

Glasir

1.0

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Chapter 1

Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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Application	
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Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 4

Namespace Documentation

4.1 Package Glasir

Classes

- class [ADToolInstance](#)
- class [App](#)

Interaction logic for App.xaml

- class [BigGlasir](#)
- class [Filter](#)
- class [FunctionEditor](#)
- class [MainWindow](#)

Interaction logic for MainWindow.xaml

- class [Module](#)
- class [Optimizer](#)
- class [TemplateLibrary](#)
- class [XMLFile](#)

Chapter 5

Class Documentation

5.1 Glasir.ADToolInstance Class Reference

Public Member Functions

- [ADToolInstance](#) (string fileName)
[ADToolInstance](#) constructor

Properties

- static [ADToolInstance](#) **foregroundInstance** [get, set]
- Process **process** [get]
- [XMLFile](#) **file** [get]

5.1.1 Constructor & Destructor Documentation

5.1.1.1 Glasir.ADToolInstance.ADToolInstance (string fileName)

[ADToolInstance](#) constructor

Parameters

<i>fileName</i>	
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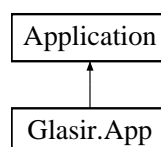
The documentation for this class was generated from the following file:

- ADToolInstance.cs

5.2 Glasir.App Class Reference

Interaction logic for App.xaml

Inheritance diagram for Glasir.App:



5.2.1 Detailed Description

Interaction logic for App.xaml

The documentation for this class was generated from the following file:

- App.xaml.cs

5.3 Glasir.BigGlasir Class Reference

Public Member Functions

- void [launchADToolInstance](#) (string fileName)
launch an instance of ADTool containing an ADTree
- void [loadTemplate](#) ()
load a template
- void [saveProject](#) ()
save a project

Properties

- static string **AdtoolVersion** [get]
- string **projectName** [get, set]
- [Filter](#) **Filter** [get, set]
- [Optimizer](#) **Optimizer** [get, set]
- [FunctionEditor](#) **FunctionEditor** [get, set]
- System.Collections.Generic.List< [ADToolInstance](#) > **ADToolInstances** [get, set]
- [TemplateLibrary](#) **templateLibrary** [get, set]

5.3.1 Member Function Documentation

5.3.1.1 void Glasir.BigGlasir.launchADToolInstance (string fileName)

launch an instance of ADTool containing an ADTree

Returns

5.3.1.2 void Glasir.BigGlasir.loadTemplate ()

load a template

5.3.1.3 void Glasir.BigGlasir.saveProject ()

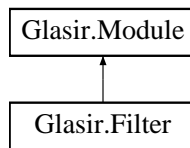
save a project

The documentation for this class was generated from the following file:

- BigGlasir.cs

5.4 Glasir.Filter Class Reference

Inheritance diagram for Glasir.Filter:



Public Member Functions

- [Filter](#) ([XMLFile](#) f, string domain, String max)
Create a new [Filter](#) object with the given properties
- [XMLFile](#) [createResultingFile](#) ()
create the resulting tree of the function
- void [searchAndChange1](#) (XElement code, double m)
Cut the given tree from the original tree if it doesn't respect the filter conditions. If the given tree respects the conditions, call recursively the same algorithm on the subtrees of the given tree to make sure that they respect the conditions as-well
- void [searchAndChange2](#) (XElement code, double m)
same that [searchAndChange1](#) method
- override [XMLFile](#) [createResultingFile](#) ([XMLFile](#) file)
create the resulting tree of the function

Static Public Member Functions

- static double [Evaluate](#) (string expression)
evaluate the mathematical expression in the string parameter and return the result as a double

Properties

- List< XElement > **listDelete** [get]
- string **DomainParam** [get]
- [XMLFile](#) **File** [get]
- double **Max** [get]
- String **L1** [get]
- String **M1** [get]
- String **H1** [get]
- String **E1** [get]

5.4.1 Constructor & Destructor Documentation

5.4.1.1 Glasir.Filter.Filter (XMLFile f, string domain, String max)

Create a new [Filter](#) object with the given properties

Parameters

<i>f</i>	
<i>domain</i>	
<i>max</i>	

5.4.2 Member Function Documentation

5.4.2.1 XMLFile Glasir.Filter.createResultingFile ()

create the resulting tree of the function

Parameters

<i>fileName</i>	
<i>xmlCode</i>	

5.4.2.2 override XMLFile Glasir.Filter.createResultingFile (XMLFile *file*) [virtual]

create the resulting tree of the function

Parameters

<i>fileName</i>	
<i>xmlCode</i>	

Implements [Glasir.Module](#).

5.4.2.3 static double Glasir.Filter.Evaluate (string *expression*) [static]

evaluate the mathematical expression in the string parameter and return the result as a double

Parameters

<i>expression</i>	
-------------------	--

Returns

5.4.2.4 void Glasir.Filter.searchAndChange1 (XElement *code*, double *m*)

Cut the given tree from the original tree if it doesn't respect the filter conditions. If the given tree respects the conditions, call recursively the same algorithm on the subtrees of the given tree to make sure that they respect the conditions as-well

Parameters

<i>code</i>	
<i>m</i>	

5.4.2.5 void Glasir.Filter.searchAndChange2 (XElement *code*, double *m*)

same that searchAndChange1 method

Parameters

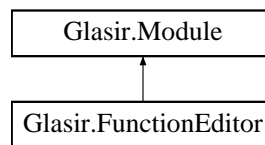
<i>code</i>	
<i>m</i>	

The documentation for this class was generated from the following file:

- Filter.cs

5.5 Glasir.FunctionEditor Class Reference

Inheritance diagram for Glasir.FunctionEditor:



Public Member Functions

- [FunctionEditor](#) ([XMLFile](#) f, String name, String fn, string firstP, string secondP, String l1, String m1, String h1, String e1, String l2, String m2, String h2, String e2)
Create a new [FunctionEditor](#) object with the given properties
- [XMLFile createResultingFile](#) ()
create the resulting tree of the function
- void [searchAndChange](#) (XElement code, int swittcccchhhh=0)
Change the valuations of the given tree following the given formula. If the given tree isn't a leaf but a simple node, call recursively the same algorithm on the subtrees of the given tree to search for leafs
- override [XMLFile createResultingFile](#) ([XMLFile](#) file)
create the resulting tree of the function

Static Public Member Functions

- static double [Evaluate](#) (string expression)
Send the resultat of the mathematical operation within the expression

Properties

- String **FunctionName** [get]
- String **Function** [get]
- string **FirstParam** [get]
- string **SecondParam** [get]
- [XMLFile File](#) [get]
- String **L1** [get]
- String **M1** [get]
- String **H1** [get]
- String **E1** [get]
- String **L2** [get]
- String **M2** [get]
- String **H2** [get]
- String **E2** [get]

5.5.1 Constructor & Destructor Documentation

5.5.1.1 Glasir.FunctionEditor.FunctionEditor (XMLFile *f*, String *name*, String *fn*, string *firstP*, string *secondP*, String *l1*, String *m1*, String *h1*, String *e1*, String *l2*, String *m2*, String *h2*, String *e2*)

Create a new [FunctionEditor](#) object with the given properties

Parameters

<i>f</i>	
<i>name</i>	
<i>fn</i>	
<i>firstP</i>	
<i>secondP</i>	
<i>l1</i>	
<i>m1</i>	
<i>h1</i>	
<i>e1</i>	
<i>l2</i>	
<i>m2</i>	
<i>h2</i>	
<i>e2</i>	

5.5.2 Member Function Documentation

5.5.2.1 XMLFile Glasir.FunctionEditor.createResultingFile ()

create the resulting tree of the function

Parameters

<i>fileName</i>	
<i>xmlCode</i>	

5.5.2.2 override XMLFile Glasir.FunctionEditor.createResultingFile (XMLFile *file*) [virtual]

create the resulting tree of the function

Parameters

<i>file</i>	
<i>xmlCode</i>	

Implements [Glasir.Module](#).

5.5.2.3 static double Glasir.FunctionEditor.Evaluate (string *expression*) [static]

Send the resultat of the mathematical operation within the expression

Parameters

<i>expression</i>	
-------------------	--

Returns

5.5.2.4 void Glasir.FunctionEditor.searchAndChange (XElement *code*, int *swittcccchhhh* = 0)

Change the valuations of the given tree following the given formula. If the given tree isn't a leaf but a simple node, call recursively the same algorithm on the subtrees of the given tree to search for leaves

Parameters

<i>code</i>	
<i>swittcccchhhh</i>	

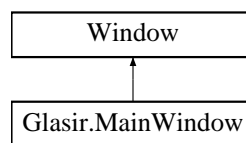
The documentation for this class was generated from the following file:

- FunctionEditor.cs

5.6 Glasir.MainWindow Class Reference

Interaction logic for MainWindow.xaml

Inheritance diagram for Glasir.MainWindow:



Public Member Functions

- [MainWindow](#) ()
constructor
- void [testDomain1](#) (object sender, SelectionChangedEventArgs args)
Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the second parameter of the [FunctionEditor](#)
- void [testDomain2](#) (object sender, SelectionChangedEventArgs args)
Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the second parameter of the [FunctionEditor](#)
- void [testDomainFiltering](#) (object sender, SelectionChangedEventArgs args)
Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the filter

Static Public Member Functions

- static void [messageBox](#) (string message)
used for showing something

Protected Member Functions

- override void [OnClosing](#) (CancelEventArgs e)
close project when exiting

Properties

- [BigGlasir](#) **Glasir** [get, set]

5.6.1 Detailed Description

Interaction logic for MainWindow.xaml

5.6.2 Constructor & Destructor Documentation

5.6.2.1 Glasir.MainWindow.MainWindow ()

constructor

5.6.3 Member Function Documentation

5.6.3.1 static void Glasir.MainWindow.messageBox (string *message*) [static]

used for showing something

Parameters

<i>message</i>	
----------------	--

5.6.3.2 override void Glasir.MainWindow.OnClosing (CancelEventArgs *e*) [protected]

close project when exiting

Parameters

<i>e</i>	
----------	--

5.6.3.3 void Glasir.MainWindow.testDomain1 (object *sender*, SelectionChangedEventArgs *args*)

Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the second parameter of the [FunctionEditor](#)

Parameters

<i>sender</i>	
<i>args</i>	

5.6.3.4 void Glasir.MainWindow.testDomain2 (object *sender*, SelectionChangedEventArgs *args*)

Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the second parameter of the [FunctionEditor](#)

Parameters

<i>sender</i>	
<i>args</i>	

5.6.3.5 void Glasir.MainWindow.testDomainFiltering (object *sender*, SelectionChangedEventArgs *args*)

Print or hide the LMHE boxex is an LMHE paramter is/is not selected for the filter

Parameters

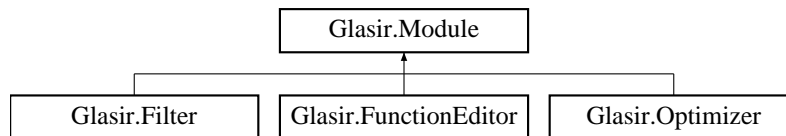
<i>sender</i>	
<i>args</i>	

The documentation for this class was generated from the following file:

- MainWindow.xaml.cs

5.7 Glasir.Module Class Reference

Inheritance diagram for Glasir.Module:



Public Member Functions

- string [openFile](#) ([XMLFile](#) file)
return xml code of file f
- abstract [XMLFile](#) [createResultingFile](#) ([XMLFile](#) file)
create the resulting tree of the function

5.7.1 Member Function Documentation

5.7.1.1 abstract [XMLFile](#) Glasir.Module.createResultingFile ([XMLFile](#) file) [pure virtual]

create the resulting tree of the function

Parameters

<i>file</i>	
<i>xmlCode</i>	

Implemented in [Glasir.Filter](#), [Glasir.FunctionEditor](#), and [Glasir.Optimizer](#).

5.7.1.2 string Glasir.Module.openFile ([XMLFile](#) file)

return xml code of file f

Parameters

<i>f</i>	
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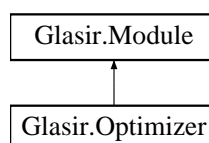
Returns

The documentation for this class was generated from the following file:

- [Module.cs](#)

5.8 Glasir.Optimizer Class Reference

Inheritance diagram for Glasir.Optimizer:



Public Member Functions

- [Optimizer](#) ([XMLFile](#) f, String item)
Create a new [Optimizer](#) object with the given properties
- [XMLFile](#) [createResultingFile](#) ()
Optimize the given tree by the given parameter and create the resulting [XMLFile](#)
- override [XMLFile](#) [createResultingFile](#) ([XMLFile](#) fileName)
create the resulting tree of the function

Properties

- [XMLFile](#) **File** [get]
- String **domain** [get]
- String **max** [get]

5.8.1 Constructor & Destructor Documentation

5.8.1.1 Glasir.Optimizer.Optimizer ([XMLFile](#) f, String item)

Create a new [Optimizer](#) object with the given properties

Parameters

<i>f</i>	
<i>item</i>	

5.8.2 Member Function Documentation

5.8.2.1 [XMLFile](#) Glasir.Optimizer.createResultingFile ()

Optimize the given tree by the given parameter and create the resulting [XMLFile](#)

Returns

5.8.2.2 override [XMLFile](#) Glasir.Optimizer.createResultingFile ([XMLFile](#) fileName) [virtual]

create the resulting tree of the function

Parameters

<i>fileName</i>	
<i>xmlCode</i>	

Implements [Glasir.Module](#).

The documentation for this class was generated from the following file:

- [Optimizer.cs](#)

5.9 Glasir.TemplateLibrary Class Reference

Public Member Functions

- void **addTemplate** ([XMLFile](#) template)
- void **loadTemplate** ()
- void **browseLibrary** ()
- void **deleteTemplate** ()

Properties

- List< [XMLFile](#) > **templates** [get]

The documentation for this class was generated from the following file:

- TemplateLibrary.cs

5.10 Glasir.XMLFile Class Reference

Public Member Functions

- [XMLFile](#) (string path)
Create a new [XMLFile](#) with the given parameter
- [XMLFile](#) ([XMLFile](#) file)
Create a new [XMLFile](#) with the given parameter
- [XMLFile](#) (string xmlfile, XDocument code)
Create a new [XMLFile](#) object with the given parameters
- Boolean **isEmpty** ()
Tell if the XMLTree is empty or not
- string **getXMLCodeFromFile** ()
Return the XMLCode of the file
- [XMLFile](#) **createResultFile** (int a)
Create the resulting file of a module
- List< String > **getDomains** ()
get the list of the domains used in the [XMLFile](#)

Properties

- string **FileName** [get]
- XDocument **XmlCode** [get]

5.10.1 Constructor & Destructor Documentation

5.10.1.1 Glasir.XMLFile.XMLFile (string path)

Create a new [XMLFile](#) with the given parameter

Parameters

<i>path</i>	
-------------	--

5.10.1.2 Glasir.XMLFile.XMLFile (XMLFile file)

Create a new [XMLFile](#) with the given parameter

Parameters

<i>file</i>	
-------------	--

5.10.1.3 Glasir.XMLFile.XMLFile (string xmlfile, XDocument code)

Create a new [XMLFile](#) object with the given parameters

Parameters

<i>xmlfile</i>	
<i>code</i>	

5.10.2 Member Function Documentation

5.10.2.1 XMLFile Glasir.XMLFile.createResultFile (int a)

Create the resulting file of a module

Parameters

<i>a</i>	
----------	--

Returns

5.10.2.2 List<String> Glasir.XMLFile.getDomains ()

get the list of the domains used in the [XMLFile](#)

Returns

5.10.2.3 string Glasir.XMLFile.getXMLCodeFromFile ()

Return the XMLCode of the file

Returns

5.10.2.4 Boolean Glasir.XMLFile.isEmpty ()

Tell if the XMLTree is empty or not

Returns

The documentation for this class was generated from the following file:

- XMLFile.cs

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