#include <iostream>

#include <string>

#include <curl/curl.h>

#include <nlohmann/json.hpp>

// Function to send an HTTP POST request

std::string sendPOSTRequest(const std::string& url, const std::string& data)

{

CURL\* curl = curl\_easy\_init();

if (!curl) {

std::cerr << "Failed to initialize CURL" << std::endl;

return "";

}

std::string response;

curl\_easy\_setopt(curl, CURLOPT\_URL, url.c\_str());

curl\_easy\_setopt(curl, CURLOPT\_POSTFIELDS, data.c\_str());

curl\_easy\_setopt(curl, CURLOPT\_WRITEFUNCTION, [](char\* ptr, size\_t size, size\_t nmemb, std::string\* data) {

data->append(ptr, size \* nmemb);

return size \* nmemb;

});

curl\_easy\_setopt(curl, CURLOPT\_WRITEDATA, &response);

CURLcode res = curl\_easy\_perform(curl);

if (res != CURLE\_OK) {

std::cerr << "Failed to send HTTP request: " << curl\_easy\_strerror(res) << std::endl;

}

curl\_easy\_cleanup(curl);

return response;

}

// Function to translate text using Google Translate API

std::string translateText(const std::string& text, const std::string& sourceLang, const std::string& targetLang)

{

std::string url = "https://translation.googleapis.com/language/translate/v2?key=YOUR\_API\_KEY";

std::string data = "q=" + text;

data += "&source=" + sourceLang;

data += "&target=" + targetLang;

data += "&format=text";

std::string response = sendPOSTRequest(url, data);

// Parse the JSON response

auto json = nlohmann::json::parse(response);

// Extract the translated text

std::string translatedText = json["data"]["translations"][0]["translatedText"];

return translatedText;

}

int main()

{

std::string apiKey = "YOUR\_API\_KEY";

std::string sourceLang = "en"; // Source language

std::string targetLang = "fr"; // Target language

std::string input;

std::cout << "Enter a word or phrase to translate (or 'q' to quit):" << std::endl;

while (std::getline(std::cin, input) && input != "q") {

std::string translation = translateText(input, sourceLang, targetLang);

std::cout << "Translation: " << translation << std::endl;

}

return 0;

}

Please note that you'll need to replace **"YOUR\_API\_KEY"** with your actual Google Translate API key. Additionally, make sure you have the **curl** and **nlohmann/json** libraries installed in your C++ environment.

This code sends an HTTP POST request to the Google Translate API with the text to translate, source language, target language, and API key. It then parses the JSON response and extracts the translated text. The loop in the **main** function reads user input and calls the **translateText** function to get the translation, which is then printed to the console.