Copilot

When using scanf to read input in C, it treats spaces as delimiters. If you want to allow spaces within the input, you'll need to handle it differently. Here's how you can modify your code to allow spaces in the input:

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#define MAX NAME SZ 256
 int main()
{
    char *name = malloc(MAX NAME SZ);
if (name == NULL) {
printf("No memory\n");
                                return
1;
    }
    printf("What is your name? ");
fgets(name, MAX NAME SZ, stdin);
    // Remove trailing newline, if present
    if ((strlen(name) > 0) \&\& (name[strlen(name) - 1] == '\n')) {
name[strlen(name) - 1] = '\0';
    printf("Hello %s. Nice to meet you.\n", name);
    free(name);
return 0; }
```

In this modified code:

- We use fgets to read the entire line of input, including spaces.
- We remove the trailing newline character (if present) to ensure a clean string.

This approach allows you to capture names with spaces, such as "Lucas Aardvark." Remember that using fgets is safer than scanf("%s"), especially when dealing with user input, as it provides buffer overflow protection^{1 2 3}.

Source(s)

- 1. c How do you allow spaces to be entered using scanf? Stack Overflow
- 2. C scanf with spaces problem Stack Overflow
- 3. <u>c How do you include spaces in a scanf string? Stack Overflow</u>
- 4. Why are you using a space before %c in scanf(" %c", &ch) CodesDope
- 5. As a beginner, I faced this problem a lot with scanf. Took me ... Reddit
- 6. https://www.tutorialspoint.com/c standard library/c function fgets.htm
- 7. How to read numbers separated by space using scanf
- 8. Effect of adding whitespace in the scanf() function in C
- 9. <u>c How does scanf handle white space? Stack Overflow</u> 10. <u>How can I scan strings with spaces in them using scanf()?</u>