Subject: Date iterator
Posted by ratah on Tue, 20 Jul 2010 09:16:00 GMT
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Hi everybody,

I use U++ soonly and i have a question about date iteration.

An example:

```
Date datetmp, datemin(2009, 12, 31), datemax(2010, 12, 31);

for(datetmp = datemin; datetmp < datemax; datetmp.day++)
{
 ...
}
```

When i compile, datetmp.day becomes 2009-12-32 but not 2010-01-01.
Do i must implement another method to do that or there is an simplest manner to iterate with date?

Thank you

Subject: Re: Date iterator
Posted by ratah on Tue, 20 Jul 2010 09:29:42 GMT
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here is my response but it's not elegant!!

```
String ss;
Date datetmp, datemin(2009, 12, 31), datemax(2010, 12, 31);

for(datetmp = datemin; datetmp < datemax; )
{
  Time tm = ToTime(datetmp);
  tm += 24*3600;

  datetmp = (Date&) tm;

  ss = "";
  ss << datetmp;

  PrompOK(ss);
}
```

I need something like

datetmp.nexday();
or
datetmp.nextmonth(); ....

Subject: Re: Date iterator
Posted by mr_ped on Tue, 20 Jul 2010 09:32:05 GMT
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ratah wrote on Tue, 20 July 2010 11:16

```
Date datetmp, datemin(2009, 12, 31), datemax(2010, 12, 31);

for(datetmp = datemin; datetmp < datemax; datetmp.day++)
{
 ...
}
```

See TimeDate.h with Date definition:
Date& operator+=(Date& a, int b);

instead of datetmp.day++ (which does post-increment only day, not whole date), just do:

```
Date datetmp, datemin(2009, 12, 31), datemax(2010, 12, 31);

for(datetmp = datemin; datetmp < datemax; datetmp += 1 )
{
 ...
}
```

Subject: Re: Date iterator
Posted by mr_ped on Tue, 20 Jul 2010 09:34:16 GMT
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For next month just read the DateTime.h further..
Date AddMonths(Date date, int months);

So "datetmp = AddMonths(datetmp, 1);" should work IMHO.

Subject: Re: Date iterator
Posted by koldo on Tue, 20 Jul 2010 10:24:04 GMT
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Hello Ratah

Yes, follow mr_ped advide.

For example:

Date d(2009, 12, 31);

d += 1;
d will be the January 1st, 2010.

If you add an int to a Date, you add days.

If you add an int to a Time, you add seconds.

Subject: Re: Date iterator
Posted by ratah on Tue, 20 Jul 2010 12:18:14 GMT
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mr_ped > koldo

Thank you,

I use another notation datetmp++ instead of datetmp += 1

and it is marked no match operator++ in ++datatmp

Subject: Re: Date iterator
Posted by mr_ped on Wed, 21 Jul 2010 06:12:06 GMT
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yes, "++" is not defined for Date class (in either form), use "+=" instead. Or define your own operator somewhere in your code (header? It's short stub which will be very likely inlined anyway), like this:
Date& operator++(Date& a) { return a += 1; }
Date& operator++(Date& a, int) { return a += 1; }
Date& operator--(Date& a) { return a -= 1; }
Date& operator--(Date& a, int) { return a -= 1; }

Subject: Re: Date iterator
Posted by mirek on Fri, 23 Jul 2010 09:05:47 GMT
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BTW, in cases like this one, it is often easier to work with scalar dates - use Get and Set to convert Date to/from number of dates since the start of the era.

Mirek