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Assignment 3 Report

1. My program consists of 4 functions, including the main(). The functions besides main are display(), finding(), and checking(). The program has more function to simplify and allow easier readability. The 2D char tags[][] array is used to store the tags and the int array[] is used to keep track and store the number of times a tag is found in the html file.

**htags.c**

#include <stdlib.h>

#include <stdio.h>

#include <string.h>

char tags[100][10];

static int array[100];

char storing[100000];

char tempArr[100][10];

int counter = 0;

int variable = 0;

int anotherVar = 0;

void display()

{

    for(int i = 0; i < counter; i++)

    {

        printf("%s found: %d\n", \*(tags+i), array[i]);

    }

}

int checking(char\* var)

{

    if((\*var) == '\0')

    {

        return -5;

    }

    if(counter == 0)

    {

        return -1;

    }

    else

    {

        for(int i = 0; i < counter; i++)

        {

            int result = strcmp(\*(tags+i), var);

            if(result == 0)

            {

                return i;

            }

        }

        return -1;

    }

}

void finding(char\* charac)

{

    int a = 0;

    int len = strlen(charac);

    for(int i = 0; i < len; i++)

    {

        if(charac[i] == '<')

        {

            for(int j = i+1; j < len; j++)

            {

                if(charac[j] == '>'|| charac[j] == ' '|| charac[j] == '/' || charac[j] == '\n')

                {

                    i = j;

                    break;

                }

                else

                {

                    tempArr[anotherVar][a] = charac[j];

                    a++;

                }

            }

            char\* var1 = &tempArr[anotherVar][0];

            int ans = checking(var1);

            if(ans == -1)

            {

                for(int k = 0; k < strlen(var1); k++)

                {

                    tags[variable][k] = tempArr[anotherVar][k];

                }

                array[variable] = array[variable] + 1;

                variable++;

                counter++;

            }

            else

            {

                array[ans] = array[ans] + 1;

            }

            anotherVar++;

            a = 0;

        }

    }

}

int main(int argc, char \*\* argv)

{

    char\* inputtt = &storing[0];

    scanf("%[^\t]%\*c", inputtt);

    finding(inputtt);

    display();

}

A screenshot of a computer

Description automatically generatedA picture containing indoor, sitting

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