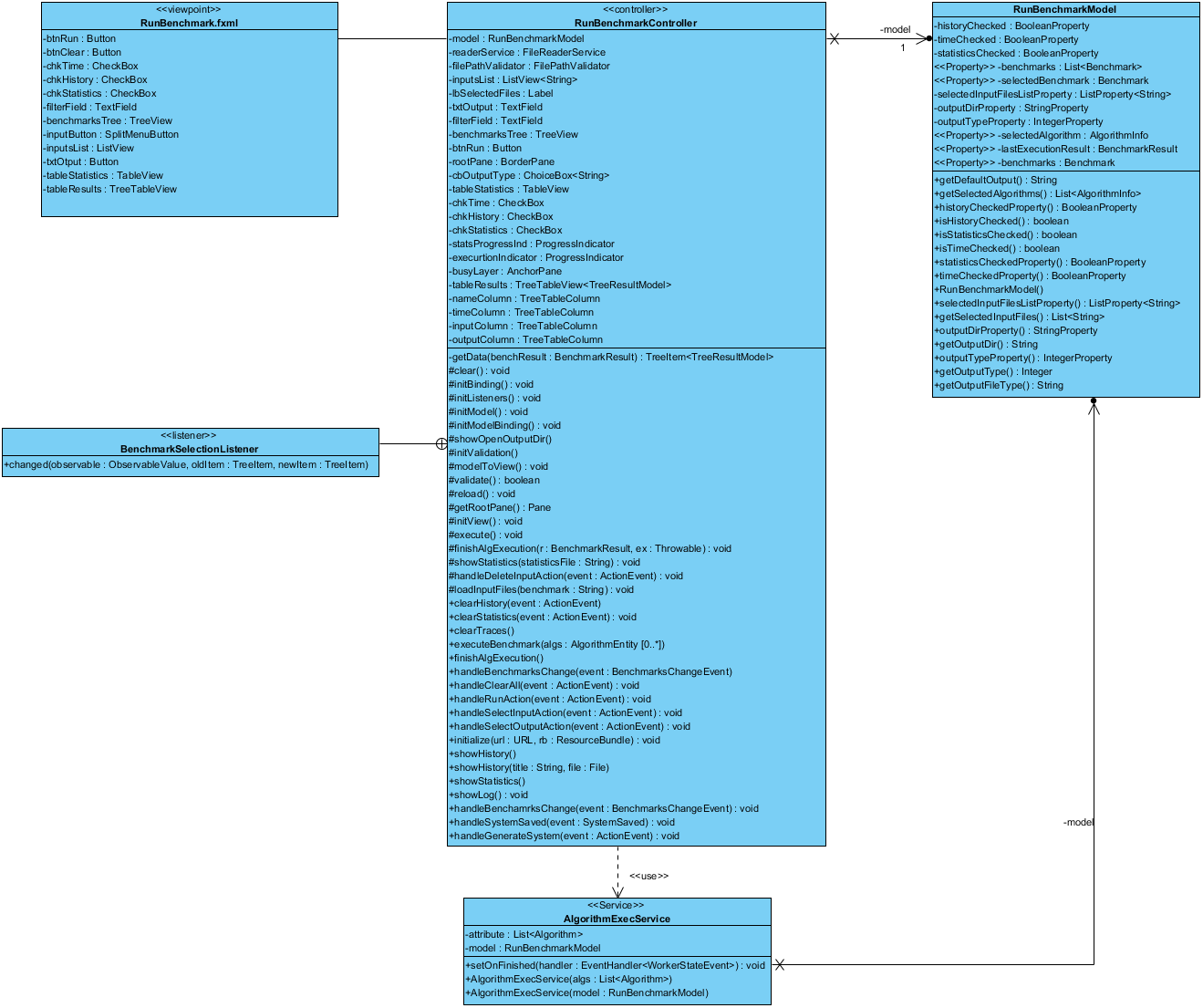
# es.uma.pfc.is.bench.benchmarks.execution



## Summary

|  |  |
| --- | --- |
| **Name** | **Description** |
| Image1.png [RunBenchmark.fxml](#fRdhi_KGAqACIRit) | Benchmarks execution view. |
| Image1.png [RunBenchmarkController](#.pPei_KGAqACIRdn) | Run view controller. |
| Image1.png [RunBenchmarkModel](#K_2hi_KGAqACIRhu) | Benchmarks execution model. |
| Image1.png [BenchmarkSelectionListener](#66vei_KGAqACIRd4) | Benchmarks tree listener.  \* When a benchmark is selected, the output field is initialized with benchmark output dir and is disabled.  \* In this case, the mode checks and console outputs are disabled too.  \* If the selection is an algorithm, the output field is enabled and initialized with the path of algorithm default  \* output file.  \* If the selection is more than one algorithm, the output field is cleared and disabled.  \* If the selection contains benchmarks and algorithms the output field is cleared ant the Run button disabled. |
| Image1.png [AlgorithmExecService](#PJNpxwqGAqACImZo) | Service for the background execution of algorithms and benchmarks.  @author Dora Calderón |

## Details

### Image2.png RunBenchmark.fxml

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Benchmarks execution view. |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |
| Stereotypes | viewpoint |

#### Attributes

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **private chkTime : CheckBox** | | | |
| Description | Check for to enable / disable the Time mode. | | |
| Type | CheckBox | | |
| 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 chkHistory : CheckBox** | | | |
| Description | Check for to enable / disable the Trace mode. | | |
| Type | CheckBox | | |
| 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 chkStatistics : CheckBox** | | | |
| Description | Check for to enable / disable the Statistics mode. | | |
| Type | CheckBox | | |
| 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 filterField : TextField** | | | |
| Description | Filter over the benchmarks tree. | | |
| 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 benchmarksTree : TreeView** | | | |
| Description | Two levels tree with the current workspace registered benchmarks at the first level, and its algorithms at the second level. | | |
| Type | TreeView | | |
| 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 inputButton : javafx.scene.control.SplitMenuButton** | | | |
| Description | Menu button which shows the dialog box for to select the input files.  Contains two options: select the existent file or generate a random implicational system. | | |
| Type | javafx.scene.control.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 inputsList : javafx.scene.control.ListView** | | | |
| Description | Iinput implicational system file paths list. | | |
| Type | javafx.scene.control.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 txtOtput : Button** | | | |
| Description | Campo de texto para la ruta absoluta del archivo en el que se guarda el sistema implicacional de salida. | | |
| Type | Button | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | 1 | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private tableStatistics : TableView** | | | |
| Description | Table which contains the sizes statistics if the Statistics mode is enabled. | | |
| Type | TableView | | |
| 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 tableResults : javafx.scene.control.TreeTableView** | | | |
| Description | Table which contains the results of the executed benchmark, grouped by benchmark and algorithm. | | |
| Type | javafx.scene.control.TreeTableView | | |
| 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 | Image3.png viewpoint |

|  |  |
| --- | --- |
| **Purpose** | |
| Description | The purpose addresses the stakeholder concerns. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Purpose |
| Tag Definition Stereotype | Image3.png viewpoint |

|  |  |
| --- | --- |
| **Concerns** | |
| Description | The interest of the stakeholders. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Concerns |
| Tag Definition Stereotype | Image3.png viewpoint |

|  |  |
| --- | --- |
| **Languages** | |
| Description | The languages used to construct the viewpoint. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Languages |
| Tag Definition Stereotype | Image3.png viewpoint |

|  |  |
| --- | --- |
| **Methods** | |
| Description | The methods used to construct the views for this viewpoint. |
| Type | Text |
| Multiplicity | Unspecified |
| Tag Definition | Methods |
| Tag Definition Stereotype | Image3.png viewpoint |

### Image2.png RunBenchmarkController

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Run view controller. |
| Active | false |
| Business Key Mutable | true |
| Java Detail | N/A |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |
| Stereotypes | controller |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private model : RunBenchmarkModel** | | | |
| Description | Model. | | |
| Type | Image2.png [RunBenchmarkModel](#jn3JC_KGAqACIRKd) | | |
| 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 readerService : FileReaderService** | | | |
| Description | Servicio que lee un fichero. Se utiliza para leer la traza generada. | | |
| Type | Image2.png FileReaderService | | |
| 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 filePathValidator : FilePathValidator** | | | |
| Description | Validador de las rutas de ficheros de entrada y salida. | | |
| Type | FilePathValidator | | |
| 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 inputsList : javafx.scene.control.ListView** | | | |
| Template Type Bind Info | N/A | | |
| Type | javafx.scene.control.ListView | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private lbSelectedFiles : javafx.scene.control.Label** | | | |
| Description | Path output file. | | |
| Type | javafx.scene.control.Label | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private txtOutput : javafx.scene.control.TextField** | | | |
| Description | Output field. | | |
| Type | javafx.scene.control.TextField | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private filterField : javafx.scene.control.TextField** | | | |
| Description | Algorithms filter. | | |
| Type | javafx.scene.control.TextField | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private benchmarksTree : javafx.scene.control.TreeView** | | | |
| Description | Benchmarks and algorithms tree. | | |
| Type | javafx.scene.control.TreeView | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private btnRun : javafx.scene.control.Button** | | | |
| Description | Run Button. | | |
| Type | javafx.scene.control.Button | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private rootPane : javafx.scene.layout.BorderPane** | | | |
| Description | Root pane. | | |
| Type | javafx.scene.layout.BorderPane | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private cbOutputType : javafx.scene.control.ChoiceBox** | | | |
| Description | Output type combobox. | | |
| Template Type Bind Info | N/A | | |
| Type | javafx.scene.control.ChoiceBox | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private tableStatistics : javafx.scene.control.TableView** | | | |
| Description | Table with statistics results. | | |
| Type | javafx.scene.control.TableView | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private chkTime : javafx.scene.control.CheckBox** | | | |
| Description | Mode checks. | | |
| Type | javafx.scene.control.CheckBox | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private chkHistory : javafx.scene.control.CheckBox** | | | |
| Description | Mode checks. | | |
| Type | javafx.scene.control.CheckBox | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private chkStatistics : javafx.scene.control.CheckBox** | | | |
| Description | Mode checks. | | |
| Type | javafx.scene.control.CheckBox | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private statsProgressInd : javafx.scene.control.ProgressIndicator** | | | |
| Description | Statistics loading progress indicator. | | |
| Type | javafx.scene.control.ProgressIndicator | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private execurtionIndicator : javafx.scene.control.ProgressIndicator** | | | |
| Description | Execution progress indicator. | | |
| Type | javafx.scene.control.ProgressIndicator | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private busyLayer : javafx.scene.layout.AnchorPane** | | | |
| Description | Layer which contains progress indicators. | | |
| Type | javafx.scene.layout.AnchorPane | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private tableResults : javafx.scene.control.TreeTableView** | | | |
| Description | Execution results table. | | |
| Template Type Bind Info | N/A | | |
| Type | javafx.scene.control.TreeTableView | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private nameColumn : javafx.scene.control.TreeTableColumn** | | | |
| Description | Columns of execution results table. | | |
| Type | javafx.scene.control.TreeTableColumn | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private timeColumn : javafx.scene.control.TreeTableColumn** | | | |
| Description | Columns of execution results table. | | |
| Type | javafx.scene.control.TreeTableColumn | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private inputColumn : javafx.scene.control.TreeTableColumn** | | | |
| Description | Columns of execution results table. | | |
| Type | javafx.scene.control.TreeTableColumn | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private outputColumn : javafx.scene.control.TreeTableColumn** | | | |
| Description | Columns of execution results table. | | |
| Type | javafx.scene.control.TreeTableColumn | | |
| 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

|  |  |
| --- | --- |
| **protected clear () : void** | |
| Description | Clears the model and the view. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public clearHistory (event : ActionEvent)** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Multiplicity | Unspecified | | Type | ActionEvent | | Direction | inout | |
| Description | Limpia el visor de traza, cuando se selecciona la opción en el menú contextual. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public clearStatistics (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Limpia el visor de traza, cuando se selecciona la opción en el menú contextual. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public clearTraces ()** | |
| Description | Limpia el visor de traza y estadísticas. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public executeBenchmark (algs : AlgorithmEntity)** | |
| Parameters | |  |  | | --- | --- | | **algs** | | | Description | Algoritmos a ejecutar. | | Multiplicity | 1..\* | | Type Modifier | [0..\*] | | Type | AlgorithmEntity | | Direction | inout | |
| Description | Ejecuta los algoritmos de un benchmark. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public finishAlgExecution ()** | |
| Description | Si se ha ejecutado un algoritmo, muestra las trazas generadas si se han seleccionado y si se ha ejecutado sólo un algoritmo.  Si se ha ejecutado un benchmark, pregunta al usuario si desea abrir el archivo de salida. |
| Transit To | Image4.png N/A (RunBenchmarkController -> RunBenchmarkController) |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleBenchmarksChange (event : BenchmarksChangeEvent)** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Evento de cambio de benchmarks registrados. | | Multiplicity | Unspecified | | Type | Image2.png BenchmarksChangeEvent | | Direction | inout | |
| Description | Actualiza el árbol de bechmarks cuando hay algún cambio. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleClearAll (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | ActionEvent handler of Run button.  Clear all traces. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleRunAction (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Handles the event thrown when Run button is pressed.  Runs the selected benchmark / algorithm. |
| Transit To | Image4.png N/A (RunBenchmark.fxml -> RunBenchmarkController) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleSelectInputAction (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Shows a dialog box for select the input of algorithm. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleSelectOutputAction (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Shows the dialog box for select the target of algorithm results. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected initBinding () : void** | |
| Description | Inicialización del enlace de valores entre componentes de la vista y propiedades del modelo. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

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

|  |  |
| --- | --- |
| **protected initListeners () : void** | |
| Description | Método que ha de ser sobrescrito por los hijos para la inicialización de los listeners de eventos de componentes de la vista. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected initModel () : void** | |
| Description | Método que ha de ser sobrescrito por los hijos para la inicialización y carga de datos en el modelo. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected initModelBinding () : void** | |
| Description | Initializes the bindings with the model. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public showHistory ()** | |
| Description | Muestra en el visor el archivo de traza generado. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public showHistory (title : String, file : File)** | |
| Parameters | |  |  | | --- | --- | | **title** | | | Description | Título. | | Multiplicity | Unspecified | | Type | Image5.png String | | Direction | inout |  |  |  | | --- | --- | | **file** | | | Multiplicity | Unspecified | | Type | File | | Direction | inout | |
| Description | Muestra en el visor un archivo. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected showOpenOutputDir ()** | |
| Description | Muestra un mensaje de confirmación, para preguntar al usuario si desea abrir el fichero de salida. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public showStatistics ()** | |
| Description | Muestra las estadísticas generadas al ejecutar un algoritmo. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected initValidation ()** | |
| Description | Método que ha de ser sobrescrito por los hijos para la definición de validadores de los campos de la vista. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected modelToView () : void** | |
| Description | Método que ha de ser sobrescrito por los hijos para la actualización de la vista con los valores del modelo, cuando éstos no pueden ser enlazados mediante *binding*. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected validate () : boolean** | |
| Description | Implementa la validación de la vista. Por defecto, comprueba las validaciones definidas con validationSupport. Se puede sobrescribir si se desea realizar validaciones adicionales. |
| Transit To | Image4.png N/A (RunBenchmarkController -> RunBenchmarkController) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | {@code true} if values are valids, {@code false} en otro caso. |
| Query | false |

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

|  |  |
| --- | --- |
| **protected getRootPane () : javafx.scene.layout.Pane** | |
| Description | Método que debe ser sobrescrito por los hijos, y ha de devolver el panel raíz de la vista. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | Root pane. |
| Query | false |

|  |  |
| --- | --- |
| **protected initView () : void** | |
| Description | Initializes the view. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | @throws IOException |
| Query | false |

|  |  |
| --- | --- |
| **public showLog () : void** | |
| Description | Shows the algorithm result selected log. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleBenchamrksChange (event : BenchmarksChangeEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | Image2.png BenchmarksChangeEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Handles the event BenchmarksChangeEvent published by Eventbus, and reloads view and model. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected execute () : void** | |
| Description | Executes the algorithms or benchmark selected with AlgorithmExecService. |
| Transit To | Image4.png N/A (RunBenchmarkController -> RunBenchmarkController) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected finishAlgExecution (r : BenchmarkResult, ex : Throwable) : void** | |
| Parameters | |  |  | | --- | --- | | **r** | | | Description | Benchmark result. | | Multiplicity | Unspecified | | Type | Image2.png BenchmarkResult | | Direction | inout | | Java Detail | N/A |  |  |  | | --- | --- | | **ex** | | | Description | Exception. | | Multiplicity | Unspecified | | Type | Throwable | | Direction | inout | | Java Detail | N/A | |
| Description | Shows the results and statistics. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected showStatistics (statisticsFile : String) : void** | |
| Parameters | |  |  | | --- | --- | | **statisticsFile** | | | Description | Statistics file path. | | Multiplicity | Unspecified | | Type | Image5.png String | | Direction | inout | | Java Detail | N/A | |
| Description | Loads the result statistics into a table. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public handleSystemSaved (event : SystemSaved) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | 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 |

|  |  |
| --- | --- |
| **public handleGenerateSystem (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Action event. | | Multiplicity | Unspecified | | 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 handleDeleteInputAction (event : javafx.event.ActionEvent) : void** | |
| Parameters | |  |  | | --- | --- | | **event** | | | Description | Event. | | Multiplicity | Unspecified | | Type | javafx.event.ActionEvent | | Direction | inout | | Java Detail | N/A | |
| Description | Removes the selected items from the list. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected loadInputFiles (benchmark : String) : void** | |
| Parameters | |  |  | | --- | --- | | **benchmark** | | | Description | Benchmark's name. | | Multiplicity | Unspecified | | Type | Image5.png String | | Direction | inout | | Java Detail | N/A | |
| Description | Loads the input files defined for the selected benchmark. |
| Transit To | Image4.png N/A (BenchmarkSelectionListener -> RunBenchmarkController) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **private getData (benchResult : BenchmarkResult) : javafx.scene.control.TreeItem** | |
| Parameters | |  |  | | --- | --- | | **benchResult** | | | Description | Benchmark results. | | Multiplicity | Unspecified | | Type | Image2.png BenchmarkResult | | Direction | inout | | Java Detail | N/A | |
| Description | Loads the benchmark results into a TreeTableView hierarchy. |
| Leaf | false |
| Upper | 1 |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Return Type Description | TreeItem |
| Query | false |

### Image2.png RunBenchmarkModel

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Benchmarks execution model. |
| Active | false |
| Business Key Mutable | true |
| Java Detail | N/A |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private historyChecked : javafx.beans.property.BooleanProperty** | | | |
| Description | If the history mode is checked. | | |
| Type | javafx.beans.property.BooleanProperty | | |
| 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 timeChecked : javafx.beans.property.BooleanProperty** | | | |
| Description | Si la ejecución se realiza con traza. Esta propiedad es enlazada al componente chkHIstory de RunBenchmark.fxml. | | |
| Type | javafx.beans.property.BooleanProperty | | |
| 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 statisticsChecked : javafx.beans.property.BooleanProperty** | | | |
| Description | Si la ejecución se realiza con traza. Esta propiedad es enlazada al componente chkHIstory de RunBenchmark.fxml. | | |
| Type | javafx.beans.property.BooleanProperty | | |
| 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 benchmarks : java.util.List** | | | |
| Description | Available benchmarks. | | |
| Stereotypes | Property | | |
| Template Type Bind Info | N/A | | |
| Type | java.util.List | | |
| Allow Empty Name | false | | |
| Getter | true | Setter | true |
| Derived | false | | |
| Multiplicity | \* | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private selectedBenchmark : Benchmark** | | | |
| Description | Selected benchmark. | | |
| Stereotypes | Property | | |
| Type | Image2.png Benchmark | | |
| Allow Empty Name | false | | |
| Getter | true | Setter | true |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private selectedInputFilesListProperty : javafx.beans.property.ListProperty** | | | |
| Description | Input files list property. | | |
| Template Type Bind Info | N/A | | |
| Type | javafx.beans.property.ListProperty | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private outputDirProperty : javafx.beans.property.StringProperty** | | | |
| Description | Path output file property.\* | | |
| Type | javafx.beans.property.StringProperty | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private outputTypeProperty : javafx.beans.property.IntegerProperty** | | | |
| Description | Output file type selected. | | |
| Type | javafx.beans.property.IntegerProperty | | |
| 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 | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private selectedAlgorithm : AlgorithmInfo** | | | |
| Description | When the selection is an algorithm. | | |
| Stereotypes | Property | | |
| Type | Image2.png AlgorithmInfo | | |
| Allow Empty Name | false | | |
| Getter | true | Setter | true |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private lastExecutionResult : BenchmarkResult** | | | |
| Description | Last execution result. | | |
| Stereotypes | Property | | |
| Type | Image2.png BenchmarkResult | | |
| Allow Empty Name | false | | |
| Getter | true | Setter | true |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private benchmarks : Benchmark** | | | |
| Description | Available benchmarks. | | |
| Stereotypes | Property | | |
| Type | Image2.png Benchmark | | |
| Allow Empty Name | false | | |
| Getter | true | Setter | true |
| Derived | false | | |
| Multiplicity | \* | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

#### Operations

|  |  |
| --- | --- |
| **public getDefaultOutput () : String** | |
| Description | Devuelve la ruta por defecto del archivo de salida de un algoritmo.  La ruta por defecto si lo que hay seleccionado es un algoritmo, es el archivo [abreviatura\_alg]\_output.txt en la carpeta output del workspace actual.    Si hay seleccionado un benchmark, será el archvio [abreviatura\_alg]\_output.txt en la carpeta del benchmark en el workspace actual. |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public getSelectedAlgorithms () : java.util.List** | |
| Description | Selected algorithms. |
| Leaf | false |
| Upper | 1 |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Return Type Description | List of selected algorithms. |
| Query | false |

|  |  |
| --- | --- |
| **public historyCheckedProperty () : javafx.beans.property.BooleanProperty** | |
| Description | If the history mode is checked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | the historyChecked |
| Query | false |

|  |  |
| --- | --- |
| **public isHistoryChecked () : boolean** | |
| Description | If the history mode is checked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | {@code true} if the history mode is checked, {@code false} otherwise. |
| Query | false |

|  |  |
| --- | --- |
| **public isStatisticsChecked () : boolean** | |
| Description | Devuelve el valor booleano de la propiedad historyChecked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | {@code true} if the statistics mode is checked, {@code false} otherwise. |
| Query | false |

|  |  |
| --- | --- |
| **public isTimeChecked () : boolean** | |
| Description | Devuelve el valor booleano de la propiedad historyChecked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | {@code true} if the Time mode is checked, {@code false} otherwise. |
| Query | false |

|  |  |
| --- | --- |
| **public statisticsCheckedProperty () : javafx.beans.property.BooleanProperty** | |
| Description | Devuelve la propiedad historyChecked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | the statisticsChecked |
| Query | false |

|  |  |
| --- | --- |
| **public timeCheckedProperty () : javafx.beans.property.BooleanProperty** | |
| Description | Devuelve la propiedad historyChecked. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | the timeChecked |
| Query | false |

|  |  |
| --- | --- |
| **public RunBenchmarkModel ()** | |
| Description | Constructor. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public selectedInputFilesListProperty () : javafx.beans.property.ListProperty** | |
| Description | Path input file property. |
| Leaf | false |
| Upper | 1 |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Return Type Description | StringProperty. |
| Query | false |

|  |  |
| --- | --- |
| **public getSelectedInputFiles () : java.util.List** | |
| Leaf | false |
| Upper | 1 |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public outputDirProperty () : javafx.beans.property.StringProperty** | |
| Description | Path output dir property. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | StringProperty. |
| Query | false |

|  |  |
| --- | --- |
| **public getOutputDir () : String** | |
| Description | Path output file. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | the outputFile |
| Query | false |

|  |  |
| --- | --- |
| **public outputTypeProperty () : javafx.beans.property.IntegerProperty** | |
| Description | Output type property. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | StringProperty. |
| Query | false |

|  |  |
| --- | --- |
| **public getOutputType () : Integer** | |
| Description | Output file type. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | the output type. |
| Query | false |

|  |  |
| --- | --- |
| **public getOutputFileType () : String** | |
| Description | Returns the file type from the selected output type. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | File Type. |
| Query | false |

### Image2.png BenchmarkSelectionListener

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Benchmarks tree listener.  \* When a benchmark is selected, the output field is initialized with benchmark output dir and is disabled.  \* In this case, the mode checks and console outputs are disabled too.  \* If the selection is an algorithm, the output field is enabled and initialized with the path of algorithm default  \* output file.  \* If the selection is more than one algorithm, the output field is cleared and disabled.  \* If the selection contains benchmarks and algorithms the output field is cleared ant the Run button disabled. |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | protected |
| Leaf | false |
| Root | false |
| Stereotypes | listener |

#### Operations

|  |  |
| --- | --- |
| **public changed (observable : ObservableValue, oldItem : TreeItem, newItem : TreeItem)** | |
| Parameters | |  |  | | --- | --- | | **observable** | | | Multiplicity | Unspecified | | Type | ObservableValue | | Direction | inout |  |  |  | | --- | --- | | **oldItem** | | | Multiplicity | Unspecified | | Type | TreeItem | | Direction | inout |  |  |  | | --- | --- | | **newItem** | | | Multiplicity | Unspecified | | Type | TreeItem | | Direction | inout | |
| Transit To | Image4.png N/A (RunBenchmark.fxml -> BenchmarkSelectionListener) |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

### Image2.png AlgorithmExecService

|  |  |
| --- | --- |
| **Name** | **Value** |
| Description | Service for the background execution of algorithms and benchmarks.  @author Dora Calderón |
| Active | false |
| Business Key Mutable | true |
| Java Detail | N/A |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |
| Stereotypes | Service |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private attribute : List** | | | |
| Description | Algorithms to execute. | | |
| Template Type Bind Info | N/A | | |
| Type | List | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | \* | | |
| Java Detail | N/A | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Is ID | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private model : RunBenchmarkModel** | | | |
| Description | Model. | | |
| Type | Image2.png [RunBenchmarkModel](#jn3JC_KGAqACIRKd) | | |
| 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

|  |  |
| --- | --- |
| **protected createTask () : javafx.concurrent.Task** | |
| Description | Task for execute algorithms and benchmarks.  If the {@link Mode#STATISTICS} mode is enabled, prints the results into a CSV file. |
| Leaf | false |
| Upper | 1 |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Return Type Description | Task |
| Query | false |

|  |  |
| --- | --- |
| **protected instanceAlgorithms () : void** | |
| Description | Creates the instances of the benchmark algorithms. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected instanceAlgorithm (entity : AlgorithmEntity) : Algorithm** | |
| Parameters | |  |  | | --- | --- | | **entity** | | | Multiplicity | Unspecified | | Type | AlgorithmEntity | | Direction | inout | |
| Description | Crea la instancia de una implementación de algoritmo a partir de su definición en un objeto de tipo (model element not found) |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected getOutput (alg : Algorithm) : String** | |
| Parameters | |  |  | | --- | --- | | **alg** | | | Multiplicity | Unspecified | | Type | Image2.png Algorithm | | Direction | inout | |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected getOptions () : AlgorithmOptions** | |
| Description | Establishes the algorithm options from the model. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | Algorithm execution options. |
| Query | false |

|  |  |
| --- | --- |
| **public setOnFinished (handler : javafx.event.EventHandler) : void** | |
| Parameters | |  |  | | --- | --- | | **handler** | | | Description | Handler. | | Multiplicity | Unspecified | | Template Type Bind Info | N/A | | Type | javafx.event.EventHandler | | Direction | inout | | Java Detail | N/A | |
| Description | The onFinish event handler is called whenever the Task state transitions to the finished state: CANCELLED, FAILED  or SUCCEEDED. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

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

|  |  |
| --- | --- |
| **protected succeeded () : void** | |
| Description | Publishes a message event when the task is finished succesfully. |
| Transit To | Image4.png N/A (AlgorithmExecService -> AlgorithmExecService) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public AlgorithmExecService (algs : java.util.List)** | |
| Parameters | |  |  | | --- | --- | | **algs** | | | Description | Algorithms to execute. | | Multiplicity | Unspecified | | 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 |
| Query | false |

|  |  |
| --- | --- |
| **public AlgorithmExecService (model : RunBenchmarkModel)** | |
| Parameters | |  |  | | --- | --- | | **model** | | | Description | Model. | | Multiplicity | Unspecified | | Type | Image2.png [RunBenchmarkModel](#jn3JC_KGAqACIRKd) | | Direction | inout | | Java Detail | N/A | |
| Description | Constructor. |
| Transit To | Image4.png N/A (RunBenchmarkController -> AlgorithmExecService) |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **protected instanceAlgorithm (entity : AlgorithmInfo) : Algorithm** | |
| Parameters | |  |  | | --- | --- | | **entity** | | | Description | Algorithm entity. | | Multiplicity | Unspecified | | Type | Image2.png AlgorithmInfo | | Direction | inout | | Java Detail | N/A | |
| Description | Instances the algorithm of type of {@code entity} param. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | Algorithm. |
| Query | false |

|  |  |
| --- | --- |
| **protected printResults (result : BenchmarkResult) : void** | |
| Parameters | |  |  | | --- | --- | | **result** | | | Description | Results. | | Multiplicity | Unspecified | | Type | Image2.png BenchmarkResult | | Direction | inout | | Java Detail | N/A | |
| Description | Prints the results into a CSV file. |
| Leaf | false |
| Upper | 1 |
| Ordered | false |
| Unique | true |
| Return Type Description | @throws IOException |
| Query | false |