Package myMath

Class Functions_GUI

java.lang.Object
    myMath.Functions_GUI

All Implemented Interfaces:

java.lang.Iterable<function>, java.util.Collection<function>, functions

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```
public class Functions_GUI
extends java.lang.Object
implements functions
```

Field Summary

Fields

Modifier and Type	Field	Description
static java.awt.Color[]	**Colors**	

Constructor Summary

Constructors

Constructor	Description
Functions_GUI()	

Method Summary

All Methods	Static Methods	Instance Methods	Concrete Methods

Modifier and Type	Method	Description
boolean	**add** (**function** e)	
boolean	**addAll** (java.util.Collection<? extends **function**> c)	
void	**clear**()	
boolean	**contains** (java.lang.Object o)	
boolean	**containsAll** (java.util.Collection<?> c)	

void	[drawFunctions](#) (int width, int height, [Range](#) rx, [Range](#) ry, int resolution)	draw a gui representation of the functio
void	[drawFunctions](#) (java.lang.String json_file)	draw a function out of an json file after deserializeing it
[function](#)	[get](#) (int i)	
void	[initFromFile](#) (java.lang.String file)	init a a Functions_gui out of txt file whrere whr function represented as a string separated by a line
boolean	[isEmpty](#)()	
java.util.Iterator<[function](#)>	[iterator](#)()	
static void	[main](#) (java.lang.String[] args)	
boolean	[remove](#) (java.lang.Object o)	
boolean	[removeAll](#) (java.util.Collection<?> c)	
boolean	[retainAll](#) (java.util.Collection<?> c)	
void	[saveToFile](#) (java.lang.String file)	asve all the current functions to file where the functions are represented as a astring
int	[size](#)()	
java.lang.Object[]	[toArray](#)()	
<T> T[]	[toArray](#) (T[] a)	

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.util.Collection

equals, hashCode, parallelStream, removeIf, spliterator, stream, toArray

Methods inherited from interface java.lang.Iterable

forEach

Field Detail

Colors

public static java.awt.Color[] Colors

Constructor Detail

Functions_GUI

public Functions_GUI()

Method Detail

size

public int size()

Specified by:
size in interface java.util.Collection<function>

isEmpty

public boolean isEmpty()

Specified by:
isEmpty in interface java.util.Collection<function>

contains

public boolean contains (java.lang.Object o)

Specified by:
contains in interface java.util.Collection<function>

iterator

public java.util.Iterator<function> iterator()

Specified by:
iterator in interface java.util.Collection<function>

Specified by:
iterator in interface java.lang.Iterable<function>

toArray

public java.lang.Object[] toArray()

Specified by:
toArray in interface java.util.Collection<function>

toArray

public <T> T[] toArray (T[] a)

Specified by:

toArray in interface java.util.Collection<function>

add

`public boolean add (`function` e)`

Specified by:
add in interface java.util.Collection<function>

remove

`public boolean remove (java.lang.Object o)`

Specified by:
remove in interface java.util.Collection<function>

containsAll

`public boolean containsAll (java.util.Collection<?> c)`

Specified by:
containsAll in interface java.util.Collection<function>

addAll

`public boolean addAll (java.util.Collection<? extends `function`> c)`

Specified by:
addAll in interface java.util.Collection<function>

removeAll

`public boolean removeAll (java.util.Collection<?> c)`

Specified by:
removeAll in interface java.util.Collection<function>

retainAll

`public boolean retainAll (java.util.Collection<?> c)`

Specified by:
retainAll in interface java.util.Collection<function>

clear

public void clear()

Specified by:

clear in interface java.util.Collection<function>

initFromFile

public void initFromFile (java.lang.String file) throws java.io.IOException

init a a Functions_gui out of txt file whrere whr function represented as a string separated by a line

Specified by:

initFromFile in interface functions

Parameters:

file - the file directory on the pc

Throws:

java.io.IOException - if the file does not exists of unreadable (wrong format)

saveToFile

public void saveToFile (java.lang.String file) throws java.io.IOException

asve all the current functions to file where the functions are represented as a astring

Specified by:

saveToFile in interface functions

Parameters:

file - for the output

Throws:

java.io.IOException - if the file is not writable

drawFunctions

public void drawFunctions (int width, int height, Range rx, Range ry, int resolution)

draw a gui representation of the functio

Specified by:

drawFunctions in interface functions

Parameters:

width - the width of the window

height - - the height of the window

rx - - the range of x axis

ry - - the of y axis

resolution - the number of points that we draw on the function between rx.getmin and rx.gexmax

drawFunctions

public void drawFunctions (java.lang.String json_file)

draw a function out of an json file after deserializeing it

Specified by:

drawFunctions in interface functions

Parameters:

json_file - - the file with all the parameters for the GUI window. Note: is the file id not readable or in wrong format should use default values.

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get

public function get (int i)

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main

public static void main (java.lang.String[] args) throws java.io.IOException

Throws:

java.io.IOException