|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | [**Package**](http://docs.google.com/rain/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Duration.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | | |  |
| [**PREV CLASS**](http://docs.google.com/rain/DAOException.html)   [**NEXT CLASS**](http://docs.google.com/rain/EzMailer.html) | [**FRAMES**](http://docs.google.com/index.html?rain/Duration.html)    [**NO FRAMES**](http://docs.google.com/Duration.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#3rdcrjn) | [METHOD](#1ksv4uv) |

## **rain**

Class Duration

[java.lang.Object](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html)  
 **rain.Duration**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/docs/jdk_docs/api/java/io/Serializable.html)

public class **Duration**extends [Object](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html)implements [Serializable](http://docs.google.com/docs/jdk_docs/api/java/io/Serializable.html)

This class describes a duration of time. It contains the hour, minutes and seconds.

Usage Example:  
  
 Duration lunchDuration = new Duration(1, 0, 0); // 1 hr, 0 mins, 0 secs  
 System.out.println(lunchDuration);  
  
 Duration breakDuration = new Duration(0, 15, 30); // 0 hrs, 15 mins, 30 secs  
 System.out.println(breakDuration);  
  
 Duration labDuration = new Duration(2700); // 2700 seconds = 45 minutes  
 System.out.println(labDuration);

**Author:** 570 Development Team **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#rain.Duration)

|  |  |
| --- | --- |
| **Field Summary** | |
| protected  int | [**hours**](http://docs.google.com/rain/Duration.html#hours)            The number of hours |
| protected  int | [**minutes**](http://docs.google.com/rain/Duration.html#minutes)            The number of minutes |
| protected  int | [**seconds**](http://docs.google.com/rain/Duration.html#seconds)            The number of seconds |

|  |  |
| --- | --- |
| **Constructor Summary** | |
| [**Duration**](http://docs.google.com/rain/Duration.html#Duration())()            Creates a Duration object with 0 hours, minutes and seconds. |
| [**Duration**](http://docs.google.com/rain/Duration.html#Duration(int))(int totalSeconds)            Creates a Duration object with given parameter values |
| [**Duration**](http://docs.google.com/rain/Duration.html#Duration(int,%20int,%20int))(int theHours, int theMinutes, int theSeconds)            Creates a Duration object with given parameter values |

|  |  |
| --- | --- |
| **Method Summary** | |
| [Duration](http://docs.google.com/rain/Duration.html) | [**add**](http://docs.google.com/rain/Duration.html#add(rain.Duration))([Duration](http://docs.google.com/rain/Duration.html) aDuration)            Returns a new duration object that is the sum of the supplied Duration object and current object |
| int | [**getHours**](http://docs.google.com/rain/Duration.html#getHours())()            Returns the hours portion of the duration |
| int | [**getMinutes**](http://docs.google.com/rain/Duration.html#getMinutes())()            Returns the minutes portion of the duration |
| int | [**getSeconds**](http://docs.google.com/rain/Duration.html#getSeconds())()            Returns the seconds portion of the duration. |
| int | [**getTotalSeconds**](http://docs.google.com/rain/Duration.html#getTotalSeconds())()            Returns the total seconds |
| [Duration](http://docs.google.com/rain/Duration.html) | [**subtract**](http://docs.google.com/rain/Duration.html#subtract(rain.Duration))([Duration](http://docs.google.com/rain/Duration.html) aDuration)            Returns a new duration object that is the difference of the supplied Duration and current object. |
| [String](http://docs.google.com/docs/jdk_docs/api/java/lang/String.html) | [**toString**](http://docs.google.com/rain/Duration.html#toString())()            Returns a string representation of the Duration object: Format hh:mm:ss |

|  |
| --- |
| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html) |
| [clone](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#clone()), [equals](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#wait()), [wait](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#wait(long,%20int)) |

|  |
| --- |
| **Field Detail** |

### hours

protected int **hours**

The number of hours

### minutes

protected int **minutes**

The number of minutes

### seconds

protected int **seconds**

The number of seconds

|  |
| --- |
| **Constructor Detail** |

### Duration

public **Duration**()

Creates a Duration object with 0 hours, minutes and seconds.

### Duration

public **Duration**(int theHours,  
 int theMinutes,  
 int theSeconds)

Creates a Duration object with given parameter values

### Duration

public **Duration**(int totalSeconds)

Creates a Duration object with given parameter values

|  |
| --- |
| **Method Detail** |

### getHours

public int **getHours**()

Returns the hours portion of the duration

### getMinutes

public int **getMinutes**()

Returns the minutes portion of the duration

### getSeconds

public int **getSeconds**()

Returns the seconds portion of the duration. Note: This is NOT the total seconds.

**See Also:**[getTotalSeconds()](http://docs.google.com/rain/Duration.html#getTotalSeconds())

### getTotalSeconds

public int **getTotalSeconds**()

Returns the total seconds

### add

public [Duration](http://docs.google.com/rain/Duration.html) **add**([Duration](http://docs.google.com/rain/Duration.html) aDuration)

Returns a new duration object that is the sum of the supplied Duration object and current object

### subtract

public [Duration](http://docs.google.com/rain/Duration.html) **subtract**([Duration](http://docs.google.com/rain/Duration.html) aDuration)

Returns a new duration object that is the difference of the supplied Duration and current object. The difference returned is the absolute difference, so the duration will always be positive.

### toString

public [String](http://docs.google.com/docs/jdk_docs/api/java/lang/String.html) **toString**()

Returns a string representation of the Duration object: Format hh:mm:ss

**Overrides:**[toString](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/docs/jdk_docs/api/java/lang/Object.html)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | [**Package**](http://docs.google.com/rain/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Duration.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | | |  |
| [**PREV CLASS**](http://docs.google.com/rain/DAOException.html)   [**NEXT CLASS**](http://docs.google.com/rain/EzMailer.html) | [**FRAMES**](http://docs.google.com/index.html?rain/Duration.html)    [**NO FRAMES**](http://docs.google.com/Duration.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#3rdcrjn) | [METHOD](#1ksv4uv) |