

Package dayofyearset

Class DayOfYearSet

java.lang.Object[🔗]
dayofyearset.DayOfYearSet

All Implemented Interfaces:

Cloneable[🔗]

```
public class DayOfYearSet
extends Object🔗
implements Cloneable🔗
```

DayOfYearSet Class is a class keeps DayOfYear elements in the field array DayOfYear[] dates. DayOfYear is the inner class of its. It also has methods clone, equals, union, intersection, complement, setter and getters and other helper functions.

Nested Class Summary

Nested Classes		
Modifier and Type	Class	Description
static class	DayOfYearSet.DayOfYear	DayOfYear class is a class keeps day and month as fields.

Constructor Summary

Constructors	
Constructor	Description
DayOfYearSet()	Default constructor.
DayOfYearSet(int newDay, int newMonth)	Parametrized constructor.
DayOfYearSet(DayOfYearSet rSet)	Copy constructor.
DayOfYearSet(ArrayList [🔗] <DayOfYearSet.DayOfYear> dayOfYears)	Parametrized constructor.

Method Summary

All Methods	Static Methods	Instance Methods	Concrete Methods
Modifier and Type	Method	Description	
void	add(int newDay, int newMonth)	add method.	

void	<code>add(DayOfYearSet DayOfYear dayOfYear)</code>	add method by DayOfYear object.
DayOfYearSet	<code>clone()</code>	clone method (Overridden).
DayOfYearSet	<code>complement()</code>	complemenet method.
DayOfYearSet	<code>difference(DayOfYearSet rSet)</code>	difference method.
boolean	<code>equals(Object[☞] rSet)</code>	equals method (Overridden).
int	<code>getDay(int index)</code>	getDay method.
int	<code>getMonth(int index)</code>	getMonth method.
static int	<code>getTotalDates()</code>	getTotalDates method.
DayOfYearSet	<code>intersection(DayOfYearSet rSet)</code>	intersection method.
boolean	<code>isExist(int day, int month)</code>	isExist method.
void	<code>remove(int day, int month)</code>	remove method.
void	<code>setDate(int index, int newDay, int newMonth)</code>	setDate method.
int	<code>size()</code>	size method.
String [☞]	<code>toString()</code>	toString method (Overridden).
DayOfYearSet	<code>union(DayOfYearSet rSet)</code>	union method.

Methods inherited from class [java.lang.Object](#)[☞]

[finalize](#)[☞], [getClass](#)[☞], [hashCode](#)[☞], [notify](#)[☞], [notifyAll](#)[☞], [wait](#)[☞], [wait](#)[☞], [wait](#)[☞]

Constructor Details

DayOfYearSet

```
public DayOfYearSet()
```

Default constructor. Assign dates (Array of [DayOfYear](#)) to the null.

DayOfYearSet

```
public DayOfYearSet(int newDay,  
                    int newMonth)
```

Parametrized constructor. Takes 2 parameter. Creates a new [DayOfYear](#) object and add it to the dates.

Parameters:

[newDay](#) - represents day

newMonth - represents month

DayOfYearSet

```
public DayOfYearSet(ArrayList<DayOfYearSet.DayOfYear> dayOfYears)
```

Parametrized constructor. Takes an ArrayList of DayOfYear Then adds elements of ArrayList to the dates and creating new object with it.

Parameters:

dayOfYears - represents ArrayList of DayOfYear objects.

DayOfYearSet

```
public DayOfYearSet(DayOfYearSet rSet)
```

Copy constructor. Takes a DayOfYearSet object and copies it.

Parameters:

rSet - DayOfYearSet object for copying set

Method Details

clone

```
public DayOfYearSet clone()
```

clone method (Overridden). Makes a clone of current object. Instead shallow makes a deep copy.

Overrides:

clone[☞] in class Object[☞]

size

```
public int size()
```

size method.

Returns:

the size of dates.

add

```
public void add(int newDay,  
               int newMonth)
```

add method. Takes two parameter (newDay, newMonth) and add them into the dates (array of DayOfYear). At the end invoke the increaseDateNum method to increase number of created DayOfYear objects.

Parameters:

newDay - represent new day.

newMonth - represent new month

add

```
public void add(DayOfYearSet.DayOfYear dayOfYear)
```

add method by DayOfYear object. Takes DayOfYear object. Calls add(int, int) with this objects fields.

Parameters:

dayOfYear - Represent the object of DayOfYear class.

remove

```
public void remove(int day,  
                   int month)
```

remove method. Takes two parameter day and month and if this day and move is exist in the set, then removes it. Otherwise returns only. At the end invoke the decreaseDateNum method to decrease number of created DayOfYear objects.

Parameters:

day - the day to be deleted.

month - the month to be deleted.

equals

```
public boolean equals(Object↗ rSet)
```

equals method (Overridden). Takes an object and compares with current object. If both sets are equal (regardless of keeping order) returns true. Otherwise returns false.

Overrides:

equals[↗] in class Object[↗]

union

```
public DayOfYearSet union(DayOfYearSet rSet)
```

union method. Takes a set of DayOfYear (rSet) - DayOfYearSet object. Creates a ArrayList of DayOfYear. Fills with a combination of DayOfYear objects with current set and rSet. Does not allow the duplication.

Parameters:

rSet - DayOfYearSet object keeps the dates.

Returns:

Creates a DayOfYearSet object with that ArrayList

difference

```
public DayOfYearSet difference(DayOfYearSet rSet)
```

difference method. Takes a set of DayOfYear (rSet) - DayOfYearSet object. Creates a ArrayList of DayOfYear. Fills with difference of DayOfYear objects with current set and rSet.

Parameters:

rSet - DayOfYearSet object keeps the dates.

Returns:

Creates a DayOfYearSet object with that ArrayList

intersection

```
public DayOfYearSet intersection(DayOfYearSet rSet)
```

intersection method. Takes a set of DayOfYear (rSet) - DayOfYearSet object. Creates a ArrayList of DayOfYear. Fills with intersections of DayOfYear objects with current set and rSet.

Parameters:

rSet - DayOfYearSet object keeps the dates.

Returns:

Creates a DayOfYearSet object with that ArrayList

complement

```
public DayOfYearSet complement()
```

complement method. Creates a ArrayList of DayOfYear. Fills with complements of DayOfYear objects in current set.

Returns:

Creates a DayOfYearSet object with that ArrayList

isExist

```
public boolean isExist(int day,  
                       int month)
```

isExist method. Takes to element (day, month). Checks if the element is exist. If it is then returns true. Otherwise return false.

Parameters:

day - day for comparison.

month - month for comparison.

Returns:

return the result.

toString

```
public String↗ toString()
```

toString method (Overridden). Creates a StringBuilder object with elements of dates. Then returns that built string.

Overrides:

toString[↗] in class Object[↗]

setDate

```
public void setDate(int index,  
                    int newDay,  
                    int newMonth)
```

setDate method. Takes an index and day and month. If index not out of boundry then sets the day and the month. Also checks for if there is already such element. If there is, gives a warning to user and does not add anything.

Parameters:

index - index wants to change.

newDay - new day of the month.

newMonth - new month of the year.

getDay

```
public int getDay(int index)
```

getDay method. Takes an index and if the index is valid, returns the day in that index.

Parameters:

index - index wants to get its day.

Returns:

return the value of day.

getMonth

```
public int getMonth(int index)
```

getMonth method. Takes an index and if the index is valid, returns the month in that index.

Parameters:

index - index wants to get its month.

Returns:

return the value of month.

getTotalDates

```
public static int getTotalDates()
```

getTotalDates method.

Returns:

the totalDates field.