#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <time.h>

#include <ctype.h>

#define MAX\_MOOD\_LENGTH 100

#define FILENAME "mood\_log.txt"

// Function declarations

void logMood();

void showInspiringQuote();

void analyzeMood(const char\* mood);

int main() {

int choice;

do {

printf("\n=== Mood Tracker ===\n");

printf("1. Log today's mood\n");

printf("2. Show inspiring quotes\n");

printf("0. Exit\n");

printf("Enter your choice: ");

if (scanf("%d", &choice) != 1) {

while (getchar() != '\n'); // Clear invalid input

printf("Invalid input. Please enter a number.\n");

continue;

}

getchar(); // Consume newline character

switch (choice) {

case 1:

logMood();

break;

case 2:

showInspiringQuote();

break;

case 0:

printf("Goodbye!\n");

break;

default:

printf("Invalid choice. Try again.\n");

}

} while (choice != 0);

return 0;

}

void logMood() {

char mood[MAX\_MOOD\_LENGTH];

time\_t now = time(NULL);

struct tm \*t = localtime(&now);

printf("How are you feeling today? ");

fgets(mood, MAX\_MOOD\_LENGTH, stdin);

mood[strcspn(mood, "\n")] = '\0'; // Remove newline

// Respond based on mood

analyzeMood(mood);

// Save mood to file

FILE \*file = fopen(FILENAME, "a");

if (file == NULL) {

perror("Failed to open mood log file");

return;

}

fprintf(file, "[%04d-%02d-%02d %02d:%02d] Mood: %s\n",

t->tm\_year + 1900, t->tm\_mon + 1, t->tm\_mday,

t->tm\_hour, t->tm\_min, mood);

fclose(file);

printf("Mood logged successfully!\n");

}

void showInspiringQuote() {

const char\* quotes[] = {

"Believe you can and you're halfway there.",

"You are capable of amazing things.",

"Every day is a second chance.",

"Stay positive, work hard, make it happen.",

"Your only limit is your mind.",

"Don't watch the clock; do what it does. Keep going.",

"Great things never come from comfort zones."

};

int totalQuotes = sizeof(quotes) / sizeof(quotes[0]);

srand((unsigned int)time(NULL)); // Seed random generator

int index = rand() % totalQuotes;

printf("🌟 Inspiring Quote: \"%s\"\n", quotes[index]);

}

void analyzeMood(const char\* mood) {

char lowerMood[MAX\_MOOD\_LENGTH];

int i;

for (i = 0; mood[i] && i < MAX\_MOOD\_LENGTH - 1; i++) {

lowerMood[i] = tolower((unsigned char)mood[i]);

}

lowerMood[i] = '\0';

if (strstr(lowerMood, "good") || strstr(lowerMood, "happy")) {

printf("😊 That's incredible! Keep shining!\n");

} else if (strstr(lowerMood, "sad")) {

printf("😢 I'm sorry you're feeling sad. It's okay to feel down sometimes.\n");

} else if (strstr(lowerMood, "angry")) {

printf("😠 It's okay to feel angry. Try to take deep breaths.\n");

} else if (strstr(lowerMood, "tired")) {

printf("😴 Sounds like you need some rest. Take care of yourself!\n");

} else if (strstr(lowerMood, "anxious") || strstr(lowerMood, "worried")) {

printf("😟 Anxiety can be tough. Try grounding techniques or talking to someone.\n");

} else if (strstr(lowerMood, "excited") || strstr(lowerMood, "great")) {

printf("🎉 That's awesome! Hope your day keeps getting better.\n");

} else {

printf("🙂 Thanks for sharing how you feel.\n");

}

}