

Feb 9,2026

TESTING REPORT

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This report provides key insights from TestSprite's AI-powered testing. For questions or customized needs, contact us using [Calendly](#) or join our [Discord](#) community.

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Executive Summary

1 High-Level Overview

OVERVIEW

Total APIs Tested	1 APIs
Total Websites Tested	1 Websites
Pass/Fail Rate	Backend: 0/10 Frontend: 0/11

2 Key Findings

Test Summary

The project lacks actual test results for backend and frontend components, which hinders a comprehensive evaluation of quality and reliability. The absence of performance metrics limits the ability to predict stability and user experience, highlighting potential risks before deployment. Addressing these gaps through thorough testing is crucial for accurate assessment.

What could be better

The most significant weakness is the absence of success and failure test results for both frontend and backend components. This lack of data prevents identifying areas for improvement, raises concerns about project readiness, and limits confidence in stability and user experience.

Recommendations

Conduct comprehensive testing for both frontend and backend components to gather actual success and failure rates. This data will provide insights into performance, allow for identification of weaknesses, and support enhancements in reliability and user experience ahead of deployment.

Backend API Test Results

3 Test Coverage Summary

API Name	Test Cases	Test Category	Pass/Fail Rate
TMS	10	5 Basic Functionality Tests 5 Edge Case Tests	0 Pass/10 Fail

Note

The test cases were generated based on the API specifications and observed behaviors. Some tests were adapted dynamically during execution based on API responses.

4 Test Execution Summary

TMS Execution Summary

TEST CASE	TEST DESCRIPTION	IMPACT	STATUS
-----------	------------------	--------	--------

Basic Functionality Tests				
Test POST with Missing Required Fields	Send a POST request that omits necessary required fields and check that the API returns a validation error with appropriate error codes and messages.	High	Failed	
Test POST for Duplicate Entries	Send a POST request with data that would create a duplicate entry in the database and ensure the API correctly handles this by returning a relevant conflict error.	High	Failed	
Test POST with Extra Fields	Send a POST request that includes additional fields not specified in the API documentation and check if the API handles this correctly, returning the appropriate response without error.	Medium	Failed	
Test POST with Invalid Data Types	Attempt to send a POST request with fields that have incorrect data types and verify the API responds with validation errors indicating data type mismatch.	Medium	Failed	
Test POST with Valid Data	Send a POST request to the API endpoint with valid data fields and verify that a successful response is received with correct status code and expected response structure.	High	Failed	
Edge Case Tests				
Test POST with Malformed JSON	Send a POST request with a malformed JSON body and check that the API returns a correct error response indicating the JSON formatting issue.	High	Failed	
Test Maximum Length of Fields	Attempt to send a POST request where the input fields are at their maximum allowed character length to verify that the API processes it correctly without issues.	Medium	Failed	
Test POST with Special Characters	Send a POST request that includes special characters in its fields to check if the API can handle such inputs gracefully without any crashes or errors.	Medium	Failed	
Test Empty Payload POST	Send a POST request with an empty body and verify that the API responds with a proper error message and status indicating that the request was invalid.	High	Failed	
Test Unauthorized POST Request	Attempt to send a POST request without appropriate authentication or permissions, ensuring the API promptly rejects the request with an authorization error.	High	Failed	

5 Test Execution Breakdown

TMS Failed Test Details

Test POST with Missing Required Fields

ATTRIBUTES	
Status	Failed
Priority	High
Description	Send a POST request that omits necessary required fields and check that the API returns a validation error with appropriate error codes and messages.

```
1  import requests
2  import json
3
4  def test_post_with_missing_required_fields():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization":
8              "sk-user-T8Ln0jBZvBnkQ9J5uPaXHscOQPNiVXjhbZIJ7TGffmQnG0X7GZFJs
9              y1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQ
10             xb8IuLZbuv_fhM."
11      }
12      # Intentionally omitting required fields
13      payload = {
14          # Required fields should be here, but leaving them out for
15          # this test
16          "optionalField": "someValue"
17      }
18      response = requests.post(url, headers=headers, json=payload)
19
20      print(response.json()) # Print the response for debugging
21
22  test_post_with_missing_required_fields()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7f6ec6807dd0>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7f6ec6807dd0>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7f6ec6807dd0>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 18, in <module>
54   File "<string>", line 14, in test_post_with_missing_required_fields
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
70 (host='localhost', port=3000): Max retries exceeded with url: /
71 (Caused by NewConnectionError('<urllib3.connection.HTTPConnection
72 object at 0x7f6ec6807dd0>: Failed to establish a new connection:
73 [Errno 111] Connection refused'))

```

Cause

The API server is not running or is not reachable at the specified URL (localhost:3000). This causes the connection to be refused when the test attempts to send a POST request.

Fix

Ensure that the API server is running on the correct port (3000) and is accessible from the machine where the test is executed. If necessary, check firewall settings, server configurations, and logs for any issues that may be preventing the server from starting.

Test POST for Duplicate Entries

ATTRIBUTES

Status Failed

Priority High

Description Send a POST request with data that would create a duplicate entry in the database and ensure the API correctly handles this by returning a relevant conflict error.

</> Test Code

```
1  import requests
2  import json
3
4  API_URL = "http://localhost:3000/"
5  API_KEY =
    "sk-user-T8Ln0jBZvBnkQ9J5uPaXHsc0QPNiVXjhbZIJ7TGffmQnG0X7GZFJsy1TM3hA4
    f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQxb8IuLZbuv_fhM"
6
7  def test_post_duplicate_entries():
8      headers = {
9          'Authorization': f'Bearer {API_KEY}',
10         'Content-Type': 'application/json'
11     }
12
13     payload = {
14         'data': 'test_entry'
15     }
16
17     # First POST request
18     response1 = requests.post(API_URL, headers=headers, data=json.dumps
    (payload))
19     print("First POST response:", response1.json())
20
21     # Second POST request (duplicate)
22     response2 = requests.post(API_URL, headers=headers, data=json.dumps
    (payload))
23     print("Second POST response:", response2.json())
24
25     # Vague check for duplicate entries
26     assert response2.status_code == response1.status_code, f"Expected
    status code {response1.status_code}, but got {response2.
    status_code}."
27
28     test_post_duplicate_entries()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7fd5feccd2b0>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7fd5fecdd2b0>: Failed to establish a new
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36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
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39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7fd5fecdd2b0>: Failed to establish a new connection: [Errno 111]
Connection refused'))
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53   File "<string>", line 28, in <module>
54   File "<string>", line 18, in test_post_duplicate_entries
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7fd5feccd2b0>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API server at <http://localhost:3000/> is not running or accessible, resulting in a connection refused error.

Fix

Ensure that the API server is up and running on localhost:3000. Check that the server process has started correctly and is listening on the specified port.

Test POST with Extra Fields

ATTRIBUTES

Status Failed

Priority Medium

Description Send a POST request that includes additional fields not specified in the API documentation and check if the API handles this correctly, returning the appropriate response without error.

</> Test Code

```
1  import requests
2  import json
3
4  def test_post_with_extra_fields():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization": "Bearer
          sk-user-T8Ln0jBZvBnkQ9J5uPaXHsc0QPNiVXjhkBZIJ7TGffmQnG0X7GZFJsy
          1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQx
          b8IuLZbuv_fhM."
8      }
9      data = {
10         "field1": "value1",
11         "field2": "value2",
12         "extra_field": "extra_value"
13     }
14     response = requests.post(url, headers=headers, json=data)
15     print("Response Status Code:", response.status_code)
16     print("Response Body:", response.text)
17
18     response_json = response.json()
19     assert "success" in response_json, f"Expected 'success' key in
        response but got: {response_json}"
20
21     test_post_with_extra_fields()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7fa63564f050>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7fa63564f050>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7fa63564f050>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```


Test POST with Malformed JSON

ATTRIBUTES

Status	Failed
Priority	High
Description	Send a POST request with a malformed JSON body and check that the API returns a correct error response indicating the JSON formatting issue.

</> Test Code

```
1  import requests
2  import json
3
4  def test_post_malformed_json():
5      url = "http://localhost:3000/"
6      api_key =
          "sk-user-T8LnOjBZvBnkQ9J5uPaXHscOQPNiVXjhbZIJ7TGffmQnG0X7GZFJsy1TM
          3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQxb8IuLZb
          uv_fhM."
7
8      headers = {
9          "Authorization": f"Bearer {api_key}",
10         "Content-Type": "application/json"
11     }
12
13     # Sending a POST request with malformed JSON
14     malformed_json = '{"key': 'value'" # Missing closing brace
15     response = requests.post(url, headers=headers, data=malformed_json)
16
17     print("Response Status Code:", response.status_code)
18     print("Response Body:", response.text)
19
20     assert response.status_code != 200, f"Expected failure status
        code, got {response.status_code} instead."
21
22
23     test_post_malformed_json()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7ffb3da3c770>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
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13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7ffb3da3c770>: Failed to establish a new
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34 The above exception was the direct cause of the following exception:
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39         ^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7ffb3da3c770>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```


Test Maximum Length of Fields

ATTRIBUTES

Status Failed

Priority Medium

Description Attempt to send a POST request where the input fields are at their maximum allowed character length to verify that the API processes it correctly without issues.

</> Test Code

```
1  import requests
2  import json
3
4  def test_maximum_length_of_fields():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization": "Bearer
8              sk-user-T8Ln0jBZvBnkQ9J5uPaXHsc0QPNiVXjhkBZIJ7TGffmQnG0X7GZFJsy
9              1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQx
10             b8IuLZbuv_fhM.",
11          "Content-Type": "application/json"
12      }
13
14      #Prepare a payload with maximum length fields
15      payload = {
16          "field1": "A" * 1000, # Assuming maximum length is 1000
17          "field2": "B" * 1000,
18          "field3": "C" * 1000
19      }
20
21      response = requests.post(url, headers=headers, json=payload)
22
23      print("Response Status Code:", response.status_code)
24      print("Response Body:", response.text)
25
26  test_maximum_length_of_fields()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7fe1bc12e2d0>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
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create_connection
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9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7fe1bc12e2d0>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7fe1bc12e2d0>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 23, in <module>
54   File "<string>", line 18, in test_maximum_length_of_fields
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7fe1bc12e2d0>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API service may not be running on the specified port (3000), leading to a connection refusal when attempting to reach 'http://localhost:3000/'

Fix

Ensure that the API service is running and listening on port 3000. If necessary, check the API server's configuration or logs for any errors preventing it from starting.

Test POST with Special Characters

ATTRIBUTES

Status	Failed
Priority	Medium
Description	Send a POST request that includes special characters in its fields to check if the API can handle such inputs gracefully without any crashes or errors.

</> Test Code

```
1  import requests
2  import json
3
4  def test_post_with_special_characters():
5      url = "http://localhost:3000/"
6      api_key =
          "sk-user-T8LnOjBZvBnkQ9J5uPaXHscOQPNiVXjhbZIJ7TGffmQnG0X7GZFJsy1TM
          3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQxb8IuLZb
          uv_fhM."
7
8      headers = {
9          "Authorization": f"Bearer {api_key}",
10         "Content-Type": "application/json"
11     }
12
13     data = {
14         "test_key": "!@#$%^&*()_+-=[]{};':,<.>~/~`"
15     }
16
17     response = requests.post(url, headers=headers, data=json.dumps
        (data))
18
19     print(f"Response status code: {response.status_code}")
20     print(f"Response body: {response.text}")
21
22     test_post_with_special_characters()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7ffb3db96600>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7ffb3db96600>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7ffb3db96600>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 22, in <module>
54   File "<string>", line 17, in test_post_with_special_characters
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7ffb3db96600>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API server is not running or listening on port 3000, which results in connection refusal when trying to access the endpoint.

Fix

Ensure that the API server is up and running on port 3000. Check any firewall settings or configurations that may prevent access to the server. If the server is running, verify that it is correctly configured to listen for incoming connections.

Test Empty Payload POST

ATTRIBUTES

Status	Failed
Priority	High
Description	Send a POST request with an empty body and verify that the API responds with a proper error message and status indicating that the request was invalid.

</> Test Code

```
1  import requests
2  import json
3
4  def test_empty_payload_post():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization":
8              "sk-user-T8Ln0jBZvBnkQ9J5uPaXHsc0QPNiVXjhbZIJ7TGffmQnG0X7GZFJs
9              y1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQ
10             xb8IuLZbuv_fhM."
11      }
12      payload = {}
13
14      response = requests.post(url, headers=headers, json=payload)
15      print("Response Status Code:", response.status_code)
16      print("Response Body:", response.text)
17
18      # Check if the response contains a success or failure indication
19      assert response.status_code in [200, 400], f"Expected status code
20      200 or 400 but got {response.status_code}"
21      if 'error' in response.json():
22          print("Error message:", response.json()['error'])
23
24  test_empty_payload_post()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7fda0a399e20>: Failed to establish a new connection:
[Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7fda0a399e20>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7fda0a399e20>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 20, in <module>
54   File "<string>", line 11, in test_empty_payload_post
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7fda0a399e20>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API server is not running or not accessible on localhost:3000, leading to connection refusal errors.

Fix

Ensure that the API server is running on the specified host and port. You may also check firewall settings or network configurations that could block access to the server.

Test Unauthorized POST Request

ATTRIBUTES

Status Failed

Priority High

Description Attempt to send a POST request without appropriate authentication or permissions, ensuring the API promptly rejects the request with an authorization error.

</> Test Code

```
1  import requests
2  import json
3
4  def test_unauthorized_post_request():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization": "Bearer invalid-api-key"
8      }
9      data = {
10         "key": "value"
11     }
12
13     response = requests.post(url, headers=headers, json=data)
14     print(f"Response Status Code: {response.status_code}")
15     print(f"Response Body: {response.text}")
16
17     assert response.status_code == 401, f"Expected status code 401 but got {response.status_code}"
18
19     test_unauthorized_post_request()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7f6ec66ac740>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7f6ec66ac740>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7f6ec66ac740>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 19, in <module>
54   File "<string>", line 13, in test_unauthorized_post_request
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7f6ec66ac740>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API service is not running or is inaccessible, resulting in a connection refusal error.

Fix

Ensure that the API server is running on the specified host and port (localhost:3000). Additionally, verify that there are no firewall or network issues blocking access to the API.

Test POST with Invalid Data Types

ATTRIBUTES

Status Failed

Priority Medium

Description Attempt to send a POST request with fields that have incorrect data types and verify the API responds with validation errors indicating data type mismatch.

</> Test Code

```
1  import requests
2  import json
3
4  def test_post_with_invalid_data_types():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization": "Bearer
8              sk-user-T8LnOjBZvBnkQ9J5uPaXHscOQPNiVXjhbZIJ7TGffmQnG0X7GZFJsy
9              1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQx
10             b8IuLZbuv_fhM.",
11          "Content-Type": "application/json"
12      }
13      payload = {
14          "name": 123, # Invalid data type: should be a string
15          "age": "twenty", # Invalid data type: should be an integer
16          "email": True # Invalid data type: should be a string
17      }
18
19      response = requests.post(url, headers=headers, json=payload)
20      print(f"Response Code: {response.status_code}")
21      print(f"Response Body: {response.text}")
22
23  test_post_with_invalid_data_types()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7fdc18c2e750>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7fdc18c2e750>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7fdc18c2e750>: Failed to establish a new connection: [Errno 111]
Connection refused'))
```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 20, in <module>
54   File "<string>", line 16, in test_post_with_invalid_data_types
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7fdc18c2e750>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API server is not running or is not reachable at the specified address (localhost:3000).

Fix

Start the API server and ensure it is configured to listen on the correct port (3000) and address (localhost).

Test POST with Valid Data

ATTRIBUTES

Status Failed

Priority High

Description Send a POST request to the API endpoint with valid data fields and verify that a successful response is received with correct status code and expected response structure.

</> Test Code

```
1  import requests
2  import json
3
4  def test_post_with_valid_data():
5      url = "http://localhost:3000/"
6      headers = {
7          "Authorization": "Bearer
          sk-user-T8Ln0jBZvBnkQ9J5uPaXHsc0QPNiVXjhkBZIJ7TGffmQnG0X7GZFJsy
          1TM3hA4f96Lz_YJlMpIC5EzGruKmd0tpT_zxsTQT_x3zYeXf1HunQSmzt8wNoQx
          b8IuLZbuV_fhM"
8      }
9      valid_data = {
10         "key": "value"
11     }
12
13     response = requests.post(url, headers=headers, json=valid_data)
14     print(response.json())
15
16     test_post_with_valid_data()
```

Error

HTTPConnectionPool(host='localhost', port=3000): Max retries exceeded with url: / (Caused by NewConnectionError('<urllib3.connection.HTTPConnection object at 0x7ffb3db96cf0>: Failed to establish a new connection: [Errno 111] Connection refused'))


```

1 Traceback (most recent call last):
2   File "/var/task/urllib3/connection.py", line 198, in _new_conn
3     sock = connection.create_connection(
4         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
5   File "/var/task/urllib3/util/connection.py", line 85, in
create_connection
6     raise err
7   File "/var/task/urllib3/util/connection.py", line 73, in
create_connection
8     sock.connect(sa)
9 ConnectionRefusedError: [Errno 111] Connection refused
10
11 The above exception was the direct cause of the following exception:
12
13 Traceback (most recent call last):
14   File "/var/task/urllib3/connectionpool.py", line 787, in urlopen
15     response = self._make_request(
16         ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
17   File "/var/task/urllib3/connectionpool.py", line 493, in
_make_request
18     conn.request(
19   File "/var/task/urllib3/connection.py", line 445, in request
20     self.endheaders()
21   File "/var/lang/lib/python3.12/http/client.py", line 1333, in
endheaders
22     self._send_output(message_body, encode_chunked=encode_chunked)
23   File "/var/lang/lib/python3.12/http/client.py", line 1093, in
_send_output
24     self.send(msg)
25   File "/var/lang/lib/python3.12/http/client.py", line 1037, in send
26     self.connect()
27   File "/var/task/urllib3/connection.py", line 276, in connect
28     self.sock = self._new_conn()
29         ^^^^^^^^^^^^^^^^^^^^^^
30   File "/var/task/urllib3/connection.py", line 213, in _new_conn
31     raise NewConnectionError(
32 urllib3.exceptions.NewConnectionError: <urllib3.connection.
HTTPConnection object at 0x7ffb3db96cf0>: Failed to establish a new
connection: [Errno 111] Connection refused
33
34 The above exception was the direct cause of the following exception:
35
36 Traceback (most recent call last):
37   File "/var/task/requests/adapters.py", line 667, in send
38     resp = conn.urlopen(
39         ^^^^^^^^^^^^^^^
40   File "/var/task/urllib3/connectionpool.py", line 841, in urlopen
41     retries = retries.increment(
42         ^^^^^^^^^^^^^^^^^^^^^^
43   File "/var/task/urllib3/util/retry.py", line 519, in increment
44     raise MaxRetryError(_pool, url, reason) from reason # type: ignore
[arg-type]
45     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
46 urllib3.exceptions.MaxRetryError: HTTPConnectionPool(host='localhost',
port=3000): Max retries exceeded with url: / (Caused by
NewConnectionError('<urllib3.connection.HTTPConnection object at
0x7ffb3db96cf0>: Failed to establish a new connection: [Errno 111]
Connection refused'))

```

```

47
48 During handling of the above exception, another exception occurred:
49
50 Traceback (most recent call last):
51   File "/var/task/main.py", line 60, in target
52     exec(code, env)
53   File "<string>", line 16, in <module>
54   File "<string>", line 13, in test_post_with_valid_data
55   File "/var/task/requests/api.py", line 115, in post
56     return request("post", url, data=data, json=json, **kwargs)
57     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
58   File "/var/task/requests/api.py", line 59, in request
59     return session.request(method=method, url=url, **kwargs)
60     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
61   File "/var/task/requests/sessions.py", line 589, in request
62     resp = self.send(prepare, **send_kwargs)
63     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
64   File "/var/task/requests/sessions.py", line 703, in send
65     r = adapter.send(request, **kwargs)
66     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
67   File "/var/task/requests/adapters.py", line 700, in send
68     raise ConnectionError(e, request=request)
69 requests.exceptions.ConnectionError: HTTPConnectionPool
(host='localhost', port=3000): Max retries exceeded with url: /
(Caused by NewConnectionError('<urllib3.connection.HTTPConnection
object at 0x7ffb3db96cf0>: Failed to establish a new connection:
[Errno 111] Connection refused'))
70

```

Cause

The API server is not running or not listening on port 3000, leading to connection refusal errors.

Fix

Ensure that the API server is running properly and listening on port 3000. Check server logs for any startup errors or misconfigurations.

Frontend UI Test Results

6 Test Coverage Summary

This report summarizes the frontend UI testing results for the application. TestSprite's AI agent automatically generated and executed tests based on the UI structure, user interaction flows, and visual components. The tests aimed to validate core functionalities, visual correctness, and responsiveness across different states.

URL NAME	TEST CASES	PASS/FAIL RATE
TMS	11	0 Pass/11 Fail

Note

The test cases were generated using real-time analysis of the application's UI hierarchy and user flows. Some visual and functional validations were adapted dynamically based on runtime DOM changes.

7 Test Execution Summary

TMS Execution Summary

TEST CASE	TEST DESCRIPTION	IMPACT	STATUS
Offline mode, network throttling and retry behavior	Given cached data and UI that depends on network, when the network goes offline or is throttled, then cache renders where expected, optimistic UI/queued actions behave predictably, background retries and user-facing error banners are shown, and recovery upon reconnect syncs state with backend without duplication. Setup: simulate network conditions via devtools or test harness.	Medium	Failed
Role-based access control and protected route enforcement	Given users with different roles (regular, admin), when each user attempts to access role-protected pages and perform restricted actions, then the UI and backend enforce permissions (show/hide UI, 403 responses where appropriate), role changes take effect without full redeploy, and unauthorized attempts produce clear feedback. Setup: create users with roles via API. Cleanup: revoke test roles.	Medium	Failed
Real-time updates and reconnection handling (WebSockets/Server-Sent events)	Given a component that receives live updates (notifications, chat or status), when server pushes messages and the connection is interrupted, then the client displays updates in real time, attempts reconnection with backoff, and upon reconnect synchronizes missed messages without duplicates. Also validate teardown and subscription cleanup. Setup: use a test real-time server that can simulate disconnects.	Low	Failed
Complex form submission with client & server validation and file upload	Given an authenticated user on the multi-field form (including text, date, selects, file upload), when the user submits valid data and an image, then the UI shows upload progress, server-side validation passes, data persists and success UI displays. Also test client-side validation errors, server validation error handling, and file size/format rejection paths. Setup: mock or use test endpoints for file storage. Cleanup: remove created entries and files.	High	Failed
Email/password authentication, session persistence and logout	Given a registered test user, when the user logs in with valid credentials and then refreshes the browser, then the user remains authenticated (valid session/token), protected routes are accessible, and after logout protected routes redirect to login. Also verify invalid credentials show appropriate server/client validation messages. Setup: create/delete test user via API.	High	Failed
Shopping cart lifecycle and checkout (success and payment failure)	Given a catalog of items and a test payment sandbox, when a user adds/removes items, updates quantities and applies coupons, then totals recalc correctly, cart persists across refresh, and during checkout payment success completes order while payment failure surfaces recoverable error and allows retry. Setup: use sandbox payment gateway and create a test customer. Cleanup: cancel test orders.	High	Failed
Accessibility flows: keyboard navigation, focus management and screen reader landmarks	Given standard pages (homepage, form page, modal), when users navigate using keyboard and assistive tech, then focus order is logical, modals trap focus and restore on close, skip-links work, ARIA roles/labels are present for key controls, and critical interactions are operable without a mouse. Include checks for color contrast on critical UI. Setup: run with automated AX checks and manual keyboard runs.	Low	Failed
File/image upload preview, transformation and retry on failure	Given the upload flow that generates previews and server-side transformations, when a user selects images of various sizes/formats, then client previews render, server returns transformed assets, and interrupted uploads support resume/retry with correct deduplication. Also test invalid formats and maximum size enforcement. Setup: test storage endpoint and sample files. Cleanup: remove test assets.	Medium	Failed
Responsive layout and component behavior across breakpoints	Given desktop, tablet and mobile viewports, when users interact with navigation, modals, sidebars and forms, then layout adapts (menu collapses, modals full-screen on mobile), interactive elements remain reachable, and no content is clipped or overlapping. Verify critical flows (login, search, add-to-cart) on each breakpoint. Setup: run tests with emulated viewports.	Medium	Failed
Main navigation, deep links and 404 routing	Given a seeded app with pages A/B/C and a nonexistent path, when a user navigates via header links, direct deep links, and browser back/forward, then the correct pages render, route params persist, scroll restoration works, and unknown paths show the 404 page. Setup: create necessary test data. Cleanup: reset routing state.	High	Failed
Search, filtering, sorting and pagination end-to-end	Given a dataset with varied attributes, when a user performs a search, applies multiple filters, changes sort order and paginates, then results update correctly (matching backend), URLs reflect query params for deep linking, and edge cases (no matches, very large result sets) show proper empty states and performance remains acceptable. Setup: seed dataset. Cleanup: clear test data.	High	Failed

8 Test Execution Breakdown

TMS Failed Test Details

Offline mode, network throttling and retry behavior

ATTRIBUTES	
Status	Failed
Priority	Medium
Description	Given cached data and UI that depends on network, when the network goes offline or is throttled, then cache renders where expected, optimistic UI/queued actions behave predictably, background retries and user-facing error banners are shown, and recovery upon reconnect syncs state with backend without duplication. Setup: simulate network conditions via devtools or test harness.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603194732772/tmp/501d64d5-6936-45f5-9718-a19e7f4b70da/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                    # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```



```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```

Role-based access control and protected route enforcement

ATTRIBUTES	
Status	Failed
Priority	Medium
Description	Given users with different roles (regular, admin), when each user attempts to access role-protected pages and perform restricted actions, then the UI and backend enforce permissions (show/hide UI, 403 responses where appropriate), role changes take effect without full redeploy, and unauthorized attempts produce clear feedback. Setup: create users with roles via API. Cleanup: revoke test roles.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603194602732/tmp/36f6e0f6-a865-4e81-b283-3321dbd9bfd4/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59     asyncio.run(run_test())
60
```

Real-time updates and reconnection handling (WebSockets/Server-Sent events)

ATTRIBUTES	
Status	Failed
Priority	Low
Description	Given a component that receives live updates (notifications, chat or status), when server pushes messages and the connection is interrupted, then the client displays updates in real time, attempts reconnection with backoff, and upon reconnect synchronizes missed messages without duplicates. Also validate teardown and subscription cleanup. Setup: use a test real-time server that can simulate disconnects.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603194501457//tmp/52890b95-ce4e-4c87-ab0d-972757f626a4/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                    # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```

Complex form submission with client & server validation and file upload

ATTRIBUTES	
Status	Failed
Priority	High
Description	Given an authenticated user on the multi-field form (including text, date, selects, file upload), when the user submits valid data and an image, then the UI shows upload progress, server-side validation passes, data persists and success UI displays. Also test client-side validation errors, server validation error handling, and file size/format rejection paths. Setup: mock or use test endpoints for file storage. Cleanup: remove created entries and files.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603195065735/tmp/7b00c85f-134b-439b-9fb1-7915a807070f/result.webm


```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                       # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59     asyncio.run(run_test())
60
```

Email/password authentication, session persistence and logout

ATTRIBUTES	
Status	Failed
Priority	High
Description	Given a registered test user, when the user logs in with valid credentials and then refreshes the browser, then the user remains authenticated (valid session/token), protected routes are accessible, and after logout protected routes redirect to login. Also verify invalid credentials show appropriate server/client validation messages. Setup: create/delete test user via API.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/177060319477095/tmp/5adf6790-2e6d-4695-9019-2a6b66c521db/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                    # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```

Shopping cart lifecycle and checkout (success and payment failure)

ATTRIBUTES	
Status	Failed
Priority	High
Description	Given a catalog of items and a test payment sandbox, when a user adds/removes items, updates quantities and applies coupons, then totals recalc correctly, cart persists across refresh, and during checkout payment success completes order while payment failure surfaces recoverable error and allows retry. Setup: use sandbox payment gateway and create a test customer. Cleanup: cancel test orders.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603196212873//tmp/d6de89bb-3877-46da-8c05-a9aa3af336df/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                    # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```


Accessibility flows: keyboard navigation, focus management and screen reader landmarks

ATTRIBUTES	
Status	Failed
Priority	Low
Description	Given standard pages (homepage, form page, modal), when users navigate using keyboard and assistive tech, then focus order is logical, modals trap focus and restore on close, skip-links work, ARIA roles/labels are present for key controls, and critical interactions are operable without a mouse. Include checks for color contrast on critical UI. Setup: run with automated AX checks and manual keyboard runs.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603194754089/tmp/2d90dec4-d72e-4f7c-a72b-b16fc4aa5552/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                    # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59     asyncio.run(run_test())
60
```

File/image upload preview, transformation and retry on failure

ATTRIBUTES	
Status	Failed
Priority	Medium
Description	Given the upload flow that generates previews and server-side transformations, when a user selects images of various sizes/formats, then client previews render, server returns transformed assets, and interrupted uploads support resume/retry with correct deduplication. Also test invalid formats and maximum size enforcement. Setup: test storage endpoint and sample files. Cleanup: remove test assets.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603195251439//tmp/7be08a1a-367e-48ad-8202-cbb865c5f909/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59     asyncio.run(run_test())
60
```

Responsive layout and component behavior across breakpoints

ATTRIBUTES	
Status	Failed
Priority	Medium
Description	Given desktop, tablet and mobile viewports, when users interact with navigation, modals, sidebars and forms, then layout adapts (menu collapses, modals full-screen on mobile), interactive elements remain reachable, and no content is clipped or overlapping. Verify critical flows (login, search, add-to-cart) on each breakpoint. Setup: run tests with emulated viewports.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603193703234//tmp/6c477b69-742f-4f91-9ed7-f332a53e2e7d/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```



```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```

Main navigation, deep links and 404 routing

ATTRIBUTES	
Status	Failed
Priority	High
Description	Given a seeded app with pages A/B/C and a nonexistent path, when a user navigates via header links, direct deep links, and browser back/forward, then the correct pages render, route params persist, scroll restoration works, and unknown paths show the 404 page. Setup: create necessary test data. Cleanup: reset routing state.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603193537674/tmp/010000f9-175a-449e-8f72-b8806e3afaa1/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
58
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59     asyncio.run(run_test())
60
```

Search, filtering, sorting and pagination end-to-end

ATTRIBUTES	
Status	Failed
Priority	High
Description	Given a dataset with varied attributes, when a user performs a search, applies multiple filters, changes sort order and paginates, then results update correctly (matching backend), URLs reflect query params for deep linking, and edge cases (no matches, very large result sets) show proper empty states and performance remains acceptable. Setup: seed dataset. Cleanup: clear test data.
Preview Link	https://testsprite-videos.s3.us-east-1.amazonaws.com/f4786438-60d1-7030-46d1-b1ac9b0e3b51/1770603196161743/tmp/1aa3e49e-9629-4d10-ac9a-16ed891d81be/result.webm

```
1  import asyncio
2  from playwright import async_api
3
4  async def run_test():
5      pw = None
6      browser = None
7      context = None
8
9      try:
10         # Start a Playwright session in asynchronous mode
11         pw = await async_api.async_playwright().start()
12
13         # Launch a Chromium browser in headless mode with custom
14         # arguments
15         browser = await pw.chromium.launch(
16             headless=True,
17             args=[
18                 "--window-size=1280,720",          # Set the browser
19                 # window size
20                 "--disable-dev-shm-usage",          # Avoid using /dev/
21                 # shm which can cause issues in containers
22                 "--ipc=host",                        # Use host-level IPC
23                 # for better stability
24                 "--single-process"                   # Run the browser in
25                 # a single process mode
26             ],
27         )
28
29         # Create a new browser context (like an incognito window)
30         context = await browser.new_context()
31         context.set_default_timeout(5000)
32
33         # Open a new page in the browser context
34         page = await context.new_page()
35
36         # Navigate to your target URL and wait until the network
37         # request is committed
38         await page.goto("http://localhost:3000", wait_until="commit",
39             timeout=10000)
40
41         # Wait for the main page to reach DOMContentLoaded state
42         # (optional for stability)
43         try:
44             await page.wait_for_load_state("domcontentloaded",
45                 timeout=3000)
46         except async_api.Error:
47             pass
48
49         # Iterate through all iframes and wait for them to load as well
50         for frame in page.frames:
51             try:
52                 await frame.wait_for_load_state("domcontentloaded",
53                     timeout=3000)
54             except async_api.Error:
55                 pass
56
57         # Interact with the page elements to simulate user flow
```

```
49         await asyncio.sleep(5)
50
51     finally:
52         if context:
53             await context.close()
54         if browser:
55             await browser.close()
56         if pw:
57             await pw.stop()
58
59 asyncio.run(run_test())
60
```

