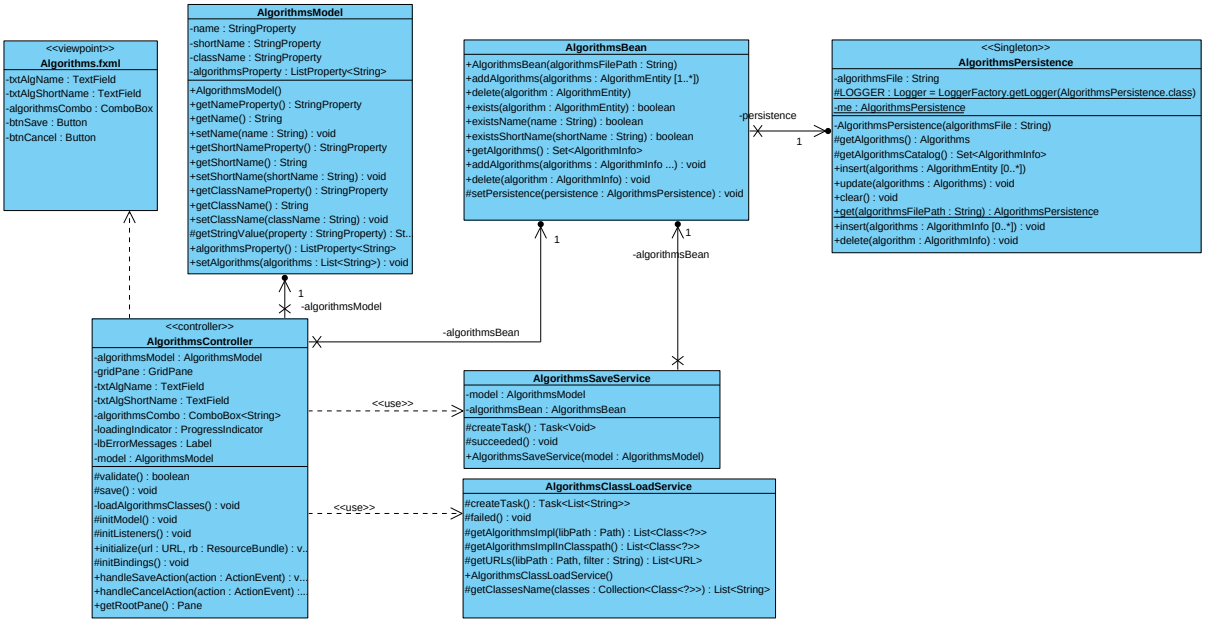
Registrar Algoritmo



Summary

Name	Description
AlgorithmsModel	Model of Algorithms view.
AlgorithmsBean	Business logic for insert, modify and delete algorithms.
AlgorithmsPersistence	Persists the algorithms into an XML file entities using JAXB.
Algorithms.fxml	Algorithms View.
AlgorithmsController	Algorithms FXML Controller class.
AlgorithmsSaveService	Service which saves the algorithms changes.
AlgorithmsClassLoadService	Service which loads the classes name of algorithms implementations found in the workspace classpath.

Description

Class Diagram which presents the relation between involved classes in the algorithms registry.

Details

AlgorithmsModel

Name	Value
Description	Model of Algorithms view.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public

Leaf	false
Root	false

Attributes

private name : javafx.beans.property.StringProperty			
Description	Name.		
Type	javafx.beans.property.StringProperty		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private shortName : javafx.beans.property.StringProperty			
Description	Short name.		
Type	javafx.beans.property.StringProperty		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private className : javafx.beans.property.StringProperty			
Description	Full qualified name of algorithm implementation.		
Type	javafx.beans.property.StringProperty		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		

Read Only	false
Is ID	false
Leaf	false

private algorithmsProperty : javafx.beans.property.ListProperty			
Description	Class algorithms list found in the classpath.		
Template Type Bind Info	N/A		
Type	javafx.beans.property.ListProperty		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

public AlgorithmsModel ()	
Description	Constructor.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public getNameProperty () : javafx.beans.property.StringProperty	
Description	Returns the name property.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	StringProperty.
Query	false

public getName () : String	
Description	Returns the algorithm name.
Leaf	false
Upper	1
Ordered	false
Unique	true

Return Type Description	the name
Query	false

public setName (name : String) : void		
Parameters	name	
	Description	the name to set
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Sets the algorithm name.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public getShortNameProperty () : javafx.beans.property.StringProperty	
Description	Returns the short name property.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	StringProperty.
Query	false

public getShortName () : String	
Description	Returns the algorithm short name.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	the shortName
Query	false

public setShortName (shortName : String) : void		
Parameters	shortName	
	Description	the shortName to set
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Sets the algorithm short name.	

Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public getClassNameProperty () : javafx.beans.property.StringProperty	
Description	Returns the class name property.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	StringProperty.
Query	false

public getClassName () : String	
Description	Returns the full qualified name of algorithm implementation.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	the className
Query	false

public setClassName (className : String) : void		
Parameters	className	
	Description	the className to set
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Sets the full qualified name of algorithm implementation.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected getStringValue (property : javafx.beans.property.StringProperty) : String

Parameters	property	
	Description	Property.
	Multiplicity	1
	Type	javafx.beans.property.StringProperty
	Direction	inout
	Java Detail	N/A
Description	Get the value of a StringProperty.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Value of the StringProperty. {@code null} if property or its value is null.	
Query	false	

public algorithmsProperty () : javafx.beans.property.ListProperty	
Description	Algorithms list.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	the algorithms
Query	false

public setAlgorithms (algorithms : java.util.List) : void		
Parameters	algorithms	
	Description	the algorithms to set
	Multiplicity	0..*
	Template Type Bind Info	N/A
	Type	java.util.List
	Direction	inout
	Java Detail	N/A
Description	Sets the algorithms list.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

AlgorithmsBean

Name	Value
Description	Business logic for insert, modify and delete algorithms.

Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private persistence : AlgorithmsPersistence			
Description	Algorithms persistence.		
Type	AlgorithmsPersistence		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

public AlgorithmsBean (algorithmsFilePath : String)		
Parameters	algorithmsFilePath	
	Description	Workspace path.
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Constructor.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public addAlgorithms (algorithms : AlgorithmEntity)

Parameters	algorithms	
	Description	Algorithms to add.
	Multiplicity	0..*
	Type Modifier	[1..*]
	Type	AlgorithmEntity
	Direction	inout
Description	Updates the algorithms file adding new algorithms. If any algorithms exists, this is overrided.	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

public delete (algorithm : AlgorithmEntity)		
Parameters	algorithm	
	Description	Algorithm
	Multiplicity	1
	Type	AlgorithmEntity
	Direction	inout
Description	Removes an algorithm from algorithms file.	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

public exists (algorithm : AlgorithmEntity) : boolean		
Parameters	algorithm	
	Description	Algorithm
	Multiplicity	1
	Type	AlgorithmEntity
	Direction	inout
Description	If an algorithm exists in algorithms file.	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

public existsName (name : String) : boolean

Parameters	name	
	Description	Name.
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	If exists an algorithm with the name argument.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	{@code true} if exists an algorithm with the name argument exists in algorithms file, {@code false} otherwise.	
Query	false	

public existsShortName (shortName : String) : boolean		
Parameters	shortName	
	Description	Short name.
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	If exists an algorithm with the shortName argument as short name.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	{@code true} if exists an algorithm with the shortName argument as short name exists in algorithms file, {@code false} otherwise.	
Query	false	

public getAlgorithms () : java.util.Set	
Description	Returns the algorithms defined in the algorithms file.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Algorithm Entities list.
Query	false

public addAlgorithms (algorithms : AlgorithmInfo) : void

Parameters	algorithms	
	Description	Algorithms to add.
	Multiplicity	0..*
	Type Modifier	...
	Type	AlgorithmInfo
	Direction	inout
	Java Detail	N/A
Description	Updates the algorithms file adding new algorithms. If any algorithms exists, this is overrided.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public delete (algorithm : AlgorithmInfo) : void		
Parameters	algorithm	
	Description	Algorithm.
	Multiplicity	1
	Type	AlgorithmInfo
	Direction	inout
	Java Detail	N/A
Description	Removes an algorithm from algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected setPersistence (persistence : AlgorithmsPersistence) : void		
Parameters	persistence	
	Multiplicity	1
	Type	AlgorithmsPersistence
	Direction	inout
	Java Detail	N/A
Description	For testing usage.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

AlgorithmsPersistence

Name	Value
Description	Persists the algorithms into an XML file entities using JAXB.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	Singleton

Attributes

private algorithmsFile : String			
Description	Target file.		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

protected LOGGER : org.slf4j.Logger			
Initial Value	LoggerFactory.getLogger(AlgorithmsPersistence.class)		
Type	org.slf4j.Logger		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private me : AlgorithmsPersistence			
Description	Single instance.		
Type	AlgorithmsPersistence		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

private AlgorithmsPersistence (algorithmsFile : String)		
Parameters	algorithmsFile	
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Constructor.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected getAlgorithms () : Algorithms	
Description	Gets an Algorithms entity from a file path.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Algorithms.
Query	false

protected getAlgorithmsCatalog () : java.util.Set	
Description	Returns the registered algorithms.
Leaf	false
Upper	1
Template Type Bind Info	N/A

Ordered	false
Unique	true
Return Type Description	Algorithms catalog.
Query	false

public insert (algorithms : AlgorithmEntity)		
Parameters	algorithms	
	Description	Algorithms to add.
	Multiplicity	0..*
	Type Modifier	[0..*]
	Type	AlgorithmEntity
	Direction	inout
Description	Adds the algorithms of algorithms}param to algorithms file.	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

public update (algorithms : Algorithms) : void		
Parameters	algorithms	
	Description	Algorithms.
	Multiplicity	1
	Type	Algorithms
	Direction	inout
	Java Detail	N/A
Description	Updates the registered algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public clear () : void	
Description	Clears the algorithms file.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public get (algorithmsFilePath : String) : AlgorithmsPersistence

Parameters	algorithmsFilePath	
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Gets a single instance of AlgorithmsPersistence.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	AlgorithmsPersistence.	
Query	false	

public insert (algorithms : AlgorithmInfo) : void		
Parameters	algorithms	
	Description	Algorithms to add.
	Multiplicity	0..*
	Type Modifier	[0..*]
	Type	AlgorithmInfo
	Direction	inout
	Java Detail	N/A
Description	Add the algorithms of algorithms parameter to algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public delete (algorithm : AlgorithmInfo) : void		
Parameters	algorithm	
	Description	Algorithm.
	Multiplicity	1
	Type	AlgorithmInfo
	Direction	inout
	Java Detail	N/A
Description	Deletes an algorithm from algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

Algorithms.fxml

Name	Value
Description	Algorithms View.
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	viewpoint

Attributes

private txtAlgName : TextField			
Type	TextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private txtAlgShortName : TextField			
Type	TextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsCombo : ComboBox			
Type	ComboBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private btnSave : Button			
Type	Button		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private btnCancel : Button			
Type	Button		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

AlgorithmsController

Name	Value
Description	Algorithms FXML Controller class.
Active	false
Business Key Mutable	true
Java Detail	N/A

Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	controller

Attributes

private algorithmsModel : AlgorithmsModel			
Description	Model		
Type	AlgorithmsModel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsBean : AlgorithmsBean			
Description	Algorithms business logic.		
Type	AlgorithmsBean		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private gridPane : javafx.scene.layout.GridPane			
Description	Root pane.		
Type	javafx.scene.layout.GridPane		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		

Aggregation	None
Derived Union	false
Read Only	false
Is ID	false
Leaf	false

private txtAlgName : javafx.scene.control.TextField			
Description	Algorithm name field.		
Type	javafx.scene.control.TextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private txtAlgShortName : javafx.scene.control.TextField			
Description	Short name field.		
Type	javafx.scene.control.TextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsCombo : javafx.scene.control.ComboBox			
Description	Algorithms in the classpath combobox.		
Template Type Bind Info	N/A		
Type	javafx.scene.control.ComboBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		

Java Detail	N/A
Aggregation	None
Derived Union	false
Read Only	false
Is ID	false
Leaf	false

private loadingIndicator : javafx.scene.control.ProgressIndicator			
Description	Indicator of algorithms load.		
Type	javafx.scene.control.ProgressIndicator		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private lbErrorMessages : javafx.scene.control.Label			
Description	Label wich contains error messages.		
Type	javafx.scene.control.Label		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private model : AlgorithmsModel			
Description	Model.		
Type	AlgorithmsModel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		

Java Detail	N/A
Aggregation	None
Derived Union	false
Read Only	false
Is ID	false
Leaf	false

Operations

protected validate () : boolean	
Description	Perform form validations.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	{@code true} if validation is succeeded, {@code false} otherwise.
Query	false

protected save () : void	
Description	Validates the changes and if are ok, these are saved.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

private loadAlgorithmsClasses () : void	
Description	Searchs the algorithms implementations in the classpath, and loads it into the model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected initModel () : void	
Description	Initializes the model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected initListeners () : void	
Description	Ver initListeners(): void.

	Initializes a text change listener for the algorithms combo. This listener only executes once time.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public initialize (url : java.net.URL, rb : java.util.ResourceBundle) : void		
Parameters	url	
	Description	URL of the view.
	Multiplicity	1
	Type	java.net.URL
	Direction	inout
	Java Detail	N/A
	rb	
	Description	Resource bundle.
	Multiplicity	1
	Type	java.util.ResourceBundle
	Direction	inout
	Java Detail	N/A
Description	Initializes the controller class.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected initBindings () : void	
Description	Initializes the bindings between view components and model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public handleSaveAction (action : javafx.event.ActionEvent) : void

Parameters	action	
	Description	Event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Handles the event thrown whtn Save button is pressed. Saves the changes.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public handleCancelAction (action : javafx.event.ActionEvent) : void		
Parameters	action	
	Description	Event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Handles the event thrown when Cancel button is pressed. Ignores the changes and closes the window.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public getRootPane () : javafx.scene.layout.Pane	
Description	Returns the root pane.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

AlgorithmsSaveService

Name	Value
Description	Service which saves the algorithms changes.
Active	false
Business Key Mutable	true

Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private model : AlgorithmsModel			
Description	Model.		
Type	AlgorithmsModel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsBean : AlgorithmsBean			
Description	Algorithms bean.		
Type	AlgorithmsBean		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

protected createTask () : javafx.concurrent.Task	
Description	Creates the background task which saves the changes.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true

Query	false

protected succeeded () : void	
Description	This method is executed when the background task is completed succesfully. Publishes an AlgorithmChangeEvent by Eventbus.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public AlgorithmsSaveService (model : AlgorithmsModel)		
Parameters	model	
	Description	Model.
	Multiplicity	1
	Type	AlgorithmsModel
	Direction	inout
	Java Detail	N/A
Description	Constructor.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

AlgorithmsClassLoadService

Name	Value
Description	Service which loads the classes name of algorithms implementations found in the workspace classpath.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Operations

protected createTask () : javafx.concurrent.Task	
Description	Searches the implementations of Algorithm interface and returns its names.
Leaf	false

Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	List of classes names.
Query	false

protected failed () : void	
Description	This method is executed when the background task is completed with errors.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected getAlgorithmsImpl (libPath : java.nio.file.Path) : java.util.List		
Parameters	libPath	
	Description	Directory that contains libraries.
	Multiplicity	1
	Type	java.nio.file.Path
	Direction	inout
	Java Detail	N/A
Description	Searches the algorithms implementations that contains the jars into current workspace lib folder.	
Leaf	false	
Upper	1	
Template Type Bind Info	N/A	
Ordered	false	
Unique	true	
Return Type Description	List of algorithm classes. @throws IllegalArgumentException When {@code libsPath} is null or empty.	
Query	false	

protected getAlgorithmsImplInClasspath () : java.util.List	
Description	Searches the algorithms implementations in the application classpath.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	List of algorithm classes. @throws IllegalArgumentException When {@code libsPath} is null or empty.
Query	false

protected getURLs (libPath : java.nio.file.Path, filter : String) : java.util.List		
Parameters	libPath	
	Description	Path.
	Multiplicity	1
	Type	java.nio.file.Path
	Direction	inout
	Java Detail	N/A
	filter	
	Description	Filter.
	Multiplicity	1
	Type	String
	Direction	inout
	Java Detail	N/A
Description	Returns the URLS of files of libPath, that matches the filter.	
Leaf	false	
Upper	1	
Template Type Bind Info	N/A	
Ordered	false	
Unique	true	
Return Type Description	List of URL's. @throws IOException	
Query	false	

public AlgorithmsClassLoadService ()	
Description	Constructor.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected getClassesName (classes : java.util.Collection) : java.util.List		
Parameters	classes	
	Description	Classes.
	Multiplicity	0..*
	Template Type Bind Info	N/A
	Type	java.util.Collection
	Direction	inout
	Java Detail	N/A
Description	Returns the names of the classes collection.	
Leaf	false	
Upper	1	

Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	List of classes name.
Query	false