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/* BY SUBMITTING THIS FILE TO CARMEN, I CERTIFY THAT I HAVE PERFORMED ALL OF
THE WORK TO CREATE THIS FILE AND/OR DETERMINE THE ANSWERS FOUND WITHIN
THIS FILE MYSELF WITH NO ASSISTANCE FROM ANY PERSON (OTHER THAN THE
INSTRUCTOR OR GRADERS OF THIS COURSE) AND I HAVE STRICTLY ADHERED TO THE
TENURES OF THE OHIO STATE UNIVERSITY'S ACADEMIC INTEGRITY POLICY.
*/
#include "lab4.h"
#include <string.h>
Node* get_NodeforName(Node *head, char *name) {
    char **matches;
    Node *traversePtr;
    Node *student;
    int i, j;
    int option;
    /* travel through the linked list looking for the student name */
    traversePtr = head;
    /*Dynamically allocates an array to store the matches*/
    matches = (char**)malloc(42 * sizeof(char*));
    i = 0;
    while (traversePtr != NULL) {
        /*found one, add the name to the matches list*/
        if (strstr(traversePtr->student.student_name, name) != NULL) {
            *(matches + i) = traversePtr->student.student_name;
            i++;
        }
        traversePtr=traversePtr->next;
    }
    student = head;
    /*If there is more than one match, prompts the user to specify which match*/
    if (i > 1) {
        printf("There is more than one student by that name.\n");
        j = 0;
        /*Prints the possible matches*/
        while (*(matches + j) != NULL) {
            printf("%d) %s\n", j + 1, *(matches +
j));
            j++;
        }
        printf("Please indicate which student you want: ");
        scanf("%d", &option);
        option--;
        /*traverses the linked list to find which match number was entered b
the user*/
        while (strstr(student->student.student_name, *(matches + option)) ==
NULL) {
            student = student->next;
        }
    }
    /*Otherwise, traverse the linked list to find the node that matches the name*/
    else {
        while (strstr(student->student.student_name, *matches) == NULL &&
student != NULL) {
            student = student->next;
        }
    }
    free(matches); /*Free the allocated storage in matches*/
    return student;
}

```