



Instituto Politécnico Nacional

ESCUELA SUPERIOR DE CÓMPUTO

CLASE 21 - CLOUD TRANSLATION API

Sistemas distribuidos Profesor: Ukranio Coronilla Contreras

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1 Captura de pantalla con respuesta.

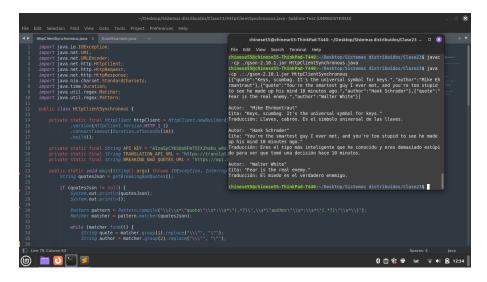


Figure 1: Caption

2 Codigo del cliente.

```
import java.io.IOException;
2 import java.net.URI;
3 import java.net.URLEncoder;
4 import java.net.http.HttpClient;
5 import java.net.http.HttpRequest;
6 import java.net.http.HttpResponse;
7 import java.nio.charset.StandardCharsets;
8 import java.time.Duration;
9 import java.util.regex.Matcher;
import java.util.regex.Pattern;
12 public class HttpClientSynchronous {
13
      private static final HttpClient httpClient = HttpClient.newBuilder()
14
15
              .version(HttpClient.Version.HTTP_1_1)
              .connectTimeout (Duration.ofSeconds(10))
16
              .build();
17
18
      private static final String API_KEY = "AIzaSyCYKSQo6FmT5IXJhabu_w0siFnQTd5Up-E";
19
      private static final String TRANSLATION_API_URL = "https://translation.googleapis.com/
20
      language/translate/v2";
      private static final String BREAKING_BAD_QUOTES_URL = "https://api.breakingbadquotes.xyz/
21
      v1/quotes/3";
22
      public static void main(String[] args) throws IOException, InterruptedException {
          String quotesJson = getBreakingBadQuotes();
25
26
          if (quotesJson != null) {
27
              System.out.println(quotesJson);
              System.out.println();
28
29
              30
      \"\\s*:\\s*\"(.*?)\"\\s*\\}");
              Matcher matcher = pattern.matcher(quotesJson);
32
              while (matcher.find()) {
33
                  String quote = matcher.group(1).replace("\\\"", "\"");
34
                  String author = matcher.group(2).replace("\\\"", "\"");
35
36
                  String translated = translateText(quote);
37
38
                  System.out.println("Autor:\t\"" + author + "\"");
```

```
System.out.println("Cita: \"" + quote + "\"");
System.out.println("Traducci n: " + translated);
40
41
                    System.out.println(); // Separador
42
               }
43
           } else {
               System.out.println("No se pudo obtener el JSON.");
45
46
47
      }
48
      private static String getBreakingBadQuotes() throws IOException, InterruptedException {
49
           HttpRequest request = HttpRequest.newBuilder()
50
                    . GET ()
51
                    .uri(URI.create(BREAKING_BAD_QUOTES_URL))
52
                    .setHeader("User-Agent", "Java 11 HttpClient Bot")
53
                    .build();
54
55
           HttpResponse<String> response = httpClient.send(request, HttpResponse.BodyHandlers.
56
       ofString());
57
           return (response.statusCode() == 200) ? response.body() : null;
58
60
61
      private static String translateText(String text) throws IOException, InterruptedException
           String encodedText = URLEncoder.encode(text, StandardCharsets.UTF_8);
62
           String apiUrl = TRANSLATION_API_URL + "?key=" + API_KEY + "&target=es&q=" +
63
       encodedText;
64
           HttpRequest request = HttpRequest.newBuilder()
                    .POST(HttpRequest.BodyPublishers.noBody())
66
67
                    .uri(URI.create(apiUrl))
                    .header("Content-Type", "application/json")
68
                    .header("Accept", "application/json")
69
70
                    .build();
71
           HttpResponse<String> response = httpClient.send(request, HttpResponse.BodyHandlers.
72
       ofString());
73
           if (response.statusCode() == 200) {
74
75
               String responseBody = response.body();
               Pattern translationPattern = Pattern.compile("\"translatedText\"\\s*:\\s*\"(.*?)\"
76
       ");
               Matcher matcher = translationPattern.matcher(responseBody);
77
               if (matcher.find()) {
78
                   return matcher.group(1).replace("'", "'");
79
80
81
           return "Error en la traducci n.";
82
83
84 }
```