Text

Description automatically generated

/\*gavin skehan

21440824

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#include <stdio.h> // libary's

#include <stdlib.h>

#include <string.h>

#include <time.h>

int readWords(char filePath[]);

void wordGuess();

typedef struct { // structures

char dictWord[20];

}dictionary;

dictionary word[100000]; // structure with array

void main() {

char myFilePath[] = "C:\\Users\\skeha\\OneDrive\\Documents\\dictionary.txt"; // properties of file store in array

int numWords = readWords(myFilePath);

printf("Loaded %d suitable words from the dictionary.\n\n", numWords);

wordGuess();

}

int readWords(char filePath[]) {

dictionary newWord;

FILE\* fptr; // file pointer

char line[200];

int i = 0;

char delims[] = "\n";

fopen\_s(&fptr, filePath, "r"); // open file in read mode

if (fptr == NULL) {

printf("Error opening file, exiting...."); // if file not read

}

else {

while (!feof(fptr) && i < 100000) { // array length 100000

fgets(line, 200, fptr);

char\* next = NULL;

char\* first = strtok\_s(line, delims, &next); // separates strings

if (strlen(first) >= 4 && strlen(first) <= 7) { // determine random word length

strcpy\_s(newWord.dictWord, 20, first); // copy a string

word[i] = newWord;

i++;

}

}

fclose(fptr); // close file

}

return i;

}

void wordGuess() {

srand(time(NULL)); // random function

char ranWord[20];

char guessedLetter;

char blankStr[20];

int d = 0;

int i = 0;

int ranNumber = rand() % 100000; // random number between 1 and 100000

strcpy\_s(ranWord, 20, word[ranNumber].dictWord); // generate random word

if (ranWord == NULL) {

int ranNumber = rand() % 100000; // random number

strcpy\_s(ranWord, 20, word[ranNumber].dictWord);

}

for (int i = 0; i < strlen(ranWord); i++) {

blankStr[i] = '-';

}

blankStr[strlen(ranWord)] = '\0'; // start substring

while (d == 0) {

printf("Guess %d.\n", i + 1);

printf("%s", blankStr);

printf("\nGuess letter > ");

scanf\_s("\n%c", &guessedLetter);

for (int j = 0; j < strlen(ranWord); j++) {

if (ranWord[j] == guessedLetter) {

blankStr[j] = guessedLetter;

}

}

int value = strcmp(ranWord, blankStr);

if (value == 0) {

printf("\n");

printf("It took you %d guesses to find %s!\n\n", i + 1, ranWord); // print guesses

break; // break program

}

i++; // incrememnt

}

}