

## Re: When is a stack used in real life?

**Source:** <http://coding.derkeiler.com/Archive/General/comp.programming/2004-05/0635.html>

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**From:** Nick Landsberg (*hukolau\_at\_NOSPAM.att.net*)

**Date:** 05/10/04

Date: Mon, 10 May 2004 00:54:01 GMT

Edward G. Nilges wrote:

> "Arthur J. O'Dwyer" <ajo@nospam.andrew.cmu.edu> wrote in message  
news:<Pine.LNX.4.58-035.0405082215090.15834@unix44.andrew.cmu.edu>...

>

>>On Sat, 8 May 2004, Nick Landsberg wrote:

>>

>>>How about the stack of clean plates on

>>>spring-loaded supports that some

>>>cafeterias use?

>>

>> I've always thought of that as a really *\*bad\** use of a stack,

>>actually! What you really want for plates (or sock drawers) is

>>a *\*queue\**, so that you don't end up with a few bottom-most plates

>>(or socks) going for weeks without washing.

>

>

> My socks form a mathematical set in that no two are alike.

>

>

>> Sure, now that I think about it, cafeterias must certainly

>>wash *\*all\** their plates each morning. At least, I sure hope they

>>do! :)

>

>

> The advantage of the spring-loaded plate is that *MOST* diners get the

> most recently washed plates which is why, in a cafeteria using the

> stack, the plate is still warm and wet from its washing.

>

> It is true that if a large number of diners show up while the

> dishwashers are out back for a smoke, some diners will get plates

> that, while clean, have been resident for a long time and may have

> acquired airborne microbes as a result.

>

> But suppose the plates were randomly shuffled. Most diners would

> receive plates of only middling cleanliness.

Then it wouldn't be a true "stack" would it? (LIFO)

Re: When is a stack used in real life?

comp.programming: Re: When is a stack used in real life?

>  
> *In fact, if the dishwashers are like MOST dishwashers in America, that*  
> *is to say hard-working immigrants, the bottom plates in a stack will*  
> *never be accessed at all.*  
>  
> *If you observe waitresses, busboys and dishwashers at almost any such*  
> *establishment you will see that by default, they maintain a fast pace*  
> *of work and this ensures your tray is bussed rapidly and your plate is*  
> *cleaned, and returned quickly to the top of the stack.*  
>  
>  
>> -Arthur

The OP asked for a "real world" example of stacks.  
I interpreted this to mean that the OP wanted to  
model some physical process(es) which were similar  
to stacks.

The "dish stack" is the one that came to my mind first,  
whatever its cleanliness merits. :) Even secondary school  
students should relate to that, since they generally  
eat in cafeterias in their schools.

CBFalconer's suggestion was much more fascinating, IMO,  
since it has the possibilities of of being extended  
(as he said) to a much harder problem as a future  
assignment. How students relate to trains nowadays  
is debatable.

NPL

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"It is impossible to make anything foolproof  
because fools are so ingenious"  
- A. Bloch