

### **Testing Documentation for API Caller:**

Tests that check whether the API response has expected format and API caller functions as expected.

Blackbox Tests:

Expected:

1. Returns a response in JSON format (python dictionary):  
<https://github.com/remotive-com/remote-jobs-api>
2. Return empty dictionary on requesting response from fake API/URL

Whitebox Tests:

Expected:

1. Successful caller creation
2. Return empty dictionary on connection timeout
3. Return empty dictionary on facing network issues
4. Proxy creation as per proxy provider (webshare) format
5. If response code is wrong in attempt 1, use fallback logic
6. Check max 2 attempts
7. Return empty dictionary after 2 attempts
8. Test call count 1 in case of error

**Tests Implementation:** [https://github.com/SGTK06/Job-Application-Tracker/blob/f39cf96de8ea966d38b4f4f4a5d0883a3db42b8e/tests/test\\_api\\_request.py](https://github.com/SGTK06/Job-Application-Tracker/blob/f39cf96de8ea966d38b4f4f4a5d0883a3db42b8e/tests/test_api_request.py)

### **Mock Usage Documentation:**

<b>Test ID</b>	<b>Test Name</b>	<b>What Was Mocked</b>	<b>Why It Was Mocked</b>
wt2	test_simulate_connection_timeout_wt2	mocked requests.Session.get to simulate_await_timeout	To simulate a timeout exception without making an actual API call or waiting. To check if

			caller handles timeouts errors.
wt3	test_simulate_network_error_wt3	mocked requests.Session.get to simulate_network_error	To simulate a network connection failure and check the function handles connection errors and returns an empty dictionary.
wt5	test_api_call_fallback_logic_wt5	mocked requests.Session.get with side_effects to return invalid status code response first, correct status code response next	To simulate a failed first call (404) followed by a successful call (200), to test the fallback logic.
wt6	test_api_request_count_limit_wt6	mocked requests.Session.get to keep track of how many times the api call was made	To track how many times the API request function is called, ensuring it does not call more than the allowed 2 calls.
wt7	test_request_limit_exceeded_response_wt7	mocked requests.Session.get to keep track of how many times the api call was made	To test what happens after call limit is exceeded and if it returns empty json response {}

			To simulate a general RequestException and check the API caller stops calling after one erroneous attempt.
wt8	test_request_count_error _wt8	mocked requests.Session.get to keep track of how many times the api call was made	