PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SEARCH: Q

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Interface IMedicine

All Known Implementing Classes:

Medicine

public interface IMedicine

Method Summary

All Methods Instance Method	s Abstract Methods	
Modifier and Type	Method	Description
void	addDose(IDose dose)	Create an IDose Object
void	<pre>createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)</pre>	Creates a medicine object.
java.lang.Double	<pre>getConcentrationsAtTime(java.time.LocalDateTime dateTime)</pre>	Calculate the total concentration amount of the medicine (sum of all doses amount) at a specific dateTime.
java.util.ArrayList< IDose >	getDoses()	Corresponds to all existing doses.
java.lang.String	<pre>getNameMedicine()</pre>	Name of medicine.
java.time.LocalTime	getTimeHalfLifeMedicine()	Half life time of the

		medicine.
java.time.LocalTime	<pre>getTimeMaxMedicine()</pre>	Tmax of medicine
void	removeAllDoses()	Removes all doses from the doses array in the medicine
void	removeDose(int index)	Remove a dose by its index.
void	removeTestDoses()	Remove all test doses from the doses array

Method Detail

getNameMedicine

java.lang.String getNameMedicine()

Name of medicine.

Returns:

Return name of the medicine.

getTimeHalfLifeMedicine

 $java.time.Local Time\ get Time Half Life Medicine ()$

Half life time of the medicine.

Returns:

Return the half life time of the medicine.

getTimeMaxMedicine

java.time.LocalTime getTimeMaxMedicine()

Tmax of medicine

Returns:

Return TMax of medicine.

getDoses

java.util.ArrayList<IDose> getDoses()

Corresponds to all existing doses. Includes type Dose and TestDose.

Returns:

An array containing all doses.

createMedicine

void createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)

Creates a medicine object.

Parameters:

nameMedicine - Name of medicine.

timeMaxMedicine - Time when medicine is at its peak concentration.

timeHalfLifeMedicine - Time required for medicine to decrease by half.

getConcentrationsAtTime

 $java.lang. Double\ getConcentrations At Time (java.time. Local Date Time\ date Time)$

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

Parameters:

dateTime - specified dateTame

Returns:

Concentration amount of dose at a specified time.

addDose

void addDose(IDose dose)

Create an IDose Object

Parameters:

dose - IDose Object

removeAllDoses

void removeAllDoses()

Removes all doses from the doses array in the medicine

removeDose

void removeDose(int index)

Remove a dose by its index.

Parameters:

index - index of dose

removeTestDoses

void removeTestDoses()

Remove all test doses from the doses array

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

PREV CLASS NEXT CLASS

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ALL CLASSES

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Class Medicine

java.lang.Object Medicine

All Implemented Interfaces:

IMedicine, java.io.Serializable

class Medicine

extends java.lang.Object implements java.io.Serializable, IMedicine

Field Summary

Fields

Modifier and Type	Field	Description
private java.util.ArrayList <idose></idose>	doses	
private java.lang.String	nameMedicine	Medicine name
private java.time.LocalTime	timeHalfLifeMedicine	Medicine half life.
private java.time.LocalTime	timeMaxMedicine	Medicine tMax.

Constructor Summary

Constructors

Constructor Description

Medicine()

Medicine(java.lang.String name, java.time.LocalTime tMax, java.time.LocalTime timeHalfLifeMedicine)

Method Summary

All Methods Instance Method	s Concrete Methods	
Modifier and Type	Method	Description
void	addDose(IDose dose)	Create an IDose Object
void	createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)	Creates a medicine object.
java.lang.Double	<pre>getConcentrationsAtTime(java.time.LocalDateTime dateTime)</pre>	Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.
java.util.ArrayList< IDose >	getDoses()	Corresponds to all existing doses.
java.lang.String	<pre>getNameMedicine()</pre>	Name of medicine.
java.time.LocalTime	<pre>getTimeHalfLifeMedicine()</pre>	Half life time of the medicine.
java.time.LocalTime	<pre>getTimeMaxMedicine()</pre>	Tmax of medicine
void	removeAllDoses()	Removes all doses from the doses array in the medicine
void	removeDose(int index)	Remove a dose by its index.
void	removeTestDoses()	Remove all test doses from the doses array
java.lang.String	toString()	

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Detail

nameMedicine

private java.lang.String nameMedicine

Medicine name

timeMaxMedicine

private java.time.LocalTime timeMaxMedicine

Medicine tMax. Time when the concentration will be at its peak.

timeHalfLifeMedicine

private java.time.LocalTime timeHalfLifeMedicine

Medicine half life. Time it takes for the concentration to be reduced by half of its amount.

doses

private java.util.ArrayList<IDose> doses

Constructor Detail

Medicine

```
public Medicine()
```

Medicine

```
public Medicine(java.lang.String name,
java.time.LocalTime tMax,
java.time.LocalTime timeHalfLifeMedicine)
```

Method Detail

createMedicine

public void createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)

Description copied from interface: IMedicine

Creates a medicine object.

Specified by:

createMedicine in interface IMedicine

Parameters:

nameMedicine - Name of medicine.

timeMaxMedicine - Time when medicine is at its peak concentration.

timeHalfLifeMedicine - Time required for medicine to decrease by half.

getNameMedicine

public java.lang.String getNameMedicine()

Description copied from interface: IMedicine

Name of medicine.

Specified by:

getNameMedicine in interface IMedicine

Returns:

Return name of the medicine.

getTimeHalfLifeMedicine

public java.time.LocalTime getTimeHalfLifeMedicine()

Description copied from interface: IMedicine

Half life time of the medicine.

Specified by:

getTimeHalfLifeMedicine in interface IMedicine

Returns:

Return the half life time of the medicine.

getDoses

public java.util.ArrayList<IDose> getDoses()

Description copied from interface: IMedicine

Corresponds to all existing doses. Includes type Dose and TestDose.

Specified by:

getDoses in interface IMedicine

Returns:

An array containing all doses.

getTimeMaxMedicine

public java.time.LocalTime getTimeMaxMedicine()

Description copied from interface: IMedicine

Tmax of medicine

Specified by:

getTimeMaxMedicine in interface IMedicine

Returns:

Return TMax of medicine.

addDose

public void addDose(IDose dose)

Description copied from interface: IMedicine

Create an IDose Object

Specified by:

addDose in interface IMedicine

Parameters:

dose - IDose Object

removeAllDoses

public void removeAllDoses()

Description copied from interface: IMedicine

Removes all doses from the doses array in the medicine

Specified by:

removeAllDoses in interface IMedicine

removeDose

public void removeDose(int index)

Description copied from interface: IMedicine

Remove a dose by its index.

Specified by:

removeDose in interface IMedicine

Parameters:

index - index of dose

getConcentrationsAtTime

public java.lang.Double getConcentrationsAtTime(java.time.LocalDateTime dateTime)

Description copied from interface: IMedicine

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

Specified by:

getConcentrationsAtTime in interface IMedicine

Parameters:

 ${\tt dateTime} - specified \ dateTame$

Returns:

Concentration amount of dose at a specified time.

toString

public java.lang.String toString()

Overrides:

toString in class java.lang.Object

removeTestDoses

public void removeTestDoses()

Description copied from interface: IMedicine

Remove all test doses from the doses array

Specified by:

removeTestDoses in interface IMedicine

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Interface IMedicine

All Known Implementing Classes:

Medicine

public interface IMedicine

Method Summary

All Methods Instance Method	s Abstract Methods	
Modifier and Type	Method	Description
void	addDose(IDose dose)	Create an IDose Object
void	<pre>createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)</pre>	Creates a medicine object.
java.lang.Double	<pre>getConcentrationsAtTime(java.time.LocalDateTime dateTime)</pre>	Calculate the total concentration amount of the medicine (sum of all doses amount) at a specific dateTime.
java.util.ArrayList< IDose >	getDoses()	Corresponds to all existing doses.
java.lang.String	<pre>getNameMedicine()</pre>	Name of medicine.
java.time.LocalTime	getTimeHalfLifeMedicine()	Half life time of the

		medicine.
java.time.LocalTime	<pre>getTimeMaxMedicine()</pre>	Tmax of medicine
void	removeAllDoses()	Removes all doses from the doses array in the medicine
void	removeDose(int index)	Remove a dose by its index.
void	removeTestDoses()	Remove all test doses from the doses array

Method Detail

getNameMedicine

java.lang.String getNameMedicine()

Name of medicine.

Returns:

Return name of the medicine.

getTimeHalfLifeMedicine

 $java.time.Local Time\ get Time Half Life Medicine ()$

Half life time of the medicine.

Returns:

Return the half life time of the medicine.

getTimeMaxMedicine

java.time.LocalTime getTimeMaxMedicine()

Tmax of medicine

Returns:

Return TMax of medicine.

getDoses

java.util.ArrayList<IDose> getDoses()

Corresponds to all existing doses. Includes type Dose and TestDose.

Returns:

An array containing all doses.

createMedicine

void createMedicine(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)

Creates a medicine object.

Parameters:

nameMedicine - Name of medicine.

timeMaxMedicine - Time when medicine is at its peak concentration.

timeHalfLifeMedicine - Time required for medicine to decrease by half.

getConcentrationsAtTime

 $java.lang. Double\ getConcentrations At Time (java.time. Local Date Time\ date Time)$

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

Parameters:

dateTime - specified dateTame

Returns:

Concentration amount of dose at a specified time.

addDose

void addDose(IDose dose)

Create an IDose Object

Parameters:

dose - IDose Object

removeAllDoses

void removeAllDoses()

Removes all doses from the doses array in the medicine

removeDose

void removeDose(int index)

Remove a dose by its index.

Parameters:

index - index of dose

removeTestDoses

void removeTestDoses()

Remove all test doses from the doses array

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SEARCH: Q

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Interface IDose

All Known Implementing Classes:

Dose

public interface IDose

Method Summary

All Methods Instance Methods	hods Abstract Methods	
Modifier and Type	Method	Description
void	<pre>createDose(java.time.LocalDateTime dateTimeTakeDose, double amount)</pre>	Creates a Dose object.
java.lang.Double	getAmountDose()	Concentration amount of the dose taken by patient.
java.lang.Double	getConcentrationAtTime(java.time.LocalDateTime timeIn, java.time.LocalTime timeMaxIn, java.time.LocalTime timeHalfLifeIn)	Calculate dose concentration amount at a specified time.
java.time.LocalDateTime	<pre>getDateTimeTakeDose()</pre>	Time when the dose is taken by patient.
boolean	<pre>getIsTestDose()</pre>	Identifies dose type.
void	setTestDose()	Sets dose to test dose.

Method Detail

createDose

void createDose(java.time.LocalDateTime dateTimeTakeDose, double amount)

Creates a Dose object.

Parameters:

dateTimeTakeDose - Time when the dose is taken by patient.

amount - Concentration amount of the dose taken by patient.

getDateTimeTakeDose

java.time.LocalDateTime getDateTimeTakeDose()

Time when the dose is taken by patient.

Returns:

LocalTime Time of Dose.

getAmountDose

java.lang.Double getAmountDose()

Concentration amount of the dose taken by patient.

Returns:

Concentration amount of Dose.

getConcentrationAtTime

java.lang.Double getConcentrationAtTime(java.time.LocalDateTime timeIn, java.time.LocalTime timeMaxIn, java.time.LocalTime timeHalfLifeIn)

Calculate dose concentration amount at a specified time.

Parameters:

timeIn - Time when dose is taken.

timeMaxIn - tMax of medicine.

timeHalfLifeIn - half life of medicine.

Returns:

Concentration amount of dose amount at a specified time.

getIsTestDose

boolean getIsTestDose()

Identifies dose type.

Returns:

True = TestDose (what-if dose); False = Dose (actual dose);

setTestDose

void setTestDose()

Sets dose to test dose. Used for the what-if feature of the

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Package <Unnamed>

Interface Summary

Interface	Description
IAction	
IDose	
IMedicine	

Class Summary

Class	Description
Action	
Controller	
Dose	
Medicine	

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV PACKAGE NEXT PACKAGE FRAMES NO FRAMES ALL CLASSES

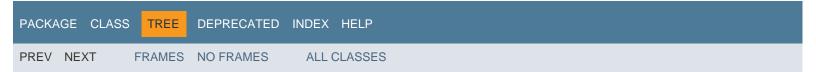
Hierarchy For Package < Unnamed>

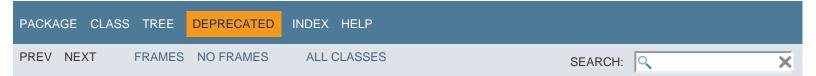
Class Hierarchy

- o java.lang.Object
 - Action (implements lAction)
 - Controller
 - **Dose** (implements IDose, java.io.Serializable)
 - Medicine (implements IMedicine, java.io.Serializable)

Interface Hierarchy

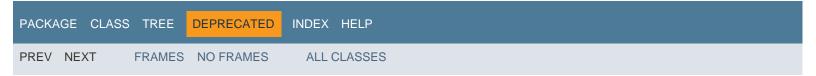
- IAction
- IDose
- IMedicine





Deprecated API

Contents



ALL CLASSES

SEARCH:

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Α

action - Static variable in class Controller

Action - Class in <Unnamed>

Action() - Constructor for class Action

Action(IMedicine) - Constructor for class Action

addDose(IDose) - Method in class Action

addDose(IDose) - Method in interface IAction

Adds a new dose.

addDose(IDose) - Method in interface IMedicine

Create an IDose Object

addDose(IDose) - Method in class Medicine

amountDose - Variable in class Dose

Amount of dose.

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER

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ALL CLASSES

How This API Document Is Organized

This API (Application Programming Interface) document has pages corresponding to the items in the navigation bar, described as follows.

Package

Each package has a page that contains a list of its classes and interfaces, with a summary for each. This page can contain six categories:

- Interfaces (italic)
- Classes
- Enums
- Exceptions
- Errors
- Annotation Types

Class/Interface

Each class, interface, nested class and nested interface has its own separate page. Each of these pages has three sections consisting of a class/interface description, summary tables, and detailed member descriptions:

- Class inheritance diagram
- Direct Subclasses
- All Known Subinterfaces
- All Known Implementing Classes
- Class/interface declaration
- Class/interface description
- Nested Class Summary
- Field Summary
- Constructor Summary
- Method Summary
- Field Detail
- Constructor Detail
- Method Detail

Each summary entry contains the first sentence from the detailed description for that item. The summary entries are alphabetical, while the detailed descriptions are in the order they appear in the source code. This preserves the logical groupings established by the programmer.

Annotation Type

Each annotation type has its own separate page with the following sections:

Annotation Type declaration

- Annotation Type description
- Required Element Summary
- Optional Element Summary
- Element Detail

Enum

Each enum has its own separate page with the following sections:

- Enum declaration
- Enum description
- Enum Constant Summary
- Enum Constant Detail

Tree (Class Hierarchy)

There is a Class Hierarchy page for all packages, plus a hierarchy for each package. Each hierarchy page contains a list of classes and a list of interfaces. The classes are organized by inheritance structure starting with <code>java.lang.Object</code>. The interfaces do not inherit from <code>java.lang.Object</code>.

- When viewing the Overview page, clicking on "Tree" displays the hierarchy for all packages.
- When viewing a particular package, class or interface page, clicking "Tree" displays the hierarchy for only that package.

Deprecated API

The Deprecated API page lists all of the API that have been deprecated. A deprecated API is not recommended for use, generally due to improvements, and a replacement API is usually given. Deprecated APIs may be removed in future implementations.

Index

The Index contains an alphabetic list of all classes, interfaces, constructors, methods, and fields.

Prev/Next

These links take you to the next or previous class, interface, package, or related page.

Frames/No Frames

These links show and hide the HTML frames. All pages are available with or without frames.

All Classes

The All Classes link shows all classes and interfaces except non-static nested types.

Serialized Form

Each serializable or externalizable class has a description of its serialization fields and methods. This information is of interest to re-implementors, not to developers using the API. While there is no link in the navigation bar, you can get to this information by going to any serialized class and clicking "Serialized Form" in the "See also" section of the class description.

Constant Field Values

The Constant Field Values page lists the static final fields and their values.

This help file applies to API documentation generated using the standard doclet.

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV NEXT FRAMES NO FRAMES ALL CLASSES

All Classes

Action

Controller

Dose

IAction

IDose

IMedicine

Medicine

PREV CLASS NEXT CLASS

FRAMES NO FRAMES

ALL CLASSES

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SUMMARY: NESTED | FIELD | CONSTR | METHOD

DETAIL: FIELD | CONSTR | METHOD

Class Dose

java.lang.Object Dose

All Implemented Interfaces:

IDose, java.io. Serializable

public class Dose
extends java.lang.Object
implements java.io.Serializable, IDose

See Also:

Serialized Form

Field Summary

Fields

Modifier and Type	Field	Description
private java.lang.Double	amountDose	Amount of dose.
private java.time.LocalDateT	ime dateTimeTakeDose	Keep time when dose is taken.
private java.lang.Boolean	isTestDose	Defines whether dose is a test dose Default: false.
private java.time.ZoneOffset	timezone	Defines time zone.

Constructor Summary

Constructors

Constructor Description

Dose()

Dose(java.time.LocalDateTime timeTake, double amountDose)

Dose(java.time.LocalDateTime timeTake, double amountDose, boolean isTestDose)

Method Summary

All Methods Instance Met	hods Concrete Methods	
Modifier and Type	Method	Description
void	<pre>createDose(java.time.LocalDateTime dateTimeTakeDose, double amount)</pre>	Creates a Dose object.
java.lang.Double	<pre>getAmountDose()</pre>	Concentration amount of the dose taken by patient.
java.lang.Double	getConcentrationAtTime(java.time.LocalDateTime dateTimeAtIn, java.time.LocalTime timeMaxIn, java.time.LocalTime timeHalfLifeIn)	Calculate dose concentration amount at a specified time.
java.time.LocalDateTime	<pre>getDateTimeTakeDose()</pre>	Time when the dose is taken by patient.
boolean	<pre>getIsTestDose()</pre>	Identifies dose type.
void	setTestDose()	Sets dose to test dose.
java.lang.String	toString()	

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Detail

dateTimeTakeDose

private java.time.LocalDateTime dateTimeTakeDose

Keep time when dose is taken. Default: current time.

amountDose

private java.lang.Double amountDose

Amount of dose. Default: 1.

isTestDose

private java.lang.Boolean isTestDose

Defines whether dose is a test dose Default: false.

timezone

private java.time.ZoneOffset timezone

Defines time zone. Default: -05:00

Constructor Detail

Dose

public Dose()

Dose

Dose

Method Detail

createDose

public void createDose(java.time.LocalDateTime dateTimeTakeDose, double amount)

Description copied from interface: IDose

Creates a Dose object.

Specified by:

createDose in interface IDose

Parameters:

dateTimeTakeDose - Time when the dose is taken by patient.

amount - Concentration amount of the dose taken by patient.

getAmountDose

public java.lang.Double getAmountDose()

Description copied from interface: IDose

Concentration amount of the dose taken by patient.

Specified by:

getAmountDose in interface IDose

Returns:

Concentration amount of Dose.

getDateTimeTakeDose

public java.time.LocalDateTime getDateTimeTakeDose()

Description copied from interface: IDose

Time when the dose is taken by patient.

Specified by:

getDateTimeTakeDose in interface IDose

Returns:

LocalTime Time of Dose.

getConcentrationAtTime

public java.lang.Double getConcentrationAtTime(java.time.LocalDateTime dateTimeAtIn, java.time.LocalTime timeMaxIn, java.time.LocalTime timeHalfLifeIn)

Description copied from interface: IDose

Calculate dose concentration amount at a specified time.

Specified by:

getConcentrationAtTime in interface IDose

Parameters:

dateTimeAtIn - Time when dose is taken.

timeMaxIn - tMax of medicine.

timeHalfLifeIn - half life of medicine.

Returns:

Concentration amount of dose amount at a specified time.

toString

public java.lang.String toString()

Overrides:

toString in class java.lang.Object

getIsTestDose

public boolean getIsTestDose()

Description copied from interface: IDose

Identifies dose type.

Specified by:

getIsTestDose in interface IDose

Returns:

True = TestDose (what-if dose); False = Dose (actual dose);

setTestDose

public void setTestDose()

Description copied from interface: IDose

Sets dose to test dose. Used for the what-if feature of the

Specified by:

setTestDose in interface IDose

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

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SEARCH: Q

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Interface IAction

All Known Implementing Classes:

Action

public interface IAction

Method Summary

All Methods Inst	ance Methods	Abstract Methods		
Modifier and Type	Method			Description
void	addDose(IDose	e dose)		Adds a new dose.
java.lang.Double	getConcentra	tionAtTime(java.time.l	LocalDateTime localDateTime)	Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.
IMedicine	<pre>getMedicine()</pre>			Retrieves the Medicine instance.
void	loadFile(java.l	ang.String filename)		Load a saved Medicine file.
void	newFile(java.lar java.time.LocalTir	ng.String name, java.time. ne halfLife)	LocalTime tMax,	Create a new Medicine instance.
void	<pre>printDoses()</pre>			Prints all doses from Medicine's Dose array.
void	printMedicine	e()		Print the name,

		tmax, and halfLife of the medicine.
void	removeAllDoses()	Delete all doses from the dosages array.
void	removeDose(int index)	Remove a dose by its index.
void	removeTestDoses()	Removes all test doses.
void	saveFile(java.lang.String filename)	Save Medicine to a file.

Method Detail

getMedicine

IMedicine getMedicine()

Retrieves the Medicine instance.

Returns:

IMedicine.Medicine instance

printDoses

void printDoses()

Prints all doses from Medicine's Dose array.

addDose

void addDose(IDose dose)

Adds a new dose. Added doses can be type Dose (actual dose) or TestDose (what-if dose)

Parameters:

dose - Dose object.

removeDose void removeDose(int index) Remove a dose by its index. Parameters: index - index of dose

removeAllDoses

void removeAllDoses()

Delete all doses from the dosages array.

getConcentrationAtTime

java.lang.Double getConcentrationAtTime(java.time.LocalDateTime localDateTime)

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

Parameters:

localDateTime - specified dateTime.

Returns:

Concentration amount at specified time.

saveFile

void saveFile(java.lang.String filename)

Save Medicine to a file. By default, save directory is user's home directory. Dose and Medicine MUST implement Serializable for this feature to work.

Parameters:

filename - Name of save file to be saved.

loadFile

void loadFile(java.lang.String filename)

Load a saved Medicine file. By default, load directory is user's home directory. Dose and Medicine MUST implement Serializable for this feature to work.

Parameters:

filename - Name of the file to be loaded

newFile

void newFile(java.lang.String name, java.time.LocalTime tMax, java.time.LocalTime halfLife)

Create a new Medicine instance.

Parameters:

name - Name of medicine

tMax - TMax of medicine.

halfLife - Half life of medicine

printMedicine

void printMedicine()

Print the name, tmax, and halfLife of the medicine.

removeTestDoses

void removeTestDoses()

Removes all test doses.

PACKAGE CLASS TREE DEPRECATED INDEX HELP

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

PREV CLASS NEXT CLASS

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DET

DETAIL: FIELD | CONSTR | METHOD

Class Action

java.lang.Object Action

All Implemented Interfaces:

IAction

public class Action
extends java.lang.Object
implements IAction

Field Summary

Fields

Modifier and Type	Field	Description
private IMedicine	medicine	Medicine file

Constructor Summary

Constructors

Constructor

Action()

Action(IMedicine medicine)

Method Summary

All Methods

Instance Methods

Concrete Methods

Modifier and Type

Method

Description

void	addDose(IDose dose)	Adds a new dose.
java.lang.Double	e getConcentrationAtTime(java.time.LocalDateTime localDateTime)	Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.
IMedicine	<pre>getMedicine()</pre>	Retrieves the Medicine instance.
void	loadFile(java.lang.String filename)	Load a saved Medicine file.
void	newFile (java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)	Create a new Medicine instance.
void	<pre>printConcentrationAtTime(java.time.LocalDateTime dateTime)</pre>	
void	$\label{thm:printDetailedConcentrationAtTime} (java.time.LocalDateTime\ dateTime)$	
void	<pre>printDoses()</pre>	Prints all doses from Medicine's Dose array.
void	<pre>printMedicine()</pre>	Print the name, tmax, and halfLife of the medicine.
void	removeAllDoses()	Delete all doses from the dosages array.
void	removeDose(int index)	Remove a dose by its index.
void	removeTestDoses()	Removes all test doses.
void	saveFile(java.lang.String filename)	Save Medicine to a

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Methods inherited from class	java.lang.Obj	ject
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clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait,
wait, wait

Field Detail

medicine

private IMedicine medicine

Medicine file

Constructor Detail

Action

public Action()

Action

public Action(IMedicine medicine)

Method Detail

getMedicine

public IMedicine getMedicine()

Description copied from interface: IAction

Retrieves the Medicine instance.

Specified by:

getMedicine in interface IAction

Returns:

IMedicine.Medicine instance

printMedicine

public void printMedicine()

Description copied from interface: IAction

Print the name, tmax, and halfLife of the medicine.

Specified by:

printMedicine in interface IAction

printDoses

public void printDoses()

Description copied from interface: IAction

Prints all doses from Medicine's Dose array.

Specified by:

printDoses in interface IAction

addDose

public void addDose(IDose dose)

Description copied from interface: IAction

Adds a new dose. Added doses can be type Dose (actual dose) or TestDose (what-if dose)

Specified by:

addDose in interface IAction

Parameters:

dose - Dose object.

removeDose

public void removeDose(int index)

Description copied from interface: IAction

Remove a dose by its index.

Specified by:

removeDose in interface IAction

Parameters:

index - index of dose

removeAllDoses

public void removeAllDoses()

Description copied from interface: IAction

Delete all doses from the dosages array.

Specified by:

removeAllDoses in interface IAction

getConcentrationAtTime

public java.lang.Double getConcentrationAtTime(java.time.LocalDateTime localDateTime)

Description copied from interface: IAction

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

Specified by:

getConcentrationAtTime in interface IAction

Parameters:

localDateTime - specified dateTime.

Returns:

Concentration amount at specified time.

printConcentrationAtTime

public void printConcentrationAtTime(java.time.LocalDateTime dateTime)

printDetailedConcentrationAtTime

public void printDetailedConcentrationAtTime(java.time.LocalDateTime dateTime)

saveFile

public void saveFile(java.lang.String filename)

Description copied from interface: IAction

Save Medicine to a file. By default, save directory is user's home directory. Dose and Medicine MUST implement Serializable for this feature to work.

Specified by:

saveFile in interface IAction

Parameters:

filename - Name of save file to be saved.

loadFile

public void loadFile(java.lang.String filename)

Description copied from interface: IAction

Load a saved Medicine file. By default, load directory is user's home directory. Dose and Medicine MUST implement Serializable for this feature to work.

Specified by:

loadFile in interface IAction

Parameters:

filename - Name of the file to be loaded

newFile

public void newFile(java.lang.String nameMedicine, java.time.LocalTime timeMaxMedicine, java.time.LocalTime timeHalfLifeMedicine)

Description copied from interface: IAction

Create a new Medicine instance.

Specified by:

newFile in interface IAction

Parameters:

nameMedicine - Name of medicine

timeMaxMedicine - TMax of medicine.

timeHalfLifeMedicine - Half life of medicine

removeTestDoses

public void removeTestDoses()

Description copied from interface: IAction

Removes all test doses.

Specified by:

removeTestDoses in interface IAction

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SEARCH: Q

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SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Class Controller

java.lang.Object Controller

public class Controller extends java.lang.Object

Field Summary

Fields

Modifier and Type	Field	Description
private static Action	action	
private static java.util.Scanner	userInput	

Constructor Summary

Constructors

Constructor **Description**

Controller()

Method Summary

All Methods	Static Methods	Concrete Methods	
Modifier and Typ	ре	Method	Description
private stat	cic void	<pre>checkIfInteger()</pre>	Validates if user input is an integer only.
private stat	cic void	<pre>checkIfValidNumber()</pre>	Validates if user input is a

		number, either Integer or Double.
private static void	clear()	Clears the console screen.
private static IDose	createDose()	Creates Dose from user input.
private static java.time.LocalDateTime	<pre>createLocalDateTime()</pre>	
private static java.time.LocalTime	<pre>createLocalTime()</pre>	Generates LocalTime instance from user input.
private static void	<pre>createMedicine()</pre>	Creates a Medicine instance from user input.
static void	<pre>main(java.lang.String[] args)</pre>	
private static void	pause()	Pause scrolling fot the console screen until user hits the Enter key.
private static void	removeDose()	Removes dose using an index selected by the user.
private static void	selectAction()	Display the list of actions that can be performed by the application.
private static void	start()	Starts the Display a welcome screen which allows the user to select whether to create a file or open an existing one.

Methods inherited from class java.lang.Object

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

Field Detail

userInput

private static java.util.Scanner userInput

action
private static Action action
Constructor Detail
Controller
muhlio Controllon()
public Controller()
Method Detail
createLocalTime
private static java.time.LocalTime createLocalTime()
Generates LocalTime instance from user input. Validates the user input to minimize application crash due to unexpected errors.
Returns:
LocalDateTime instance.
createLocalDateTime
private static java.time.LocalDateTime createLocalDateTime()
createMedicine
private static void createMedicine()
Creates a Medicine instance from user input.

createDose
private static IDose createDose()
Creates Dose from user input.
Returns: A Dose instance
removeDose
private static void removeDose()
Removes dose using an index selected by the user.
checklfInteger
private static void checkIfInteger()
Validates if user input is an integer only. If input is not an integer, the program stops.
checklfValidNumber
private static void checkIfValidNumber()
Validates if user input is a number, either Integer or Double. If input is not an number, the program stops.
clear
private static void clear()
Clears the console screen.
pause
private static void pause()
Pause scrolling fot the console screen until user hits the Enter key.

start

private static void start()

Starts the Display a welcome screen which allows the user to select whether to create a file or open an existing one.

selectAction

private static void selectAction()

Display the list of actions that can be performed by the application. The user must enter the corresponding number to execute the action.

main

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

PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

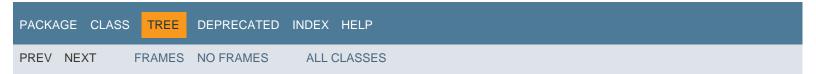
Hierarchy For All Packages

Class Hierarchy

- o java.lang.Object
 - Action (implements lAction)
 - Controller
 - **Dose** (implements IDose, java.io.Serializable)
 - Medicine (implements IMedicine, java.io.Serializable)

Interface Hierarchy

- IAction
- IDose
- IMedicine



C

checkIfInteger() - Static method in class Controller

Validates if user input is an integer only.

checkIfValidNumber() - Static method in class Controller

Validates if user input is a number, either Integer or Double.

clear() - Static method in class Controller

Clears the console screen.

Controller - Class in <Unnamed>

Controller() - Constructor for class Controller

createDose() - Static method in class Controller

Creates Dose from user input.

createDose(LocalDateTime, double) - Method in class Dose

createDose(LocalDateTime, double) - Method in interface IDose

Creates a Dose object.

createLocalDateTime() - Static method in class Controller

createLocalTime() - Static method in class Controller

Generates LocalTime instance from user input.

createMedicine() - Static method in class Controller

Creates a Medicine instance from user input.

createMedicine(String, LocalTime, LocalTime) - Method in interface IMedicine

Creates a medicine object.

createMedicine(String, LocalTime, LocalTime) - Method in class Medicine

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PACKAGE CLASS TREE DEPRECATED

INDEX

HELP

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D

dateTimeTakeDose - Variable in class Dose

Keep time when dose is taken.

Dose - Class in <Unnamed>

Dose() - Constructor for class Dose

Dose(LocalDateTime, double) - Constructor for class Dose

Dose(LocalDateTime, double, boolean) - Constructor for class Dose

doses - Variable in class Medicine

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER

FRAMES NO FRAMES

G

getAmountDose() - Method in class Dose

getAmountDose() - Method in interface IDose

Concentration amount of the dose taken by patient.

getConcentrationAtTime(LocalDateTime) - Method in class Action

getConcentrationAtTime(LocalDateTime) - Method in interface | Action

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

getConcentrationAtTime(LocalDateTime, LocalTime, LocalTime) - Method in class Dose

getConcentrationAtTime(LocalDateTime, LocalTime, LocalTime) - Method in interface IDose

Calculate dose concentration amount at a specified time.

getConcentrationsAtTime(LocalDateTime) - Method in interface IMedicine

Calculate the total concentration amount of the medicine (sum of all doses amount)at a specific dateTime.

getConcentrationsAtTime(LocalDateTime) - Method in class Medicine

getDateTimeTakeDose() - Method in class Dose

getDateTimeTakeDose() - Method in interface IDose

Time when the dose is taken by patient.

getDoses() - Method in interface IMedicine

Corresponds to all existing doses.

getDoses() - Method in class Medicine

getIsTestDose() - Method in class Dose

getIsTestDose() - Method in interface IDose

Identifies dose type.

getMedicine() - Method in class Action

getMedicine() - Method in interface IAction

Retrieves the Medicine instance.

getNameMedicine() - Method in interface IMedicine

Name of medicine.

getNameMedicine() - Method in class Medicine

getTimeHalfLifeMedicine() - Method in interface IMedicine

Half life time of the medicine.

getTimeHalfLifeMedicine() - Method in class Medicine

getTimeMaxMedicine() - Method in interface IMedicine

Tmax of medicine

getTimeMaxMedicine() - Method in class Medicine

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER FRAMES NO FRAMES ALL CLASSES

IAction - Interface in <Unnamed>

IDose - Interface in <Unnamed>

IMedicine - Interface in <Unnamed>

isTestDose - Variable in class Dose

Defines whether dose is a test dose Default: false.

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

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L

loadFile(String) - Method in class Action

loadFile(String) - Method in interface lAction Load a saved Medicine file.

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER FRAMES NO FRAMES ALL CLASSES

M

main(String[]) - Static method in class Controller

medicine - Variable in class Action

Medicine file

Medicine - Class in <Unnamed>

Medicine() - Constructor for class Medicine

Medicine(String, LocalTime, LocalTime) - Constructor for class Medicine

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER FRAMES NO FRAMES ALL CLASSES

Ν

nameMedicine - Variable in class Medicine

Medicine name

newFile(String, LocalTime, LocalTime) - Method in class Action

 $\textbf{newFile(String, LocalTime, LocalTime)} \cdot \textbf{Method in interface IAction}$

Create a new Medicine instance.

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

PREV LETTER NEXT LETTER FRAMES NO FRAMES ALL CLASSES

PREV LETTER NEXT LETTER

FRAMES NO FRAMES

ALL CLASSES

SEARCH: Q

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P

pause() - Static method in class Controller

Pause scrolling fot the console screen until user hits the Enter key. printConcentrationAtTime(LocalDateTime) - Method in class Action

printDetailedConcentrationAtTime(LocalDateTime) - Method in class Action

printDoses() - Method in class Action

printDoses() - Method in interface IAction

Prints all doses from Medicine's Dose array.

printMedicine() - Method in class Action

printMedicine() - Method in interface IAction

Print the name, tmax, and halfLife of the medicine.

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PACKAGE CLASS TREE DEPRECATED **INDEX**

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R

removeAllDoses() - Method in class Action

removeAllDoses() - Method in interface IAction

Delete all doses from the dosages array.

removeAllDoses() - Method in interface IMedicine

Removes all doses from the doses array in the medicine

removeAllDoses() - Method in class Medicine

removeDose() - Static method in class Controller

Removes dose using an index selected by the user.

removeDose(int) - Method in class Action

removeDose(int) - Method in interface IAction

Remove a dose by its index.

removeDose(int) - Method in interface IMedicine

Remove a dose by its index.

removeDose(int) - Method in class Medicine

removeTestDoses() - Method in class Action

removeTestDoses() - Method in interface IAction

Removes all test doses.

removeTestDoses() - Method in interface IMedicine

Remove all test doses from the doses array

removeTestDoses() - Method in class Medicine

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PACKAGE CLASS TREE DEPRECATED

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HELP

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S

saveFile(String) - Method in class Action

saveFile(String) - Method in interface IAction

Save Medicine to a file.

selectAction() - Static method in class Controller

Display the list of actions that can be performed by the application.

setTestDose() - Method in class Dose

setTestDose() - Method in interface IDose

Sets dose to test dose.

start() - Static method in class Controller

Starts the Display a welcome screen which allows the user to select whether to create a file or open an existing

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

FRAMES NO FRAMES PREV LETTER NEXT LETTER

Т

timeHalfLifeMedicine - Variable in class Medicine

Medicine half life.

timeMaxMedicine - Variable in class Medicine

Medicine tMax.

timezone - Variable in class Dose

Defines time zone.

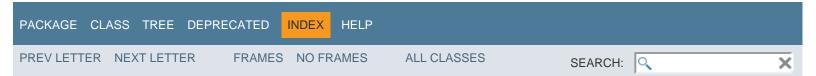
toString() - Method in class Dose

toString() - Method in class Medicine

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PACKAGE CLASS TREE DEPRECATED INDEX HELP

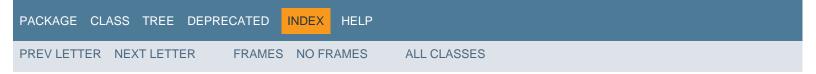
PREV LETTER NEXT LETTER FRAMES NO FRAMES ALL CLASSES



U

userInput - Static variable in class Controller

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Constant Field Values

Contents

PACKAGE CLASS TREE DEPRECATED INDEX HELP

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Serialized Form

Package <Unnamed>

Class Dose extends java.lang.Object implements Serializable

Serialized Fields

amountDose

java.lang.Double amountDose

Amount of dose, Default: 1.

dateTimeTakeDose

java.time.LocalDateTime dateTimeTakeDose

Keep time when dose is taken. Default: current time.

isTestDose

java.lang.Boolean isTestDose

Defines whether dose is a test dose Default: false.

timezone

java.time.ZoneOffset timezone

Defines time zone. Default: -05:00