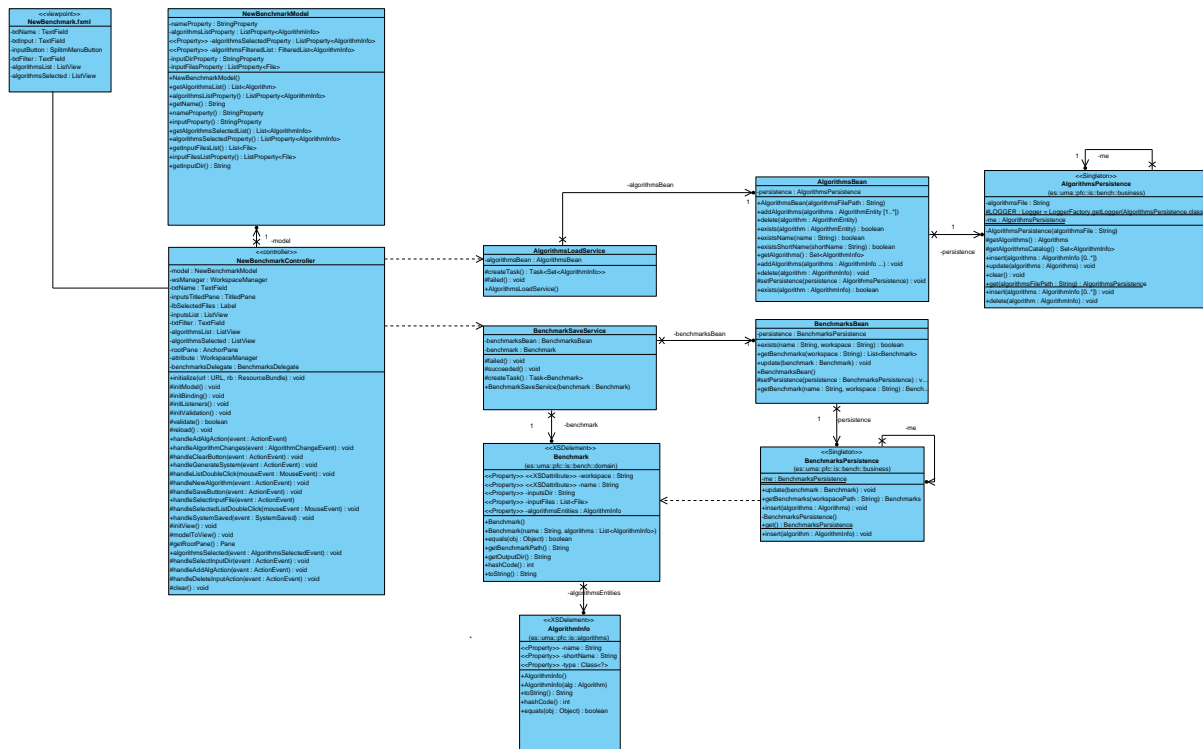













Registrar Benchmark



Summary


Name	Description
 NewBenchmark.fxml	New benchmark view.
 NewBenchmarkModel	New Benchmark view model.
 AlgorithmsPersistence	Persists the algorithms into an XML file entities using JAXB.
 AlgorithmsBean	Business logic for insert, modify and delete algorithms.
 AlgorithmsLoadService	Loads the algorithms declared in algorithms.properties file in the actual workspace.
 NewBenchmarkController	NewBenchmark view Controller class.
 BenchmarksBean	Business logic for insert, modify and delete algorithms.
 BenchmarkSaveService	Service which saves benchmark changes.
 Benchmark	Benchmark entity.
 BenchmarksPersistence	Persist the benchmarks into an XML file entities using JAXB.
	@author Dora Calderón
 AlgorithmInfo	Entity with an algorithm attributes.

Description

Class diagram that shows the relation between the classes involved in the registry of benchmarks.

Details

NewBenchmark.fxml

Name	Value
Description	New benchmark view.
Transit To	 newBenchmark.fxml
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	viewpoint

Attributes

private txtName : TextField			
Description	Name field.		
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 txtInput : TextField			
Description	Absolute path of input implicational system file.		
Type	TextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private inputButton : SplitMenuButton	
Description	Button for select the input implicational system file.

	It has two options: select the file or generate a random system.		
Type	SplitMenuButton		
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 txtFilter : TextField			
Description	Search algorithms field.		
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 algorithmsList : ListView			
Description	Registered algorithms list in the current workspace.		
Type	ListView		
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 algorithmsSelected : ListView			
Description	Selected algorithms.		
Type	ListView		
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		

NewBenchmarkModel


Name	Value
Description	New Benchmark view model.
Transit To	 newBenchmarkModel
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private nameProperty : 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 algorithmsListProperty : javafx.beans.property.ListProperty			
Description	Algorithms list.		
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

private algorithmsSelectedProperty : javafx.beans.property.ListProperty			
Description	Algorithms list.		
Stereotypes	Property		
Template Type Bind Info	N/A		
Type	 javafx.beans.property.ListProperty		
Allow Empty Name	false		
Getter	false	Setter	true
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsFilteredList : javafx.collections.transformation.FilteredList			
Description	Algorithms filtered list.		
Stereotypes	Property		
Template Type Bind Info	N/A		
Type	javafx.collections.transformation.FilteredList		
Allow Empty Name	false		
Getter	true	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private inputDirProperty : javafx.beans.property.StringProperty			
---	--	--	--

Description	Input file path.		
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 inputFilesProperty : javafx.beans.property.ListProperty			
Description	Input files list.		
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 NewBenchmarkModel ()	
Description	Constructor.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public getAlgorithmsList () : java.util.List	
Description	Algorithms list.
Leaf	false
Upper	1
Template Type Bind Info	N/A

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

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

public getName () : String	
Description	Name.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Name.
Query	false

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

public inputProperty () : javafx.beans.property.StringProperty	
Description	Input dir path property.
Transit To	→ bind nameProperty (newBenchmarkController -> newBenchmarkModel)
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	the inputProperty
Query	false

public getAlgorithmsSelectedList () : java.util.List	
Description	Algorithms list.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Algorithms list.
Query	false

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

public getInputFilesList () : java.util.List	
Description	Input files list.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Algorithms list.
Query	false

public inputFilesListProperty () : javafx.beans.property.ListProperty	
Description	Input files list property.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Input files ListProperty.
Query	false

public getInputDir () : String	
Description	Input dir path.
Leaf	false

Upper	1
Ordered	false
Unique	true
Return Type Description	Input dir path.
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 : AlgorithmInfo)		
Parameters	algorithms	
	Description	Algorithms to add.
	Multiplicity	0..*
	Type Modifier	[0..*]
	Type	 AlgorithmInfo
	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	

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	<p>Updates the algorithms file adding new algorithms.</p> <p>If any algorithms exists, this is overrided.</p>	
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 overridden.	
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	

public exists (algorithm : AlgorithmInfo) : boolean		
Parameters	algorithm	
	Description	Algorithm.
	Multiplicity	Unspecified
	Type	 AlgorithmInfo
	Direction	inout
	Java Detail	N/A
Description	If an algorithm exists in algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	{@code true} if an algorithm exists in algorithms file, {@code false} otherwise.	
Query	false	

AlgorithmsLoadService

Name	Value
Description	Loads the algorithms declared in algorithms.properties file in the actual workspace.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private algorithmsBean : AlgorithmsBean	
Description	Algorithms 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		

Operations


protected createTask () : javafx.concurrent.Task	
Description	Creates the background task which loads the registered algorithms.
Leaf	false
Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Algorithms info set.
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


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


NewBenchmarkController

Name	Value
Description	NewBenchmark view Controller class.

Transit To	 newBenchmarkController
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	controller

Attributes

private model : NewBenchmarkModel			
Description	Model.		
Type	 NewBenchmarkModel		
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 wsManager : WorkspaceManager			
Type	 WorkspaceManager		
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 txtName : javafx.scene.control.TextField			
Description	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 inputsTitledPane : javafx.scene.control.TitledPane			
Description	Container of inputs implicational systems selected.		
Type	javafx.scene.control.TitledPane		
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 lbSelectedFiles : javafx.scene.control.Label			
Description	Label with selected files count.		
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 inputsList : javafx.scene.control.ListView			
Description	List of selected input files.		
Type	javafx.scene.control.ListView		
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 txtFilter : javafx.scene.control.TextField			
Description	Algorithms filter.		
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 algorithmsList : javafx.scene.control.ListView			
Description	Available algorithms.		
Type	javafx.scene.control.ListView		
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 algorithmsSelected : javafx.scene.control.ListView			
Description	Algorithms selected.		
Type	javafx.scene.control.ListView		
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 rootPane : javafx.scene.layout.AnchorPane			
Description	Root pane.		
Type	javafx.scene.layout.AnchorPane		
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 attribute : WorkspaceManager			
Description	Workspace manager.		
Type	 WorkspaceManager		
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 benchmarksDelegate : BenchmarksDelegate			
Description	Delegate.		
Type	 BenchmarksDelegate		
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 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 initModel () : void	
Description	Initializes the model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected initBinding () : void	
Description	Initializes the binding between view components and the model.
Leaf	false
Upper	1

Ordered	false
Unique	true
Query	false


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

protected initValidation () : void	
Description	Initializes the validation support.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected validate () : boolean	
Description	Form validations.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	{@code true} if there is one algorithm selected at least, and the benchmark name not exists or user wants override it, and parent validations is succeeded. {@code false} otherwise.
Query	false

protected reload () : void	
Description	Reloads the view and model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public handleAdAlgAction (event : ActionEvent)		
Parameters	event	
	Multiplicity	1
	Type	ActionEvent
	Direction	inout
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

public handleAlgorithmChanges (event : AlgorithmChangeEvent) : void		
Parameters	event	
	Description	Event.
	Multiplicity	1
	Type	 AlgorithmChangeEvent
	Direction	inout
	Java Detail	N/A
Description	Handles the AlgorithmChangeEvent published by the Eventbus. Reloads the model and view.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected handleClearButton (event : javafx.event.ActionEvent) : void		
Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	When the Clear button is pressed, the fields are cleared.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public handleGenerateSystem (event : javafx.event.ActionEvent) : void		
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Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Shows the generator panel for generate a random system.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected handleListDoubleClick (mouseEvent : javafx.scene.input.MouseEvent) : void		
Parameters	mouseEvent	
	Description	Mouse event.
	Multiplicity	1
	Type	javafx.scene.input.MouseEvent
	Direction	inout
	Java Detail	N/A
Description	When there is a double click in algorithms list, the selection is added to algorithms selected.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected handleNewAlgorithm (event : javafx.event.ActionEvent) : void		
Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Handles the event thrown when New Algorithm button is pressed.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


protected handleSaveButton (event : javafx.event.ActionEvent) : void		
--	--	--

Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	When the Save button is pressed, the current values are validated and saved.	
Transit To	→ N/A (newBenchmark.fxml -> newBenchmarkController)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public handleSelectInputFile (event : ActionEvent)		
Parameters	event	
	Multiplicity	1
	Type	ActionEvent
	Direction	inout
Transit To	→ Diagrama de Secuencia 1.1.1: name change (newBenchmark.fxml : NewBenchmark.fxml -> newBenchmarkController : NewBenchmarkController)	
	→ Diagrama de Secuencia 1.2.1: handleSelectInputFile(event : ActionEvent) (newBenchmark.fxml : NewBenchmark.fxml -> newBenchmarkController : NewBenchmarkController)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

protected handleSelectedListDoubleClick (mouseEvent : javafx.scene.input.MouseEvent) : void		
Parameters	mouseEvent	
	Description	Mouse event.
	Multiplicity	1
	Type	javafx.scene.input.MouseEvent
	Direction	inout
	Java Detail	N/A
Description	When there is a double click in selected algorithms list, the selection is remove from algorithms selected.	
Transit To	→ N/A (newBenchmark.fxml -> newBenchmarkController)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	

Query	false
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public handleSystemSaved (event : SystemSaved) : void		
Parameters	event	
	Description	Event.
	Multiplicity	1
	Type	 SystemSaved
	Direction	inout
	Java Detail	N/A
Description	Handles the {@link SystemSaved} event, copying the path of system into input field.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected initView () : void	
Description	Initializes the inputsList selection mode.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	@throws IOException
Query	false

protected modelToView () : void	
Description	Load the algorithms list with algorithmtms of the model.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected getRootPane () : javafx.scene.layout.Pane	
Description	Root pane.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Pane.
Query	false

public algorithmsSelected (event : AlgorithmsSelectedEvent) : void	
--	--

Parameters	event	
	Description	Event.
	Multiplicity	1
	Type	 AlgorithmsSelectedEvent
	Direction	inout
	Java Detail	N/A
Description	Handles the AlgorithmsSelectedEvent published by the Eventbus. Adds all algorithms contained in the event to algorithms selected list.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


protected handleSelectInputDir (event : javafx.event.ActionEvent) : void		
Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Shows a file chooser for select the input system file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected handleAddAlgAction (event : javafx.event.ActionEvent) : void		
Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	When the Add Algorithm button is pressed, the New Algorithm window is shown.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


protected handleDeleteInputAction (event : javafx.event.ActionEvent) : void		
Parameters	event	
	Description	Action event.
	Multiplicity	1
	Type	javafx.event.ActionEvent
	Direction	inout
	Java Detail	N/A
Description	Deletes the current selection in the inputs list.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

protected clear () : void	
Description	Clears all fields.
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

BenchmarksBean

Name	Value
Description	Business logic for insert, modify and delete algorithms.
Transit To	 benchmarksBean
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private persistence : BenchmarksPersistence			
Description	Benchmarks persistence.		
Type	 BenchmarksPersistence		
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 exists (name : String, workspace : String) : boolean		
Parameters	name	
	Description	Benchmark name.
	Multiplicity	Unspecified
	Type	● String
	Direction	inout
	Java Detail	N/A
	workspace	
	Description	Workspace path.
	Multiplicity	Unspecified
	Type	● String
	Direction	inout
	Java Detail	N/A
Description	If exists a benchmark with the name argument in a workspace.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	{@code true} if exists a benchmark with the name argument, {@code false} otherwise.	
Query	false	

public getBenchmarks (workspace : String) : java.util.List		
Parameters	workspace	
	Description	Workspace path.
	Multiplicity	Unspecified
	Type	● String
	Direction	inout
	Java Detail	N/A
Description	Returns a workspace registered benchmarks.	
Leaf	false	
Upper	1	
Template Type Bind Info	N/A	
Ordered	false	

Unique	true
Return Type Description	Algorithm Entities list. @throws java.lang.Exception
Query	false

public update (benchmark : Benchmark) : void		
Parameters	benchmark	
	Description	Benchmark.
	Multiplicity	Unspecified
	Type	 Benchmark
	Direction	inout
	Java Detail	N/A
Description	Create the directory tree of benchmark.	
Transit To	→ N/A (benchmarkSaveService -> benchmarksBean)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	@throws java.io.IOException	
Query	false	


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

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


public getBenchmark (name : String, workspace : String) : Benchmark	
---	--

Parameters	name	
	Description	Benchmark name.
	Multiplicity	Unspecified
	Type	● String
	Direction	inout
	Java Detail	N/A
	workspace	
	Description	Workspace path.
	Multiplicity	Unspecified
	Type	● String
	Direction	inout
	Java Detail	N/A
Description	Returns a benchmark registered in a workspace. {@code null} if no exists.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Algorithm Entities list. @throws java.lang.Exception	
Query	false	


BenchmarkSaveService

Name	Value
Description	Service which saves benchmark changes.
Transit To	 benchmarkSaveService
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Attributes

private benchmarksBean : BenchmarksBean			
Description	Benchmarks logic.		
Type	 BenchmarksBean		
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 benchmark : Benchmark			
Description	Benchmark a guardar.		
Type	 Benchmark		
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		


Operations

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 succeeded () : void	
Description	This method is executed when the background task is completed succesfully. Publishes a BenchmarksChangeEvent and MessageEvent by the Eventbus.
Transit To	→ N/A (benchmarkSaveService -> benchmarkSaveService)
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

protected createTask () : javafx.concurrent.Task	
Description	Creates the background task which saves the benchmarks changes.
Transit To	→ N/A (benchmarkSaveService -> benchmarkSaveService)
Leaf	false


Upper	1
Template Type Bind Info	N/A
Ordered	false
Unique	true
Return Type Description	Updated benchmark.
Query	false

public BenchmarkSaveService (benchmark : Benchmark)		
Parameters	benchmark	
	Description	Benchmark to save.
	Multiplicity	Unspecified
	Type	 Benchmark
	Direction	inout
	Java Detail	N/A
Description	Constructor.	
Transit To	→ N/A (newBenchmarkController -> benchmarkSaveService)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


Benchmark


Name	Value
Description	Benchmark entity.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	true
Visibility	public
Leaf	false
Root	false
Stereotypes	XSDelement

Attributes

private workspace : String			
Description	Workspace.		
Stereotypes	Property, XSDattribute		
Type	 String		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		


Multiplicity	1
Java Detail	N/A
Aggregation	None
Derived Union	false
Read Only	false
Is ID	false
Leaf	false

private name : String			
Description	Name.		
Stereotypes	Property, XSDattribute		
Type	 String		
Allow Empty Name	false		
Getter	true	Setter	false
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	true		
Leaf	false		

private inputsDir : String			
Description	Input implicational systems dir path.		
Stereotypes	Property		
Type	 String		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private inputFiles : java.util.List			
Description	Input files which will be copied to input dir.		
Stereotypes	Property		
Template Type Bind Info	N/A		


Type	java.util.List		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		
Multiplicity	1..*		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

private algorithmsEntities : AlgorithmInfo			
Stereotypes	Property		
Type	 AlgorithmInfo		
Allow Empty Name	false		
Getter	true	Setter	false
Derived	false		
Multiplicity	*		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

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

public Benchmark (name : String, algorithms : java.util.List)

Parameters	name	
	Description	Name.
	Multiplicity	1
	Type	 String
	Direction	inout
	Java Detail	N/A
	algorithms	
	Description	Algorithms.
	Multiplicity	1..*
	Template Type Bind Info	N/A
	Type	java.util.List
	Direction	inout
	Java Detail	N/A
Description	Constructor.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	@throws IllegalArgumentException if name or algorithms list is empty.	
Query	false	

public equals (obj : Object) : boolean		
Parameters	obj	
	Multiplicity	Unspecified
	Type	Object
	Direction	inout
	Java Detail	N/A
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


public getBenchmarkPath () : String	
Description	The benchmark path.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Benchmark path.
Query	false

public getOutputDir () : String	
Description	Path of output dir of benchmark.
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Path.
Query	false


public hashCode () : int	
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public toString () : String	
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

BenchmarksPersistence


Name	Value
Description	Persist the benchmarks into an XML file entities using JAXB. @author Dora Calderón
Transit To	 benchmarksPersistence
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	Singleton


Attributes

private me : BenchmarksPersistence	
Description	Single instance.
Type	 BenchmarksPersistence
Allow Empty Name	false


Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

public update (benchmark : Benchmark) : void		
Parameters	benchmark	
	Description	Algorithms.
	Multiplicity	Unspecified
	Type	 Benchmark
	Direction	inout
	Java Detail	N/A
Description	Initialize the benchmarks file with {@code benchmarks} param.	
Transit To	→ N/A (benchmarksBean -> benchmarksPersistence)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	


public getBenchmarks (workspacePath : String) : Benchmarks		
Parameters	workspacePath	
	Multiplicity	Unspecified
	Type	 String
	Direction	inout
	Java Detail	N/A
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public insert (algorithms : Algorithms) : void			
--	--	--	--

Parameters	algorithms	
	Multiplicity	Unspecified
	Type	 Algorithms
	Direction	inout
	Java Detail	N/A
Description	Add the algorithms of {@code algorithms} param to algorithms file.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

private BenchmarksPersistence ()		
Description	Constructor.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public get () : BenchmarksPersistence		
Description	Get a single instance of BenchmarksPersistence.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	BenchmarksPersistence.	
Query	false	


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




AlgorithmInfo


Name	Value
Description	Entity with an algorithm attributes.
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	true
Visibility	public
Leaf	false
Root	false
Stereotypes	XSDelement

Attributes

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


private shortName : String			
Description	Short name.		
Stereotypes	Property		
Type	 String		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		

Leaf	false
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private type : Class			
Description	Algorithm implementation class.		
Stereotypes	Property		
Template Type Bind Info	N/A		
Type	 Class		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		
Multiplicity	1		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Operations

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

public AlgorithmInfo (alg : Algorithm)		
Parameters	alg	
	Description	Algorithm.
	Multiplicity	1
	Type	 Algorithm
	Direction	inout
	Java Detail	N/A
Description	Constructs an AlgorithmInfo instance from an algorithm implementation.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

public toString () : String	
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public hashCode () : int	
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

public equals (obj : Object) : boolean		
Parameters	obj	
	Multiplicity	Unspecified
	Type	Object
	Direction	inout
	Java Detail	N/A
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	