

package geco.fuzzy v3.0

geco.parser.GecoParser

- + *static final String version*
- + void start()
- + Environment getEnvironment()
- + ArrayList<String> getErrorList ()

geco.parser.Environment

- + public String getVersion ()
- + List<Instruction> getInstructionList ()
- + int getNInstruction ()
- + List<Instruction> getInstructionListIgnoringErrors ()
- + List<String> getErrorList ()
- + boolean hasErrors()
- + boolean hasNoError()
- + List<String> getWarningList ()

NB. Evidenziati in azzurro le variazioni rispetto alla versione precedente 2.6

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abstract geco.model.Instruction

- + static final int UNDEFINED
- + static final int GET_INSTRUCTION
- + static final int SET_INTERMEDIATE_INSTRUCTION
- + static final int SAVE_INSTRUCTION
- + static final int SPATIAL_JOIN_INSTRUCTION
- + static final int JOIN_INSTRUCTION
- + static final int FILTER_INSTRUCTION
- + static final int GROUP_INSTRUCTION
- + static final int EXPAND_INSTRUCTION
- + static final int MERGE_INSTRUCTION
- + static final int INTERSECT_INSTRUCTION
- + static final int SUBTRACT_INSTRUCTION
- + static final int USEDDB_INSTRUCTION
- + static final int TRAJECTORY_MATCHING_INSTRUCTION
- + static final int FUZZY_OPERATOR_INSTRUCTION
- + static final int JAVASCRIPT_FUNCTION_INSTRUCTION
- + int getid()
- + int getSequence()
- + String getInstructionName()
- + String toString()
- + **abstract** String toMultilineString()

geco.model.GetCollection *extends Instruction*

- + DbCollection collection

geco.model.SetIntermediateAs *extends Instruction*

- + DbCollection collection

geco.model.SaveAs *extends Instruction*

- + DbCollection collection

geco.model.SubtractCollections *extends Instruction*

- + DbCollection collection1
- + DbCollection collection2

geco.model.UseDb *extends Instruction*

- + final static int DEFAULT
- + final static int SERVER
- + final static int SERVER_CONNECTED
- + List<DbName> dbList
- + String server
- + String connectionString
- + int type
- + boolean isDefault()
- + boolean hasServer()
- + boolean hasConnectionString()

geco.model.Filter *extends Instruction*

- + CaseClause caseClause

geco.model.IntersectCollections *extends Instruction*

- + DbCollection collection1
- + DbCollection collection2

geco.model.Group *extends Instruction*

- + final static int UNDEFINED
- + final static int KEEP_OTHERS
- + final static int DROP_OTHERS
- + List<Partition> partitions
- + int others

geco.model.Expand *extends Instruction*

- + final static int KEEP_OTHERS
- + final static int DROP_OTHERS
- + List<Unpack> unpacks
- + int others

geco.model.JoinCollections *extends Instruction*

- + DbCollection collection1
- + DbCollection collection2
- + CaseClause caseClause
- + SetFuzzySets setFuzzySets
- + boolean hasCaseClause()
- + boolean hasSetFuzzySets()

geco.model.TrajectoryMatching *extends Instruction*

- + final static int UNDEFINED
- + final static int KEEP_OTHERS
- + final static int DROP_OTHERS
- + DbCollection collection1
- + DbCollection collection2
- + List<TrajectoryPartition> partitions
- + int others

geco.model.MergeCollections *extends Instruction*

- + List<DbCollection> collectionList
- + String all
- + boolean mergeAll()

geco.model.SpatialJoin *extends Instruction*

- + final static int GEOMETRY_UNDEFINED
- + final static int GEOMETRY_ALL
- + final static int GEOMETRY_RIGHT
- + final static int GEOMETRY_LEFT
- + final static int GEOMETRY_INTERSECTION
- + DbCollection collection1
- + DbCollection collection2
- + SpatialJoinCondition on
- + int geometry
- + CaseClause caseClause
- +
- +
- +

geco.model.FuzzyOperator *extends Instruction*

- + String functionName
- + List<Parameter> parameters
- + Condition precondition
- + String body

geco.model.JavascriptFunction *extends Instruction*

- + String fuzzyOperator
- + List<Parameter> parameters
- + Condition precondition
- + Condition evaluate
- + Range range
- + List<Point> polyline

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1st part

geco.model.util.Condition

- + static final int UNDEFINED
- + static final int NOT_CONDITION
- + static final int AND_CONDITION
- + static final int OR_CONDITION
- + static final int PREDICATE_CONDITION
- + Predicate predicate
- + int type
- + toMultilineString (int level)

geco.model.util.ConditionOr extends Condition

- + List<Condition> conditions

geco.model.util.ConditionAnd extends Condition

- + List<Condition> conditions

geco.model.util.ConditionNot extends Condition

- + Condition condition

geco.model.util.LogicalCondition<P>

- + static final int UNDEFINED
- + static final int GENERIC_CONDITION
- + static final int NOT_CONDITION
- + static final int AND_CONDITION
- + static final int OR_CONDITION
- + static final int SUB_CONDITION
- + static final int PREDICATE
- + int type
- + **P** predicate
- + LogicalCondition <P> subCondition
- + LogicalCondition <P> notCondition
- + List<LogicalCondition <P> > andConditions
- + List<LogicalCondition <P> > orConditions

geco.model.util.Predicate

- + static final int UNDEFINED
- + static final int WITH_PREDICATE
- + static final int WITHOUT_PREDICATE
- + static final int EXPRESSION_PREDICATE
- + static final int COMPARISON_PREDICATE
- + static final int COMPARE_PREDICATE
- + static final int IFFAILS_PREDICATE
- + static final int OVERLAP_PREDICATE
- + static final int INSIDE_PREDICATE
- + static final int HOWMEET_PREDICATE
- + static final int DIRECTION_PREDICATE
- + static final int AREA_PREDICATE
- + static final int PERIMETER_PREDICATE
- + static final int WITHIN_PREDICATE
- + static final int KNOWN_PREDICATE
- + static final int UNKNOWN_PREDICATE
- + static final String EQ
- + static final String NEQ
- + static final String LT
- + static final String GT
- + static final String LE
- + static final String GE
- + static final int SIMPLE
- + static final int COMPLEX
- + static final int ARRAY
- + static final int STRING
- + static final int NUMBER
- + static final int INTEGER
- + static final int FLOAT
- + static final int GEOMETRY
- + WithPredicate withPredicate
- + List<Field> withPredicateList
- + int withPredicateSelector
- + String withPredicateSelectorStr
- + WithoutPredicate withoutPredicate
- + List<Field> withoutPredicateList
- + Expression expression1
- + Expression expression2
- + String comparator
- + IfFails ifFails
- + String predicateName
- + String predicateParameter1
- + String predicateParameter2
- + List<String> fuzzySets
- + List<String> withinFuzzySets
- + List<String> knownFuzzySets
- + List<String> unknownFuzzySets
- + int type
- + toMultilineString (int level)

geco.model.util.Expression

- + List<ExpressionTerm> terms
- + List<String> operators

geco.model.util.ExpressionTerm

- + List<ExpressionFactor> factors
- + List<String> operator

geco.model.util.ExpressionFactor

- + static final int UNDEFINED
- + boolean hasSetFuzzySets ()
- + static final int SUBCONDITION
- + static final int FUNCTION
- + static final int ID
- + static final int FIELDNAME
- + int type
- + String id
- + Condition condition
- + Field field
- + Value value
- + String function
- + List<Expression> functionParams

geco.model.util.WithPredicate

- + static final int UNDEFINED
- + static final int SIMPLE
- + static final int COMPLEX
- + static final int ARRAY
- + static final int STRING
- + static final int NUMBER
- + static final int INTEGER
- + static final int FLOAT
- + static final int GEOMETRY
- + List<Field> fieldRefs
- + int getTypeSelector ()
- + String toMultilineString (int level)

geco.model.util.WithoutPredicate

- + List<Field> fieldRefs
- + String toMultilineString (int level)

geco.model.util.CaseClause

- + static final int UNDEFINED
- + static final int KEEP_TYPE
- + static final int DROP_TYPE
- + static final String KEEP
- + static final String DROP
- + List<WhereCase> whereList
- + List<FuzzyGenerate> fuzzyGenerateList
- + String others
- + int othersType
- + boolean hasFuzzyGenerate ()
- + toMultilineString (int level)

geco.model.util.WhereCase

- + Condition condition
- + GenerateAction generateAction
- + List<FuzzyGenerate> fuzzyGenerates
- + List<AlphaCut> alphaCuts
- + KeepingDroppingFuzzySets keepDropFuzzySets
- + boolean hasGenerateAction ()
- + boolean hasFuzzyGenerate ()
- + boolean hasAlphaCut ()
- + boolean hasKeepDropFuzzySets()
- + String toMultilineString (int level)

geco.model.util.GenerateAction

- + static final int UNDEFINED
- + static final int GA_COMPLETE
- + static final int GENERATE_ACTION_COMPLETE
- + static final int ONLY_OBJECT_STRUCTURE
- + static final int ONLY_GEOMETRIC_OPTION
- + static final int COUNT_OPTION
- + ObjectStructure objectStructure
- + GeometricOption geometricOption
- + Field countOption
- + int getGenerateActionType ()
- + boolean hasObjectStructure ()
- + boolean hasGeometricOption ()
- + boolean hasCount ()
- + boolean isComplete ()
- + String toMultilineString (int level)

geco.model.util.ObjectStructure

- + List<OutputFieldSpec> outputList
- + String toMultilineString(int level)

geco.model.util.Partition

- + Condition whereCondition
- + List<Field> by
- + Field into
- + List<SortField> sortBy
- + boolean dropGroupingFields
- + GenerateAction generate
- + boolean dropGroupingFields
- + boolean hasGenerateClause ()
- + boolean hasDropGroupingFields ()
- + boolean isSortedBy ()
- + String toMultilineString (int level)

geco.model.util.Unpack

- + Condition where
- + Field array
- + String to
- + GenerateAction generate
- + boolean hasGenerateClause ()
- + toMultilineString (int level)

geco.model.util.GeometricOption

- + static final int UNDEFINED
- + static final int KEEPING
- + static final int DROPPING
- + static final int POINT
- + static final int AGGREGATE
- + static final int FIELD_REF
- + static final int TO_POLYLINE
- + Field latitude
- + Field longitude
- + Field fieldRef
- + Field aggregate
- + int getType ()
- + String toMultilineString(int level)

geco.model.util.OutputFieldSpec

- + static final int UNDEFINED
- + static final int FIELD_REF
- + static final int VALUE_FIELD_REF
- + static final int VALUE_CONSTANT
- + static final int VALUE_OBJECT_STRUCTURE
- + Field fieldRef
- + ObjectStructure valueObjectStructure
- + Field valueField
- + Value value
- + String id ---- deprecated
- + int getOutputFieldSpecType ()

geco.model.util.SpatialJoinCondition

- + static final int UNDEFINED
- + static final int DISTANCE
- + static final int AREA
- + static final int ORIENTATION
- + static final int INCLUDED
- + static final int INCLUDED_LEFT
- + static final int INCLUDED_RIGHT
- + static final int MEET
- + static final int INTERSECT
- + int type
- + String unit
- + SetFuzzySets setFuzzySets
- + float area
- + boolean hasSetFuzzySets ()
- + String from
- + String orientation
- + float delta
- + String side
- + toMultilineString (int level)

geco.model.util.TrajectoryPartition

- + Condition selectionCondition
- + List<PartitionMatching> matchings
- + toMultilineString (int level)

geco.model.util.PartitionMatching

- + Field matching
- + Field wrt
- + String unit
- + double value
- + Condition whereCondition
- + Field into
- + Field pathToInput
- + double similarity
- + boolean hasWhereCondition ()
- + boolean hasPathToInput ()
- + boolean hasSimilarity ()
- + toMultilineString (int level)

geco.model.util.Parameter

- + String var
- + String type

geco.model.util.DbCollection

- + String db
- + String collection
- + String alias
- + boolean equals (DbCollection dc)
- + boolean hasAlias ()
- + boolean hasDbName ()
- + String getDbCollectionString ()

geco.model.util.Field

- +
- +
- +
- +
- +
- + boolean contains (Field fn)
- + boolean isContained (Field fn)

geco.model.util.SortField

- + static final int UNDEFINED
- + static final int ASCENDING
- + static final int DESCENDING
- + Field field
- + int versus
- + String versusStr

geco.model.util.Value

- + static final int INT
- + static final int FLOAT
- + static final int APEX
- + static final int QUOTED
- + static final int BOOLEAN
- + String value
- + String type
- + boolean isApex ()
- + boolean isFloat ()
- + boolean isInt ()
- + boolean isQuoted ()
- + boolean isBoolean ()

geco.model.util.DbName

- + String db
- + String alias

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geco.model.fuzzy.AlphaCut

- + String alphacut
- + String on

geco.model.fuzzy.FuzzyGenerate

- + String fuzzySet
- + Condition using
- + String toMultilineString(int level)

geco.model.fuzzy.FuzzyPoint

- + String x
- + String y
- + double getXvalue ()
- + double getYvalue ()

geco.model.fuzzy.FuzzyRange

- + String x1
- + String x2
- + double getX1value ()
- + double getX2value ()

geco.model.fuzzy.FuzzySetReference

- + static final int UNDEFINED
- + static final int FUZZYSET
- + static final int LEFT_FUZZYSET
- + static final int RIGHT_FUZZYSET
- + static final int HOWMEET
- + static final int INSIDE
- + static final int OVERLAP
- + static final int ALL_PARAMETER
- + static final int LEFT_PARAMETER
- + static final int RIGHT_PARAMETER
- + int type
- + int parameterType
- + String fuzzySet
- + String leftRight
- + String function
- + String parameter
- + String as
- + boolean hasAlias ()
- + boolean hasAs ()

- + static final int UNDEFINED
- + static final int KEEPING
- + static final int DROPPING
- + boolean isDropping ()
- + boolean isKeeping ()

geco.model.fuzzy.IfFails

- + String ifFailsValue
- + LogicalCondition<IffOperator> ifFailsCondition

geco.model.fuzzy.IffOperator

- + String operator
- + List<String> parameters

geco.model.fuzzy.KeepingDroppingFuzzySets

- + static final int UNDEFINED
- + boolean hasSetFuzzySets ()
- + static final int KEEPING
- + static final int DROPPING_ALL
- + static final int KEEPING_ALL
- + List<String> fuzzySets
- + int type
- + String typeString