VideoTranslationClient Library

1. Prerequisites

a. Python 3.9.5 or above
b. Necessary dependencies installed by running:
pip install -r requirements.txt

2. Overview

The client library, VideoTranslationClient, is located in the client/client.py file. It provides functionality to get the status of a translation job from a server and handles retries using exponential backoff.

3. Key Components

a. serverUrl: The URL of the server where the translation job status is being served (e.g., http://127.0.0.1:5000)
b. maxRetries: The maximum number of retries the client will attempt if it doesn't get a successful response.
c. initialDelay: The initial delay (in seconds) between retries.
d. backoffFactor: The factor by which the delay increases after each retry attempt (e.g., 2 means doubling the delay after each retry).

4. Usage

a. Set up the server
pendingTime=10 python3 server/server.py
This will start a Flask server at http://127.0.0.1:5000 with a pendingTime of 10 seconds. This means the server will return "pending" status for the first 10 seconds before switching to either "completed" or "error".

b. Run the client
python3 client/client.py
The client will attempt to get the status from the server and will use exponential backoff between retries.

c. Example Client Code
Here is an example on how to use the client library directly in your code.

```
from client.client import VideoTranslationClient
localUrl = "http://127.0.0.1:5000"

client = VideoTranslationClient(serverUrl=localUrl, maxRetries=100, initialDelay=1, backoffFactor=2)

result, timeElapsed = client.getStatus()
print(f"\nFinal Status: {result}\nTotal time elapsed: {timeElapsed} seconds\n")

assert result in ["completed", "error"], f"Unexpected final status: {result}"
```