Subject: SQL query generator
Posted by jibe on Fri, 24 Jun 2011 12:07:35 GMT

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Hi,

I want to make a kind of query generator. I'm trying this :

In a dialog box, I have :
- a dropdown list with the fields of my table,
- another dropdown list with possible relations (==, !=, <, <= etc.)
- an EditString where to type the desired value.

This will generate SQL queries like :
SELECT * from MYTABLE where (field) (relation) (value)

ie : SELECT * FROM CLIENTS WHERE NAME == TOTO

I tried this :

```
void MyApp::Query()
{
 String field, cond, val;
 SqlBool where;

 field = dialog.dl_field.GetValue();
 cond = dialog.dl_cond.GetValue();
 val = dialog.ed_cond.GetData();
 where = NAME == ~val;
 mytable.Query(where);
}
```

This is working well

But when I change to this
```
 where = ~field == ~val;
```

Or this
```
 where = NAME ~cond ~val;
```

It's no more working...

I tried many other things, ie grouping field, cond and val in a single String, but I cannot find a way to have it working.

How can I do ? I want to find a way to choose at runtime the complete "where" condition...

Subject: Re: SQL query generator
Posted by BioBytes on Fri, 24 Jun 2011 16:52:43 GMT

Hi Jibe,

Did you try to build the SqlBool where as follows ?

where = (AsString(~field)==AsString(~val))

I am trying some code lines based on what you wish to do and will come back to you as soon as I
have finished.

Kind regards

Biobytes

Subject: Re: SQL query generator
Posted by jibe on Fri, 24 Jun 2011 20:09:57 GMT

No, it's not working...

I also tried
where = (NAME AsString(~cond) AsString(~val));
but it does not works also...

However, this works :
where = (NAME == AsString(~val));

Have you a better solution ?

Thanks anyway

Subject: Re: SQL query generator
Posted by BioBytes on Fri, 24 Jun 2011 21:33:25 GMT

Hi Jibe,

Please find attached files showing a basic application using a sqlite3 database named
"cookbook.db" I am using in one of my projects. The files include pictures of the main window
showing the 2 droplists and the editString before clicking the "Search" button and after having
chosen the table field "NAME" and the ailment to identify ("tomate") and clicked the button
"Search". The doc file is the source code (h,cpp and database schema). I prefer to use SqlId as

often as possible and did that way in this example.

Hoping this could ne helpful

Let me know

have a nice week-end

Biobytes

File Attachments
1) source-project.7z, downloaded 286 times

Subject: Re: SQL query generator
Posted by jibe on Mon, 27 Jun 2011 13:54:27 GMT
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Hi BioBytes,

Thanks for your kind and efficient help !

Reading your sample, I finally made this :
where = (SqlId)(~field) == ~val;
This works well   Finally, the solution was only to cast to the right type !!!

However, I see that you use switch/case to choose the condition. It seems a heavy solution ! Does
somebody knows a better way to do that ? Seems better to have :
where = (SqlId)(~field) COND ~val;
where COND is ==, !=; <, > etc. But what type should be COND so that it works ?

Subject: Re: SQL query generator
Posted by BioBytes on Mon, 27 Jun 2011 19:49:47 GMT
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Hi Jibe,

Happy that I could bring some help. Switch/case seems to be heavy but I think the application is
not really slowed going this way.

Meanwhile, I am trying to test that following code:

SqlId FIELD(~fieldsDL);
SqlBool where("Where"+AsString(~opeDL)+AsString(~valueEdit),pr);

SQL *Select(ALL).From(TBLALIMENTS).Where(where);

while(SQL.Fetch())PromptOK(AsString(SQL[0])+" "+AsString(SQL[1]));

The problem is to know what to pass in pr. U++ help tells that pr should be an integer but all my trials fail except when passing pr = 0. In that case, all the records from the table are obtained ignoring the Where condition.

Another way is to use SqlVal but the problem is to get a SqlBool expression from a SqlVal.

I will inform you if I can solve this issue.

Cheers

Biobytes

Subject: Re: SQL query generator
Posted by jibe on Tue, 28 Jun 2011 06:32:09 GMT
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Hi,

BioBytes wrote on Mon, 27 June 2011 21:49Switch/case seems to be heavy but I think the application is not really slowed going this way.
Yes, it's a good solution ! I was just telling that there could be some "more beautifull" way to code that.

In fact, it's not sure that there is really another solution, as some statements (Like, IsNull) have another syntax...

For me, I'm satisfied with the switch/cas solution, more especially because I need Like, IsNull and there contraries.

Anyway, if somebody has other(s) solution(s), or usefull links to documentation, I'll be happy to know

Thanks again to BioBytes, and good luck for your research !