Subject: Problems with Dave's LinkedList Posted by s007amf on Mon, 02 Apr 2001 18:25:35 GMT

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I am using Dave Fanning's LinkedList object and seem to have run into a problem with it. In the procedure Delete_Node, I was getting a Invalid Pointer error on line:

IF NOT Ptr_Valid((*currentNode).previous) THEN BEGIN

To me, it looks like the error occurs when the linked list only has one node left. Dave has code that should deal with this condition on line:

IF index EQ (self.count - 1) THEN self->Delete_Last_Node

This code does deal with the above condition, but does not cause Delete_Node to exit. Therefore, the list is empty and tries to execute the first line I mentioned; which, causes a runtime error.

I changed the second line I mentioned into the following block of code (which seems to fix the error):

IF index EQ (self.count - 1) THEN BEGIN self->Delete_Last_Node RETURN END

Alan

Subject: Re: Problems with Dave's LinkedList Posted by davidf on Mon, 02 Apr 2001 18:55:37 GMT View Forum Message <> Reply to Message

ALAN FRAZIER (s007amf@news.wright.edu) writes:

- > I am using Dave Fanning's LinkedList object and seem to have run into a
- > problem with it. In the procedure Delete Node, I was getting a Invalid
- > Pointer error on line:
- > IF NOT Ptr_Valid((*currentNode).previous) THEN BEGIN
- > To me, it looks like the error occurs when the linked list only has one
- > node left. Dave has code that should deal with this condition on line:

>

- > IF index EQ (self.count 1) THEN self->Delete_Last_Node
- >
- > This code does deal with the above condition, but does not cause
- > Delete_Node to exit. Therefore, the list is empty and tries to execute
- > the first line I mentioned; which, causes a runtime error.

>

- > I changed the second line I mentioned into the following block of code
- (which seems to fix the error):

> >

- > IF index EQ (self.count 1) THEN BEGIN
- > self->Delete Last Node
- > RETURN
- > END

Ah, this is a problem, I think, in how programs sometimes grow organically.

This was one of the first programs I wrote shortly after pointers were introduced in IDL. I wanted to learn how to use them, and I thought a linked list was a good programming exercise. It was that, and much, much more. When I was finished I pretty much didn't want to *look* at another pointer for a long, long time!

It is a mystery to me why something so simple in theory can be so exasperatingly complex in detail. I grimace just thinking about the experience.

But, anyway, I set out to do one thing, and I ended up doing something else. And by the time I was done, the program worked, but it was a lot more fragile than I expected it to be. When I decided to publish it, I knew it had to be more robust, but the thought of re-writing all that tedious code was still too fresh.

So what I did instead was add a robust public interface to the private methods I had already worked out. I kind of liked this solution because it tied in nicely with a little lecture I was giving about pointers and objects. But with two years hindsight, I can see it may have not been the brightest idea I ever had. But, in any case, I thought I documented the public methods pretty well.

The point of this long-winded story is that you are using one of the private methods (DELETE_NODE) instead of the proper public method (DELETE). The public method will call the appropriate private methods, and will do

so appropriately and without having to resort to making changes in the code. (Thank God!!)

Cheers,

David

P.S. Let's just say I can see the benefit of re-writing this program, but, unfortunately, it is WAY down on my list. :-)

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Problems with Dave's LinkedList Posted by Pavel A. Romashkin on Mon, 02 Apr 2001 21:02:41 GMT View Forum Message <> Reply to Message

David Fanning wrote:

- > ...programs sometimes
- > grow organically.

I am afraid, mine would not qualify for the USDA seal of "organic". Some are affected by beers, others by tylenols :-(

Cheers, Pavel

Subject: Re: Problems with Dave's LinkedList Posted by davidf on Mon, 02 Apr 2001 21:21:09 GMT View Forum Message <> Reply to Message

Pavel A. Romashkin (pavel.romashkin@noaa.gov) writes:

- > I am afraid, mine would not qualify for the USDA seal of "organic". Some
- > are affected by beers, others by tylenols :-(

I think beer qualifies as organic. I heard it described on NPR the other day as "liquid bread". They were trying to tell me, Pavel, that beer goes good with desserts, as long as the beer is sweeter than the

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dessert. Souundeed gud to mee. :-)
Cheers,
David
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155
Subject: Re: Problems with Dave's LinkedList
Posted by Martin Schultz on Tue, 03 Apr 2001 10:24:27 GMT
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David Fanning wrote:
> Pavel A. Romashkin (pavel.romashkin@noaa.gov) writes:
>> I am afraid, mine would not qualify for the USDA seal of "organic". Some
>> are affected by beers, others by tylenols :-(
> I think beer qualifies as organic.
... only if brewed according to the German "Reinheitsgebot" ;-) I
heard that American beer is full of antibiotics etc. (or was that cows
?). Oh well, we shouldn't be too proud of our cattle these days either
;-(
Cheers,
Martin
PS: David: when you come, could you bring a good burger?
> I heard it described
> on NPR the other day as "liquid bread". They were
> trying to tell me, Pavel, that beer goes good with
> desserts, as long as the beer is sweeter than the
> dessert. Souundeed gud to mee. :-)
> Cheers,
> David
```

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> David Fanning, Ph.D.
> Fanning Software Consulting
> Phone: 970-221-0438 E-Mail: davidf@dfanning.com
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Toll-Free IDL Book Orders: 1-888-461-0155
[[ Dr. Martin Schultz Max-Planck-Institut fuer Meteorologie
           Bundesstr. 55, 20146 Hamburg
[[
                                           [[
[[
           phone: +49 40 41173-308
                                         [[
           fax: +49 40 41173-298
                                       [[
[[
[[ martin.schultz@dkrz.de
                                       [[
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