Subject: Using realloc()
Posted by SSinischo on Wed, 15 Mar 2017 14:26:39 GMT
View Forum Message <> Reply to Message

"Dr. Lusth says...we use malloc() in this class

Does this still apply for our implementations of DArray?

-

Subject: Re: Using realloc()
Posted by jarobinson3 on Wed, 15 Mar 2017 20:56:02 GMT
View Forum Message <> Reply to Message

Just write your own realloc.

    // grow a region of memory from size to new_size
    //
    // @pointer   - Points to the first address you want to resize
    // @size      - The size of current size of memory
    // @new_size  - The new size you want your memory to be
    //
    // @NOTE      - This is not robust, or even guaranteed to work
    //
    // @REQUIRES  - string.h, stdlib.h
    //
    void Realloc(void** pointer, unsigned int size, unsigned int new_size) {

    // Allocate new buffer of memory
        void* result = malloc(new_size);
        if(result == NULL ) perror("Realloc: could not allocate new space");

    // copy over only what fits
        unsigned int to_copy = size < new_size? size : new_size;
        memcpy(result,*pointer,min(size,new_size));

    // safely swap
        void* tmp = *pointer;
        *pointer = result;
        free(tmp); // if tmp is garbage prepare for pain
    }

Page 1 of 2 ---- Generated from The Beastie Forums
So is realloc() off the table? I'm all up for creating our own function to relocate memory, but it seems a bit redundant to create a function that is already in the standard library.

Realloc is OK. When I say malloc, I mean the malloc family of functions (malloc, realloc, calloc).