Subject: array vs. array's items.id sorting/searching
Posted by qwerty on Wed, 19 May 2010 09:32:37 GMT
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Hello,

I have such a piece of code:

```
    class Item {
    public:
        int id;
        void do(int);
    };

    Array<Item> items;
    Array<int>  data;


    /*
     * ... filling arrays with items here ...
     */

//section ONE
{
    ArrayMap<int, int> idx;
    for(int i = 0; i < items.GetCount(); ++i) {
        idx.Add(i, items[i].id);
    }

    Vector<int> idx_order = GetSortOrder(idx.GetValues));
    int ni = 0;     // count of the items with unique id
    for(int i = 1; i < idx_order.GetCount(); ++i) {
        ni += items[idx_order[i - 1]].id ==
              items[idx_order[i    ]].id ? 0 : 1;
    }
}

// section TWO
    for(int d = 0; d < data.GetCount(); ++d) {
        for(int i = 0; i < items.GetCount(); ++i) {
            if(items[i].id == d) {
                items[i].do(d);
            }
 }
    }
```

section ONE:

I am doing this, because I want the count of unique 'items' by the their 'id', as it can be seen. Is there better approach? (need persistency, thus Array)

optional: sorting the array by their's item's property was for me interesting topic too(by one/two functions of course)

section TWO:
There is redundancy. Bad. I belive, that it can be solved better using upp without adding anything to Item. Maybee.

thank you very much for your optional suggestions

Subject: Re: array vs. array's items.id sorting/searching
Posted by fudadmin on Wed, 19 May 2010 09:52:03 GMT
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Have you had a look at GridCtrl GridSort.cpp?

Subject: Re: array vs. array's items.id sorting/searching
Posted by fudadmin on Wed, 19 May 2010 11:12:03 GMT
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For my own GridCtrl class I have written a code that copies/pastes only unique column values (useful for databases...). Something like this:

```
//Grid1.h
VectorMap<String, int>& Unique();  //Value might be better?

//Grid1.cpp
VectorMap<String, int>& Grid1::Unique()
{
 static  VectorMap<String, int> x;
 return x;
}

void Grid1::PumpInCol()
{
 int col=GetSelCol();

 Unique().Clear();
 for (int r=0; r< GetRowCount(); r++)
  Unique().GetAdd(AsString(Get(r,col)), 0)++;

 SelectCells(col,col,-1,-1);
}
```

```
void Grid1::PumpOutCol()
{
 Clear();

 Vector<int> order = UPP::GetSortOrder( Unique().GetKeys() );
 for(int i = 0; i < order.GetCount(); i++)
 {
  Add();
  String mylist = Unique().GetKey(order[i]);
//  SetLast(0, i+1);
  SetLast(1,  atoi(mylist));
//  SetLast(2, Unique()[order[i]]); // 0 everywhere
//  SetLast(1, AsString(Unique()[i]));
  SetLast(2, mylist.GetCount());
}


void Grid1::PumpOutColM()
{
 for(int i = 0; i < Unique().GetCount(); i++)
 {
  Add();
  SetLast(0, i+1);
  SetLast(1, Unique().GetKey(i));
  SetLast(2, Unique()[i]);
 }

}
```

Maybe it would give you some ideas.

Subject: Re: array vs. array's items.id sorting/searching
Posted by qwerty on Thu, 20 May 2010 07:44:25 GMT
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Yes, it's quite possible... not changed my code, but that 'static' trick is nice, I'll remember that

thank you

Subject: Re: array vs. array's items.id sorting/searching
Posted by fudadmin on Thu, 20 May 2010 12:58:28 GMT
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qwerty wrote on Thu, 20 May 2010 08:44Yes, it's quite possible... not changed my code, but that 'static' trick is nice, I'll remember that

thank you

thanks for noticing!

btw, this trick with that code serves as internal shared clipboard amongst Grid1 instances. It enables a user to copy with e.g Shift_Ctrl_C from one database with duplicates and paste into another without duplicates with customizable column selection sets. Of course you need more lines of code.

querty, maybe a bit off topic:
but... my general advice for newbies (and not only) - use GridCtrl with QuickSearch enabled for debugging purposes. It is much faster to explore and find things than using text logs.

And... a kind of my patented idea... with this code it is possible to have/find/use unique strings from debug output.

And another one. Use and learn from GridCtrl everywhere unless speed really matters. And even then use GridCtrl. It's the best thing after the wheel invention. Believe me.
Sorry, maybe too much off topic...

Subject: Re: array vs. array's items.id sorting/searching
Posted by qwerty on Thu, 20 May 2010 14:21:48 GMT
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little bit disapointig is, that I am still newbie a few years in upp

thanx for advices, I am curious what I will find

Subject: Re: array vs. array's items.id sorting/searching
Posted by alendar on Fri, 24 Dec 2010 22:10:23 GMT
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I'm snagging this static wrapper idea, I had a problem with the VectorMap sitting as an attribute, this really helps!

Thanks!
