Subject: Is there a way to fetch objects w/o default constructor?
Posted by Mindtraveller on Mon, 08 Sep 2008 09:25:45 GMT
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Simplified code as a description of problem:

```
class Project
{
   Project(TabCtrl &tabs) {/*add new tab with Project controls*/}
};

class App
{
   void Serialize (Stream &stream) {stream % projects;} //ERROR: no default constructor available
   Array<Project> projects;
   TabCtrl       mainTabs;
};
```

Is there a way I can fetch my Project objects with auto-adding to the tabs?

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by mirek on Mon, 08 Sep 2008 17:23:08 GMT
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Mindtraveller wrote on Mon, 08 September 2008 05:25Simplified code as a description of problem:

```
class Project
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};
```

Is there a way I can fetch my Project objects with auto-adding to the tabs?

Yes, but not really recomended

The trick would be to implement your own Array serialization, using "new" variant of Add.

Something like:

```
if(s.IsLoading())
    projects.Clear();
int count = projects.GetCount();
s % count;
for(int i = 0; i < count; i++)
    if(s.IsStoring())
        s % projects[i];
    else
        s % projects.Add(new Project(tabs));
```

(I would rather find some other solution. IMO, except special cases, classes should have default constructors).

Mirek

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by Mindtraveller on Tue, 09 Sep 2008 06:47:29 GMT
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So what "right", or "typical" solution of such a common problem is recommended? Just to make default constructor along with something like void Setup(.....) ?

```
stream % projects;

if(stream.IsLoading())
{
    for (int i=0; i<projects.GetCount(); ++i)
        projects.Setup(......);
}
```

This method has one big drawback: I can`t hold any references inside Project class because I can`t initialize them in constructor. In my previous example this means i.e. I can`t hold tabs reference inside Project which is very uncomfortable. Using simple pointer and setting it inside Setup() is no good too.

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by mirek on Tue, 09 Sep 2008 06:57:53 GMT
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Mindtraveller wrote on Tue, 09 September 2008 02:47So what "right", or "typical" solution of such a common problem is recommended? Just to make default constructor along with something like void Setup(.....) ?

Well, that is what I would use.

Quote:

```
stream % projects;

if(stream.IsLoading())
{
    for (int i=0; i<projects.GetCount(); ++i)
        projects.Setup(......);
}
```

Well, I actually do not really know what degree of flexibility is needed... Is the number of projects fixed and only the content is changing? Too little info to discuss the solution.

Quote:
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That is correct. Personally I would do this sacrifice in order to avoid "Add(new)" variant. (Well, as you might have noticed, I tend to judge the quality of code by number of new/delete statements

Mirek

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by Mindtraveller on Tue, 09 Sep 2008 07:38:21 GMT
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luzr wrote on Tue, 09 September 2008 10:57Quote:
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Thanks. I think I`ll store these objects pointers in Ptr objects. This would at least look better than plain pointers.

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by mirek on Tue, 09 Sep 2008 07:48:01 GMT
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Mindtraveller wrote on Tue, 09 September 2008 03:38luzr wrote on Tue, 09 September 2008 10:57Quote:
This method has one big drawback: I can`t hold any references inside Project class because I can`t initialize them in constructor. In my previous example this means i.e. I can`t hold tabs reference inside Project which is very uncomfortable. Using simple pointer and setting it inside Setup() is no good too.

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Thanks. I think I`ll store these objects pointers in Ptr objects. This would at least look better than plain pointers.

That is only useful if they can get destructed while "parent" object is alive....

Mirek

Subject: Re: Is there a way to fetch objects w/o default constructor?
Posted by mrjt on Tue, 09 Sep 2008 11:45:04 GMT
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Plus auto-initialisation to NULL. One less thing to forget is always nice

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