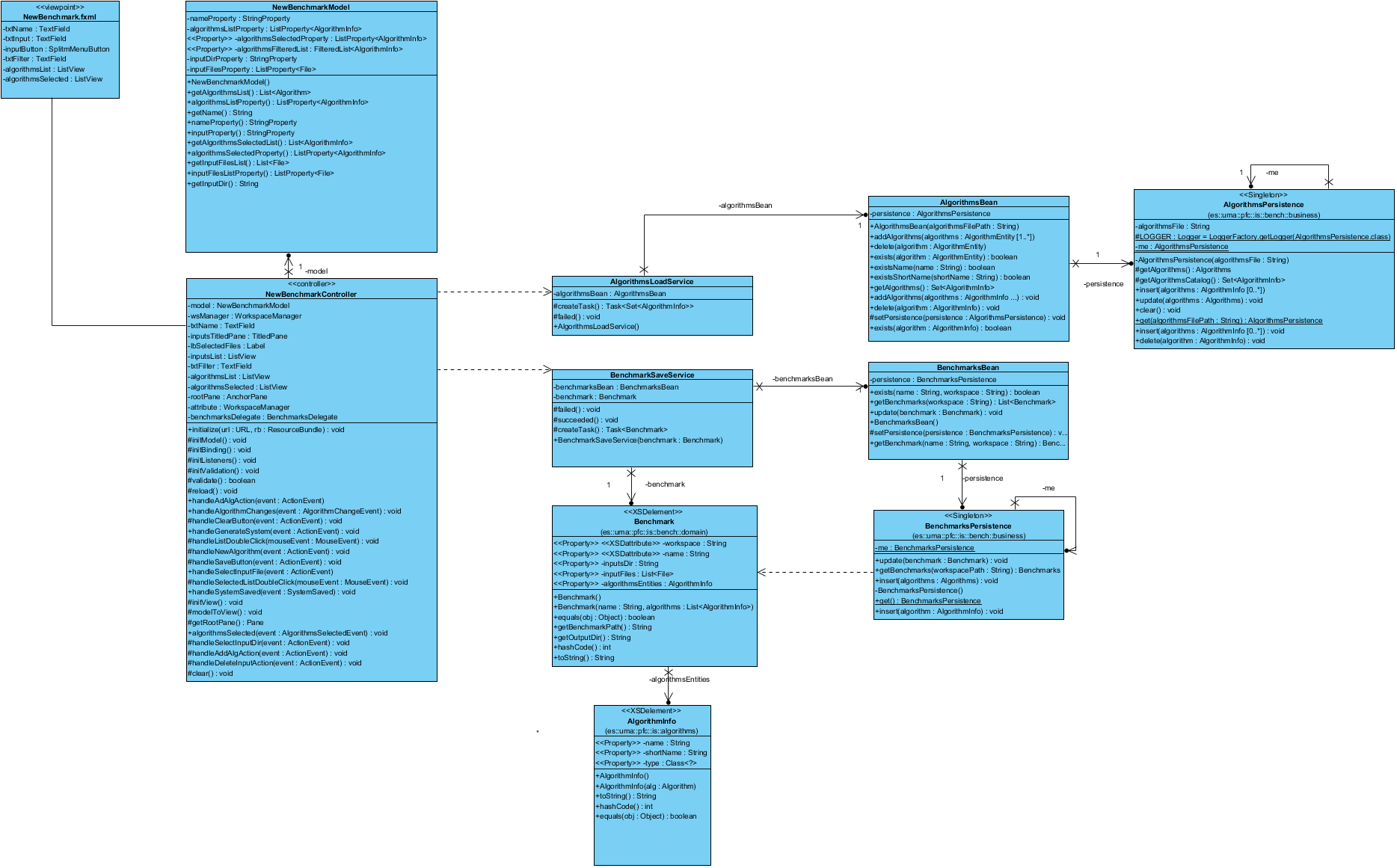
# Registrar Benchmark



## Summary

|  |  |
| --- | --- |
| **Name** | **Description** |
| Image1.png [NewBenchmark.fxml](#1jX1Q_KGAqACJApR) | New benchmark view. |
| Image1.png [NewBenchmarkModel](#f7YNQ_KGAqACJAp_) | New Benchmark view model. |
| Image1.png [AlgorithmsPersistence](#yZEWmwqGAqACIS2F) | Persists the algorithms into an XML file entities using JAXB. |
| Image1.png [AlgorithmsBean](#Oq2DQ_KGAqACJA6Q) | Business logic for insert, modify and delete algorithms. |
| Image1.png [AlgorithmsLoadService](#x0KcC_KGAqACIQ6f) | Loads the algorithms declared in algorithms.properties file in the actual workspace. |
| Image1.png [NewBenchmarkController](#y7L1Q_KGAqACJAo_) | NewBenchmark view Controller class. |
| Image1.png [BenchmarksBean](#WI.rQ_KGAqACJBFe) | Business logic for insert, modify and delete algorithms. |
| Image1.png [BenchmarkSaveService](#NyMcC_KGAqACIQ6H) | Service which saves benchmark changes. |
| Image1.png [Benchmark](#dkHqmwqGAqACISvp) | Benchmark entity. |
| Image1.png [BenchmarksPersistence](#i.sWmwqGAqACIS2W) | Persist the benchmarks into an XML file entities using JAXB.    @author Dora Calderón |
| Image1.png [AlgorithmInfo](#7AAGmwqGAqACISxk) | Entity with an algorithm attributes. |

#### Description

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

## Details

### Image2.png NewBenchmark.fxml

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | New benchmark view. |
| Transit To | Image3.png 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 : SplitmMenuButton** | | | |
| Description | Button for select the input implicational system file.  It has two options: select the file or generate a random system. | | |
| Type | SplitmMenuButton | | |
| 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 | | |

#### Tagged Values

|  |  |
| --- | --- |
| **Stakeholders** | |
| Description | The set of stakeholders. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Stakeholders |
| Tag Definition Stereotype | Image4.png viewpoint |

|  |  |
| --- | --- |
| **Purpose** | |
| Description | The purpose addresses the stakeholder concerns. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Purpose |
| Tag Definition Stereotype | Image4.png viewpoint |

|  |  |
| --- | --- |
| **Concerns** | |
| Description | The interest of the stakeholders. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Concerns |
| Tag Definition Stereotype | Image4.png viewpoint |

|  |  |
| --- | --- |
| **Languages** | |
| Description | The languages used to construct the viewpoint. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Languages |
| Tag Definition Stereotype | Image4.png viewpoint |

|  |  |
| --- | --- |
| **Methods** | |
| Description | The methods used to construct the views for this viewpoint. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Methods |
| Tag Definition Stereotype | Image4.png viewpoint |

### Image2.png NewBenchmarkModel

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | New Benchmark view model. |
| Transit To | Image3.png 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 | Image5.png 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 | Image5.png 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 | Algorhtms 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 | Image5.png 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 | Image6.png 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 |

### Image2.png 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 | Image5.png 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 | Image2.png [AlgorithmsPersistence](#EC1FHfKGAqACITI0) | | |
| 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 | Image5.png 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | 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 | Image2.png 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 | Image5.png 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | Direction | inout | | Java Detail | N/A | |
| Description | Deletes an algorithm from algorithms file. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

### Image2.png 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 | Image2.png [AlgorithmsPersistence](#EC1FHfKGAqACITI0) | | |
| 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 | Image5.png 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 | Image2.png 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 | Image2.png 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 | Image2.png 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 | Image5.png 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 | Image5.png 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | 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 | Image2.png [AlgorithmsPersistence](#EC1FHfKGAqACITI0) | | 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | 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 |

### Image2.png 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 | Image2.png [AlgorithmsBean](#cbtFHfKGAqACITJa) | | |
| 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 laods 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 |

### Image2.png NewBenchmarkController

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | NewBenchmark view Controller class. |
| Transit To | Image3.png 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 | Image2.png [NewBenchmarkModel](#f7YNQ_KGAqACJAqA) | | |
| 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 | Image2.png 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 | Image2.png 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 | Image2.png 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 | Image2.png 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** | |
| 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 | Image6.png 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 | |  | | --- | | Image6.png Diagrama de Secuencia1.1.1: name change (newBenchmark.fxml : NewBenchmark.fxml -> newBenchmarkController : NewBenchmarkController) | | Image6.png Diagrama de Secuencia1.2.1: 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 | Image6.png N/A (newBenchmark.fxml -> newBenchmarkController) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleSystemSaved (event : SystemSaved) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | 1 | | Type | Image2.png 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 algorihtms 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 | Image2.png 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 |

### Image2.png BenchmarksBean

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Business logic for insert, modify and delete algorithms. |
| Transit To | Image3.png 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 | Image2.png [BenchmarksPersistence](#LMsjQ_KGAqACJA7g) | | |
| 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 | Image5.png String | | Direction | inout | | Java Detail | N/A |  |  |  | | --- | --- | | **workspace** | | | Description | Workspace path. | | Multiplicity | Unspecified | | Type | Image5.png 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 | Image5.png 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 | Image2.png [Benchmark](#r2BkHfKGAqACISZ0) | | Direction | inout | | Java Detail | N/A | |
| Description | Create the directory tree of benchmark. |
| Transit To | Image6.png 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 | Image2.png [BenchmarksPersistence](#LMsjQ_KGAqACJA7g) | | 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 | Image5.png String | | Direction | inout | | Java Detail | N/A |  |  |  | | --- | --- | | **workspace** | | | Description | Workspace path. | | Multiplicity | Unspecified | | Type | Image5.png 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 |

### Image2.png BenchmarkSaveService

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Service which saves benchmark changes. |
| Transit To | Image3.png 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 | Image2.png [BenchmarksBean](#KwELQ_KGAqACJBC4) | | |
| 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 | Image2.png [Benchmark](#r2BkHfKGAqACISZ0) | | |
| 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 | Image6.png 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 | Image6.png 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 | Image2.png [Benchmark](#r2BkHfKGAqACISZ0) | | Direction | inout | | Java Detail | N/A | |
| Description | Constructor. |
| Transit To | Image6.png N/A (newBenchmarkController -> benchmarkSaveService) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

### Image2.png 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 | Image5.png 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 | Image5.png 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 | Image5.png 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | |
| 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 | Image5.png 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 |

### Image2.png BenchmarksPersistence

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Persist the benchmarks into an XML file entities using JAXB.    @author Dora Calderón |
| Transit To | Image3.png 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 | Image2.png [BenchmarksPersistence](#LMsjQ_KGAqACJA7g) | | |
| 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 | Image2.png [Benchmark](#r2BkHfKGAqACISZ0) | | Direction | inout | | Java Detail | N/A | |
| Description | Initialize the benchmarks file with {@code benchmarks} param. |
| Transit To | Image6.png N/A (benchmarksBean -> benchmarksPersistence) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public getBenchmarks (workspacePath : String) : Benchmarks** | |
| Parameters | |  |  | | --- | --- | | **workspacePath** | | | Multiplicity | Unspecified | | Type | Image5.png 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 | Image2.png 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 | Image2.png [AlgorithmInfo](#IIlEkwqGAqACIUbm) | | Direction | inout | | Java Detail | N/A | |
| Description | Add an algorithm to algorithms file. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

### Image2.png 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 | Image5.png 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 | Image5.png 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 type : Class** | | | |
| Description | Algorithm implementation class. | | |
| Stereotypes | Property | | |
| Template Type Bind Info | N/A | | |
| Type | Image2.png 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 | Image2.png 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 |