**Java date difference**

[**JAVA DATE**](http://beginnersbook.com/category/technology/java-guide/java-date/)

Most of the Java application involves date format data and related computations. **Calculating difference between two date** values is one of the important and frequently performed operation.

Following code shows how we can obtain difference between two date values. We will check if the date difference between provided two dates is more than 30 months.

1.**getDateDiff method** : This method calculates difference between two dates

2. **StrTokens** : This method parses given date value and obtain the year, month and day part of given date. These year, month and day parts will be used by getDateDiff method while computing the difference.

**Method : getDateDiff**

[code language=”java”]  
public static String getDateDiff(String strStartDate, String strEndDate)  
{  
int iStartDay, iEndDay, iStartMonth, iEndMonth, iStartYear, iEndYear = 0;  
int iStartDate, iEndDate, iDateDiff = 0;  
if (strStartDate.trim().equals("") || strEndDate.trim().equals(""))  
{  
return ("Success");  
}  
else  
{  
String strDelim = "/";  
StrTokens StartDate = new StrTokens (strStartDate, strDelim);  
StrTokens EndDate = new StrTokens (strEndDate, strDelim);  
iStartYear = StartDate.getIYear();  
iEndYear = EndDate.getIYear();  
iStartMonth = StartDate.getIMonth();  
iEndMonth = EndDate.getIMonth();  
iStartDay = StartDate.getIDate();  
iEndDay = EndDate.getIDate();  
iStartYear = iStartYear \* 12;  
iEndYear = iEndYear \* 12;  
iStartDate = iStartYear + iStartMonth;  
iEndDate = iEndYear + iEndMonth;  
iDateDiff = iEndDate – iStartDate;

if (iDateDiff >= 29) {  
Calendar c = new GregorianCalendar();  
String firstDate = strStartDate;  
String secondDate = strEndDate;  
DateFormat df = DateFormat.getDateInstance(DateFormat.SHORT);  
Date fdate, sdate, newFDate;  
try {  
fdate = df.parse(firstDate);  
sdate = df.parse(secondDate);  
c.setTime(fdate);  
c.add(Calendar.MONTH, 30);  
log.debug("newFDate "+c.getTime());  
newFDate = c.getTime();

if ( newFDate.after(sdate)||newFDate.equals(sdate) )  
{  
log.debug("newFDate is before the sdate");  
log.debug("Difference is not more than 30 months");  
return ("Success");  
}}catch (ParseException e){  
log.debug("error"+e);  
}

log.debug("Difference is more than 30 months");  
return ("Fail");  
}  
else  
{  
log.debug("Difference is not more than 30 months");  
return ("Success");  
}

}  
}  
[/code]

**Method/Constructor : StrTokens**

[code language=”java”]  
import java.util.StringTokenizer;  
import org.apache.commons.logging.Log;  
import org.apache.commons.logging.LogFactory;

public class StrTokens {  
private int iYear;  
private int iMonth;  
private int iDate;

/\*\*  
\* @return Returns the iDate.  
\*/  
public int getIDate() {  
return iDate;  
}  
/\*\*  
\* @param date The iDate to set.  
\*/  
public void setIDate(int date) {  
iDate = date;  
}  
/\*\*  
\* @return Returns the iMonth.  
\*/  
public int getIMonth() {  
return iMonth;  
}  
/\*\*  
\* @param month The iMonth to set.  
\*/  
public void setIMonth(int month) {  
iMonth = month;  
}  
/\*\*  
\* @return Returns the iYear.  
\*/  
public int getIYear() {  
return iYear;  
}  
/\*\*  
\* @param year The iYear to set.  
\*/  
public void setIYear(int year) {  
iYear = year;  
}  
public StrTokens(String strTxt, String strDelim)  
{  
String origTxt = new String();  
String delimeter = new String();  
int length = 0;  
origTxt = strTxt;  
delimeter = strDelim;  
int delimLen = delimeter.length();  
int startTokInd = 0;  
int curDelimIndex = origTxt.indexOf(delimeter);  
StringTokenizer str = new StringTokenizer(strTxt,strDelim);  
int iCountTokens = str.countTokens();  
String[] tokens = new String [iCountTokens];  
int i=0;

while (str.hasMoreTokens())  
{  
tokens[i]=str.nextToken();  
i++;  
}  
this.setIMonth(new Integer(tokens[0]).intValue());  
this.setIYear(new Integer(tokens[2]).intValue());  
this.setIDate(new Integer(tokens[1]).intValue());  
}  
}[/code]

The method getDateDiff will pass start date and end date to StrTokens constructor.  
This constructor will parse the date and will obtain year, month and day part of given date.  
The getDateDiff method then check if the date difference between start date and end date is more than 30 months. This method will then return a flag value indicating success/failure.