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1  /*
2  * C program by Dave Russillo. Made for CS1311.
3  * Takes collection of items and puts it in linked list.
4  */
5  #include <stdio.h>
6  #include <stdlib.h>
7  #include <string.h>
8
9  struct videogame {
10     char name[31];
11     double space; // in GB
12     int playtime; // in hours
13     double price; // in USD
14     struct videogame *next;
15 };
16 struct videogame *head, *last, *current;
17 int entries; // length of list
18
19
20 void add_node(void) {
21     int valid_value = 0; // boolean
22
23     // new struct
24     current = malloc(sizeof(struct videogame));
25
26     // set name
27     printf("Enter name (will read up to 30 characters): ");
28     fgets(current->name, 31, stdin);
29     // remove newline
30     if(strcspn(current->name, "\n") == 30) { // if strcspn returns length, input exceeds limit
31         while(getchar() != '\n');

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32 } else {
33     current->name[strcspn(current->name, "\n")] = '\0';
34 }
35
36 // set space
37 while(valid_value == 0) {
38     printf("Enter required space in GB (up to 9,999.9): ");
39     scanf("%lf", &current->space);
40     if(current->space < 0.000001 || current->space > 9999.9) {
41         printf("Invalid value for required space was entered. Try again. \n");
42     } else {
43         valid_value = 1; // pass
44     }
45 }
46 valid_value = 0; // reset valid_value
47
48 // set playtime
49 while(valid_value == 0) {
50     printf("Enter playtime in hours (up to 99,999): ");
51     scanf("%d", &current->playtime);
52     if(current->playtime < 0 || current->playtime > 99999) {
53         printf("Invalid value for playtime was entered. Try again. \n");
54     } else {
55         valid_value = 1; // pass
56     }
57 }
58 valid_value = 0; // reset valid_value
59
60 // set price
61 while(valid_value == 0) {
62     printf("Enter price in USD (enter up to 999.99): ");
```

[illegible]

[illegible]

This program take videogames' names, required space, playtime, and price as input.
It then puts them in a liked list database.

Press enter to continue

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CURRENT DATA (1 ENTRIES):

| name | req. space | playtime | price |
|--------------|------------|----------|---------|
| Doom Eternal | 88.9GB | 15h | \$39.99 |

Enter name (will read up to 30 characters): Minecraft

Enter required space in GB (up to 9,999.9): 0.6

Enter playtime in hours (up to 99,999): 200

Enter price in USD (enter up to 999.99): 23.99█

CURRENT DATA (5 ENTRIES):

| name | req. space | playtime | price |
|--------------------|------------|----------|---------|
| Doom Eternal | 88.9GB | 15h | \$39.99 |
| Minecraft | 0.6GB | 200h | \$23.99 |
| Grand Theft Auto V | 110.0GB | 1126h | \$10.99 |
| Rainbow Six Siege | 82.3GB | 1312h | \$6.89 |
| Garfield Kart | 1.8GB | 12h | \$14.99 |

Would you like to continue?
Type y for yes or done to quit.

?..done