`( double` **value** `)`
- *setGeometricJumpRecoverWeight*
  `public void` **setGeometricJumpRecoverWeight**`( double` **value** `)`
- *setGeometricPeakCountWeight*
  `public void` **setGeometricPeakCountWeight**`( double` **value** `)`

- *setGeometricRibattuteWeight1*
  `public void` **setGeometricRibattuteWeight1**`( double` **value** `)`
- *setGeometricRibattuteWeight2*
  `public void` **setGeometricRibattuteWeight2**`( double` **value** `)`
- *setNoteCheckTemplateWeight1*
  `public void` **setNoteCheckTemplateWeight1**`( double` **value** `)`
- *setNoteCheckTemplateWeight2*
  `public void` **setNoteCheckTemplateWeight2**`( double` **value** `)`
- *setNoteExternalScalePitchMalus1*
  `public void` **setNoteExternalScalePitchMalus1**`( double` **value** `)`
- *setNoteExternalScalePitchMalus2*
  `public void` **setNoteExternalScalePitchMalus2**`( double` **value** `)`
- *setNoteScalePitchMalus1*
  `public void` **setNoteScalePitchMalus1**`( double` **value** `)`
- *setNoteScalePitchMalus2*
  `public void` **setNoteScalePitchMalus2**`( double` **value** `)`
- *setNoteScalePitchMalus3*
  `public void` **setNoteScalePitchMalus3**`( double` **value** `)`
- *setNoteScalePitchWeight*
  `public void` **setNoteScalePitchWeight**`( double` **value** `)`

Methods inherited from class `java.util.HashMap`

- *clear*
  `public void` **clear**`( )`
- *clone*
  `public Object` **clone**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public Set` **entrySet**`( )`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *values*
  `public Collection` **values**`( )`

METHODS INHERITED FROM CLASS `java.util.AbstractMap`

- *clear*
  `public void` **clear**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public abstract Set` **entrySet**`( )`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *hashCode*
  `public int` **hashCode**`( )`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *toString*
  `public String` **toString**`( )`
- *values*
  `public Collection` **values**`( )`

2.1.3 CLASS ConfigJGap

DECLARATION

public class ConfigJGap
extends java.util.HashMap

CONSTRUCTORS

- *ConfigJGap*
  `public` **ConfigJGap**`( )`

METHODS

- *getFitnessValueAccetable*
  `public double` **getFitnessValueAccetable**`( )`
- *getMinPitch*
  `public int` **getMinPitch**`( )`
- *getNumOttave*
  `public int` **getNumOttave**`( )`
- *getNumPopulation*
  `public int` **getNumPopulation**`( )`
- *getPopulationSizeConstant*
  `public boolean` **getPopulationSizeConstant**`( )`
- *getPreservFitTestIndividual*
  `public boolean` **getPreservFitTestIndividual**`( )`
- *getSizeSoundChromosome*
  `public int` **getSizeSoundChromosome**`( )`
- *setFitnessValueAccetable*
  `public void` **setFitnessValueAccetable**`( double` **value** `)`
- *setMinPitch*
  `public void` **setMinPitch**`( int` **pitch** `)`
- *setNumOttave*
  `public void` **setNumOttave**`( int` **num** `)`
- *setNumPopulation*
  `public void` **setNumPopulation**`( int` **num** `)`
- *setPopulationSizeConstant*
  `public void` **setPopulationSizeConstant**`( boolean` **value** `)`
- *setPreservFitTestIndividual*
  `public void` **setPreservFitTestIndividual**`( boolean` **value** `)`
- *setSizeSoundChromosome*
  `public void` **setSizeSoundChromosome**`( int` **size** `)`

METHODS INHERITED FROM CLASS `java.util.HashMap`

- *clear*
  `public void` **clear**`( )`
- *clone*
  `public Object` **clone**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`

- *entrySet*
  `public Set` **entrySet**`( )`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *values*
  `public Collection` **values**`( )`

METHODS INHERITED FROM CLASS `java.util.AbstractMap`

- *clear*
  `public void` **clear**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public abstract Set` **entrySet**`( )`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *hashCode*
  `public int` **hashCode**`( )`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *toString*
  `public String` **toString**`( )`
- *values*
  `public Collection` **values**`( )`

2.1.4 Class **GeneticConstants**

Declaration

public final class GeneticConstants
extends java.lang.Object

Fields

- public static final int MAGGIORE

  –

- public static final int MINORE_NATURALE

  –

- public static final int MINORE_ARMONICO

  –

- public static final int SEMIDIMINUITA

  –

- public static final int ESATONALE

  –

- public static final int DO

  –

- public static final int DO_DIESIS

  –

- public static final int RE

  –

- public static final int RE_DIESIS

  –

- public static final int MI

  –

- public static final int FA

  –

- public static final int FA_DIESIS

  –

- public static final int SOL

–

- public static final int SOL_DIESIS

  –

- public static final int LA

  –

- public static final int LA_DIESIS

  –

- public static final int SI

  –

CONSTRUCTORS

- *GeneticConstants*
  `public` **GeneticConstants**`( )`

2.1.5 CLASS JGapFindWeight

DECLARATION

public class JGapFindWeight
extends java.lang.Object

CONSTRUCTORS

- *JGapFindWeight*
  `public` **JGapFindWeight**`( java.util.HashMap` **scoreList** `)`

METHODS

- *start*
  `public void` **start**`( )`

2.1.6 CLASS JGapSoundGenetic

DECLARATION

public class JGapSoundGenetic
extends java.lang.Object

Constructors

- *JGapSoundGenetic*
  `public` **JGapSoundGenetic**`( )`

Methods

- *getFitnessValue*
  `public HashMap` **getFitnessValue**`( )`
  - **Returns** -
- *getSizeSoundChromosome*
  `public int` **getSizeSoundChromosome**`( )`
  - **Returns** -
- *initialization*
  `public void` **initialization**`( soundGenetic.jgap.ConfigJGap` **configJGap**`, soundGenetic.jgap.ConfigFitness` **configFitness** `)`
- *kill*
  `public void` **kill**`( )`
- *setSizeSoundChromosome*
  `public void` **setSizeSoundChromosome**`( int` **sizeSoundChromosome** `)`
  - **Parameters**
    - `sizeSoundChromosome` -
- *start*
  `public int` **start**`( )`

2.1.7 Class SoundFitnessFunction

Declaration

public class SoundFitnessFunction
extends org.jgap.FitnessFunction

Serializable Fields

- private ConfigFitness configFitness
  –
- private ConfigJGap configJGap
  –

Constructors

- *SoundFitnessFunction*
  `public` **SoundFitnessFunction**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJGap** `)`

Methods inherited from class `org.jgap.FitnessFunction`

- *clone*
  `public Object` **clone**`( )`
- *getFitnessValue*
  `public double` **getFitnessValue**`( org.jgap.IChromosome` **arg0** `)`
- *getLastComputedFitnessValue*
  `public double` **getLastComputedFitnessValue**`( )`

Chapter 3

Package soundGenetic.jgap.FitnessFunction.support

Package Contents *Page*

Classes

3.1 Classes

3.1.1 Class FormattedRandomGenerator

Declaration

public class FormattedRandomGenerator
extends java.lang.Object
implements org.jgap.RandomGenerator

Serializable Fields

- private double m_nextDouble
  –

Constructors

- *FormattedRandomGenerator*
  `public` **FormattedRandomGenerator**`( )`
- *FormattedRandomGenerator*
  `public` **FormattedRandomGenerator**`( double` **a_nextDouble** `)`

Methods

- *nextBoolean*
  `public boolean` **nextBoolean**`( )`
- *nextDouble*
  `public double` **nextDouble**`( )`
- *nextFloat*
  `public float` **nextFloat**`( )`
- *nextInt*
  `public int` **nextInt**`( )`
- *nextInt*
  `public int` **nextInt**`( int` **arg0** `)`
- *nextLong*
  `public long` **nextLong**`( )`
- *setNextDouble*
  `public void` **setNextDouble**`( double` **a_nextDouble** `)`

3.1.2 Class Pitch

Declaration

public class Pitch
extends java.lang.Object
implements java.lang.Comparable

Constructors

- *Pitch*
  `public` **Pitch**`( int` **nota**`, int` **frequenza** `)`

Methods

- *compareTo*
  `public int` **compareTo**`( soundGenetic.jgap.FitnessFunction.support.Pitch` **o** `)`
- *getFrequenza*
  `public int` **getFrequenza**`( )`
  - **Returns** -
- *getNome*
  `public int` **getNome**`( )`
- *isMax*
  `public boolean` **isMax**`( )`
  - **Returns** -
- *isScale*
  `public boolean` **isScale**`( )`
  - **Returns** -
- *setFrequenza*
  `public void` **setFrequenza**`( int` **frequenza** `)`
  - **Parameters**
    - `frequenza` -
- *setMax*
  `public void` **setMax**`( boolean` **valore** `)`
  - **Parameters**
    - `valore` -
- *setNome*
  `public void` **setNome**`( int` **nota** `)`
- *setScala*
  `public void` **setScala**`( boolean` **value** `)`
- *toString*
  `public String` **toString**`( )`

3.1.3 Class PitchFunction

Declaration

public class PitchFunction
extends java.lang.Object

Constructors

- *PitchFunction*
  `public` **PitchFunction**`( java.util.ArrayList` **pitchList**`,`
  `soundGenetic.jgap.ConfigFitness` **configFitness** `)`
- *PitchFunction*
  `public` **PitchFunction**`( org.jgap.IChromosome` **chromosome**`,`
  `soundGenetic.jgap.ConfigFitness` **configFitness** `)`

Methods

- *getJumpCount*
  `public int` **getJumpCount**`( )`
  – **Returns** -
- *getPitchesOrderByPitches*
  `public ArrayList` **getPitchesOrderByPitches**`( )`
- *getPitchesOrderedByFrequency*
  `public ArrayList` **getPitchesOrderedByFrequency**`( )`
  – **Returns** -
- *getPitchs*
  `public ArrayList` **getPitchs**`( )`
- *getPropertyPitches*
  `public ArrayList` **getPropertyPitches**`( )`
- *getPropertyTonalityPitchs*
  `public HashMap` **getPropertyTonalityPitchs**`( )`
- *setChromosome*
  `public void` **setChromosome**`( java.util.ArrayList` **list**`,`
  `soundGenetic.jgap.ConfigFitness` **configFitness** `)`
- *setChromosome*
  `public void` **setChromosome**`( org.jgap.IChromosome` **chromosome**`,`
  `soundGenetic.jgap.ConfigFitness` **configFitness** `)`

3.1.4 Class **PropertyGeometryPitches**

Declaration

public class PropertyGeometryPitches
extends java.lang.Object

Constructors

- *PropertyGeometryPitches*
  `public` **PropertyGeometryPitches**`( double` **previousPitch**`, double` **pitch**`, double` **nextPitch**`, double` **interval**`, double` **position** `)`

Methods

- *getDerivate*
  `public String` **getDerivate**`( )`
- *getJumpDirection*
  `public int` **getJumpDirection**`( )`
- *getJumpDistance*
  `public int` **getJumpDistance**`( )`
  – **Returns** -
- *getLenghtJump*
  `public double` **getLenghtJump**`( )`
  – **Returns** -
- *getNextPitch*
  `public double` **getNextPitch**`( )`
  – **Returns** -
- *getPitch*
  `public double` **getPitch**`( )`
  – **Returns** -
- *getPosition*
  `public double` **getPosition**`( )`
  – **Returns** -
- *getPreviousPitch*
  `public double` **getPreviousPitch**`( )`
  – **Returns** -

- *isJump*
  `public boolean` **isJump**`( )`
  - **Returns** -

- *isMax*
  `public boolean` **isMax**`( )`

- *isMin*
  `public boolean` **isMin**`( )`

- *isPeak*
  `public boolean` **isPeak**`( )`
  - **Returns** -

- *setJump*
  `public void` **setJump**`( boolean` **value** `)`
  - **Parameters**
    - `value` -

- *setJumpDistance*
  `public void` **setJumpDistance**`( int` **distance** `)`
  - **Parameters**
    - `distance` -

3.1.5 Class Scheme

Declaration

public class Scheme **extends** java.lang.Object

Constructors

- *Scheme*
  `public` **Scheme**`( boolean [] schema, int` **max** `)`

Methods

- *getMax*
  `public int` **getMax**`( )`
  - **Returns** -

- *getscheme*
  `public boolean` **getscheme**`( )`

- *getScheme*
  `public boolean` **getScheme**`( int` **nota** `)`

3.1.6 Class **TonalitySchemes**

Declaration

public class TonalitySchemes
extends java.util.HashMap

Methods

- *getInstance*
  `public static TonalitySchemes` **getInstance**`( )`
  - **Returns** -

Methods inherited from class `java.util.HashMap`

- *clear*
  `public void` **clear**`( )`
- *clone*
  `public Object` **clone**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public Set` **entrySet**`( )`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *values*
  `public Collection` **values**`( )`

METHODS INHERITED FROM CLASS `java.util.AbstractMap`

- *clear*
  `public void` **clear**`( )`
- *containsKey*
  `public boolean` **containsKey**`( java.lang.Object` **arg0** `)`
- *containsValue*
  `public boolean` **containsValue**`( java.lang.Object` **arg0** `)`
- *entrySet*
  `public abstract Set` **entrySet**`( )`
- *equals*
  `public boolean` **equals**`( java.lang.Object` **arg0** `)`
- *get*
  `public Object` **get**`( java.lang.Object` **arg0** `)`
- *hashCode*
  `public int` **hashCode**`( )`
- *isEmpty*
  `public boolean` **isEmpty**`( )`
- *keySet*
  `public Set` **keySet**`( )`
- *put*
  `public Object` **put**`( java.lang.Object` **arg0**`, java.lang.Object` **arg1** `)`
- *putAll*
  `public void` **putAll**`( java.util.Map` **arg0** `)`
- *remove*
  `public Object` **remove**`( java.lang.Object` **arg0** `)`
- *size*
  `public int` **size**`( )`
- *toString*
  `public String` **toString**`( )`
- *values*
  `public Collection` **values**`( )`

Chapter 4

Package soundGenetic

Package Contents *Page*

Classes

4.1 Classes

4.1.1 Class **FitnessValue**

Declaration

public class FitnessValue
extends java.lang.Object

Constructors

- *FitnessValue*
  `public` **FitnessValue**`( )`

Methods

- *getEvolution*
  `public static int` **getEvolution**`( )`

  – **Returns** -

- *getListValue*
  `public static HashMap` **getListValue**`( )`
- *getPopulation*
  `public static int` **getPopulation**`( )`

  – **Returns** -

- *printFrequencyPitchDistribution*
  `public static void` **printFrequencyPitchDistribution**`( double` **value** `)`
- *printFrequencyScore*
  `public static void` **printFrequencyScore**`( double` **value** `)`
- *printGeometryJumpCount*
  `public static void` **printGeometryJumpCount**`( double` **value** `)`
- *printGeometryJumpDirection*
  `public static void` **printGeometryJumpDirection**`( double` **value** `)`
- *printGeometryJumpDirectionDown*
  `public static void` **printGeometryJumpDirectionDown**`( double` **value** `)`
- *printGeometryJumpDirectionUp*
  `public static void` **printGeometryJumpDirectionUp**`( double` **value** `)`
- *printGeometryJumpDistance*
  `public static void` **printGeometryJumpDistance**`( double` **value** `)`

- *printGeometryJumpRecover*
  `public static void` **printGeometryJumpRecover**`( double` **value** `)`
- *printGeometryPeackIdealDistribution*
  `public static void` **printGeometryPeackIdealDistribution**`( double` **value** `)`
- *printGeometryPeakCount*
  `public static void` **printGeometryPeakCount**`( double` **value** `)`
- *printGeometryPeakDistribution*
  `public static void` **printGeometryPeakDistribution**`( double` **value** `)`
- *printGeometryPeakNumber*
  `public static void` **printGeometryPeakNumber**`( double` **value** `)`
- *printGeometryRibattuta*
  `public static void` **printGeometryRibattuta**`( double` **value** `)`
- *printGeometryScore*
  `public static void` **printGeometryScore**`( double` **value** `)`
- *printGeometryScoreJump*
  `public static void` **printGeometryScoreJump**`( double` **value** `)`
- *printModelStagionalita*
  `public static void` **printModelStagionalita**`( double` **value** `)`
- *printModelWhiteTest*
  `public static void` **printModelWhiteTest**`( double` **value** `)`
- *printTonalitaCongruenza*
  `public static void` **printTonalitaCongruenza**`( java.lang.Double` **value**`, java.lang.Double` **valueMax** `)`
- *printTonalitaScore*
  `public static void` **printTonalitaScore**`( double` **value** `)`
- *printTonalitaSize*
  `public static void` **printTonalitaSize**`( java.lang.Double` **value**`, java.lang.Double` **valueMax** `)`
- *printTonalityExternalScalePitch*
  `public static void` **printTonalityExternalScalePitch**`( double` **value** `)`
- *printTonalityPitch*
  `public static void` **printTonalityPitch**`( double` **value** `)`
- *printTonalityScalePitch*
  `public static void` **printTonalityScalePitch**`( double` **value** `)`
- *reset*
  `public static void` **reset**`( )`
- *setEvolution*
  `public static void` **setEvolution**`( int` **value** `)`
  - **Parameters**
    - `value` -

- *setFitness*
  `public static void` **setFitness**`( double` **value** `)`
- *setPiches*
  `public static void` **setPiches**`( java.util.ArrayList` **pitchs** `)`
- *setPopulation*
  `public static void` **setPopulation**`( int` **value** `)`
  - **Parameters**
    - `value` -

4.1.2 Class Main

Declaration

public class Main **extends** java.lang.Object

Constructors

- *Main*
  `public` **Main**`( )`

Methods

- *main*
  `public static void` **main**`( java.lang.String [] args )`

Chapter 5

Package tools

Package Contents *Page*

Classes

5.1 Classes

5.1.1 Class ChartFitness

Declaration

public class ChartFitness
extends java.lang.Object

Constructors

- *ChartFitness*
  `public` **ChartFitness**`( )`

Methods

- *addNewFitness*
  `public static void` **addNewFitness**`( double  y )`
- *getChart*
  `public static ChartPanel` **getChart**`( )`
- *getChartPanel*
  `public static JPanel` **getChartPanel**`( )`
- *newChart*
  `public static void` **newChart**`( )`
- *resetChart*
  `public static void` **resetChart**`( )`

5.1.2 Class ChartPitchs

Declaration

public class ChartPitchs
extends java.lang.Object

Constructors

- *ChartPitchs*
  `public` **ChartPitchs**`( )`

Methods

- *getChart*
  `public static ChartPanel` **getChart**`( double` **lower**`, double` **upper** `)`
- *getChartPanel*
  `public static JPanel` **getChartPanel**`( double` **lower**`, int` **numottave** `)`
- *updateChart*
  `public static void` **updateChart**`( java.util.ArrayList` **pitchs** `)`
- *updateChart*
  `public static void` **updateChart**`( org.jgap.IChromosome` **crhomosome** `)`

5.1.3 Class Configs

Declaration

public class Configs
extends java.lang.Object

Constructors

- *Configs*
  `public` **Configs**`( )`

Methods

- *ExportToXml*
  `public void` **ExportToXml**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJgap**`, java.io.File` **saveXml** `)`
- *ExportToXml*
  `public void` **ExportToXml**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJgap**`, java.lang.String` **pathToSave** `)`
- *ImportFromXml*
  `public void` **ImportFromXml**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJgap**`, java.io.File` **loadXml** `)`
- *ImportFromXml*
  `public void` **ImportFromXml**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJgap**`, java.lang.String` **pathToLoad** `)`
- *ImportFromXml*
  `public void` **ImportFromXml**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJgap**`, java.net.URL` **pathToLoad** `)`

5.1.4 Class **Debug**

Declaration

public class Debug
extends java.lang.Object

Constructors

- *Debug*
  `public` **Debug**`( )`

Methods

- *print*
  `public static void` **print**`( java.lang.String` **str** `)`
- *println*
  `public static void` **println**`( java.lang.String` **str** `)`
- *println1*
  `public static void` **println1**`( java.lang.String` **str** `)`
- *setJTextAreaLog*
  `public static void` **setJTextAreaLog**`( javax.swing.JTextArea` **obj** `)`

5.1.5 Class **SynthNote**

Declaration

public class SynthNote
extends java.lang.Object

Constructors

- *SynthNote*
  `public` **SynthNote**`( )`
- *SynthNote*
  `public` **SynthNote**`( int` **channel**`, int` **velocity**`, int` **duration** `)`

METHODS

- *getMidi*
  `public File` **getMidi**`( )`
- *play*
  `public void` **play**`( java.util.ArrayList` **pitchs** `)`
- *play*
  `public void` **play**`( int [] pitchs )`
- *setChannell*
  `public void` **setChannell**`( int` **num** `)`
- *setDuration*
  `public void` **setDuration**`( int` **value** `)`
- *setVelocity*
  `public void` **setVelocity**`( int` **value** `)`
- *stop*
  `public void` **stop**`( )`

Chapter 6

Package tools.findWeight

Package Contents *Page*

Classes

6.1 Classes

6.1.1 Class **FindWeightFromMidi**

Declaration

public class FindWeightFromMidi
extends java.lang.Object

Constructors

- *FindWeightFromMidi*
  `public` **FindWeightFromMidi**`( )`
- *FindWeightFromMidi*
  `public` **FindWeightFromMidi**`( java.util.ArrayList` **listScoreKey** `)`

Methods

- *createNewFileConfig*
  `public void` **createNewFileConfig**`( java.util.HashMap` **weightList**`, java.io.File` **file** `)`
- *extractMidiFile*
  `public HashMap` **extractMidiFile**`( java.io.File` **file** `)`
- *extractMidiFiles*
  `public ArrayList` **extractMidiFiles**`( java.util.ArrayList` **list** `)`
- *getAllListScoreKey*
  `public ArrayList` **getAllListScoreKey**`( )`

6.1.2 Class **MinimiQuadrati**

Declaration

public class MinimiQuadrati
extends java.lang.Object

Constructors

- *MinimiQuadrati*
  `public` **MinimiQuadrati**`( int` **m**`, int` **n**`, java.util.ArrayList` **scoreList** `)`

METHODS

- *getWeight*
  `public HashMap` **getWeight**`( )`
- *printAll*
  `public String` **printAll**`( )`
- *printMatrix*
  `public String` **printMatrix**`( Jama.Matrix` **matrix** `)`

Chapter 7

Package soundGenetic.jgap.FitnessFunction

Package Contents *Page*

Classes

7.1 Classes

7.1.1 Class **FuncDistribFrequency**

Declaration

public class FuncDistribFrequency
extends soundGenetic.jgap.FitnessFunction.GenericFitness

Constructors

- *FuncDistribFrequency*
  `public` **FuncDistribFrequency**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJGap** `)`

Methods inherited from class `soundGenetic.jgap.FitnessFunction.GenericFitness`

(in 7.1.6, page 56)

- *runTest*
  `public double` **runTest**`( soundGenetic.jgap.FitnessFunction.support.PitchFunction` **pitchFunction** `)`

7.1.2 Class **FuncDistribGeometric**

Declaration

public class FuncDistribGeometric
extends soundGenetic.jgap.FitnessFunction.GenericFitness

Constructors

- *FuncDistribGeometric*
  `public` **FuncDistribGeometric**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJGap** `)`

Methods inherited from class `soundGenetic.jgap.FitnessFunction.GenericFitness`

(in 7.1.6, page 56)

- *runTest*
  `public double` **runTest**`( soundGenetic.jgap.FitnessFunction.support.PitchFunction` **pitchFunction** `)`

7.1.3 Class **FuncDistribModel**

Declaration

public class FuncDistribModel
extends soundGenetic.jgap.FitnessFunction.GenericFitness

Constructors

- *FuncDistribModel*
  `public` **FuncDistribModel**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJGap** `)`

Methods inherited from class `soundGenetic.jgap.FitnessFunction.GenericFitness`

(in 7.1.6, page 56)
- *runTest*
  `public double` **runTest**`( soundGenetic.jgap.FitnessFunction.support.PitchFunction` **pitchFunction** `)`

7.1.4 Class **FuncDistribNote**

Declaration

public class FuncDistribNote
extends soundGenetic.jgap.FitnessFunction.GenericFitness

Constructors

- *FuncDistribNote*
  `public` **FuncDistribNote**`( soundGenetic.jgap.ConfigFitness` **configFitness**`, soundGenetic.jgap.ConfigJGap` **configJGap** `)`

Methods inherited from class `soundGenetic.jgap.FitnessFunction.GenericFitness`

(in 7.1.6, page 56)
- *runTest*
  `public double` **runTest**`( soundGenetic.jgap.FitnessFunction.support.PitchFunction` **pitchFunction** `)`

7.1.5 Class **FuncFindWeight**

DECLARATION

public class FuncFindWeight
extends org.jgap.FitnessFunction

SERIALIZABLE FIELDS

- private HashMap scoreList
  –

CONSTRUCTORS

- *FuncFindWeight*
  `public` **FuncFindWeight**`( java.util.HashMap` **scoreList** `)`

METHODS INHERITED FROM CLASS `org.jgap.FitnessFunction`

- *clone*
  `public Object` **clone**`( )`
- *getFitnessValue*
  `public double` **getFitnessValue**`( org.jgap.IChromosome` **arg0** `)`
- *getLastComputedFitnessValue*
  `public double` **getLastComputedFitnessValue**`( )`

7.1.6 CLASS GenericFitness

DECLARATION

public abstract class GenericFitness
extends java.lang.Object

CONSTRUCTORS

- *GenericFitness*
  `public` **GenericFitness**`( soundGenetic.jgap.ConfigFitness` **configFitness**`,`
  `soundGenetic.jgap.ConfigJGap` **configJGap** `)`

METHODS

- *runTest*
  `public double` **runTest**`(`
  `soundGenetic.jgap.FitnessFunction.support.PitchFunction` **pitchFunction** `)`