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#include <stdio.h>

#include <stdlib.h>

#include <string.h>


#define API_ENDPOINT "https://api.openweathermap.org/data/2.5/weather"

#define API_KEY "cf87caec981c552fe6909bd59b17c832"


void print_weather(const char *city_name) {

    char request_url[1024];

    char response_body[1024];

    size_t response_size;


    // Construct the request URL

    sprintf(request_url, "%s?q=%s&appid=%s", API_ENDPOINT, city_name, API_KEY);


    // Make a request to the API

    int http_status_code = curl_easy_perform(curl);

    if (http_status_code != CURLE_OK) {

        fprintf(stderr, "Could not perform request: %s\n", curl_easy_strerror(http_status_code));

        exit(EXIT_FAILURE);

    }


    // Get the response body

    curl_easy_getinfo(curl, CURLINFO_RESPONSE_BODY, &response_size);

    if (response_size == 0) {

        fprintf(stderr, "No response body\n");

        exit(EXIT_FAILURE);

    }


    // Parse the JSON response

    struct JSON_object *root;

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root = json_object_new_object();

if (root == NULL) {
    fprintf(stderr, "Could not create JSON object\n");
    exit(EXIT_FAILURE);
}

json_object_parse_string(root, response_body);

// Display the weather data
printf("Current weather in %s:\n", city_name);
printf("Temperature: %.1f °C\n", json_object_get_double(root, "main", "temp") - 273.15);
printf("Humidity: %d%%\n", json_object_get_int(root, "main", "humidity"));
printf("Wind speed: %.1f m/s\n", json_object_get_double(root, "wind", "speed"));
printf("Wind direction: %d°\n", json_object_get_int(root, "wind", "deg"));

// Free the JSON object
json_object_put(root);

// Free the response body
free(response_body);

// Close the CURL handle
curl_easy_cleanup(curl);
}

int main() {
    char city_name[256];

    // Get the city name from the user
    printf("Enter city name: ");
    fgets(city_name, sizeof(city_name), stdin);

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city_name[strlen(city_name) - 1] = '\0';
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// Print the weather for the city
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print_weather(city_name);
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return 0;
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}
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