

```
# FILEPATH: /Users/default/Desktop/Athena/research/swarms-cloud/tests/test_cogvlm.py
```

```
import pytest
```

```
from fastapi import HTTPException
```

```
from servers.cogvlm.cogvlm import (
```

```
    create_chat_completion,
```

```
    ChatCompletionRequest,
```

```
    ChatMessageRequest,
```

```
    EventSourceResponse,
```

```
)
```

```
# Create a fixture for a valid request
```

```
@pytest.fixture
```

```
def valid_request():
```

```
    return ChatCompletionRequest(
```

```
        model="gpt-3",
```

```
        messages=[ChatMessageRequest(role="user", content="Hello")],
```

```
        temperature=0.5,
```

```
        top_p=0.5,
```

```
        max_tokens=100,
```

```
        stream=False,
```

```
)
```

```
# Create a fixture for an invalid request
```

```
@pytest.fixture
```

```
def invalid_request():
```

```
    return ChatCompletionRequest(
```

```
        model="gpt-3",
```

```
        messages=[ChatMessageRequest(role="assistant", content="Hello")],
```

```
        temperature=0.5,
```

```
        top_p=0.5,
```

```
        max_tokens=100,
```

```
        stream=False,
```

```
    )
```

```
# Test when the request is valid
```

```
def test_create_chat_completion_valid_request(valid_request):
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```

```
    assert len(response.choices) == 1
```

```
    assert response.choices[0].message.role == "assistant"
```

```
    assert response.object == "chat.completion"
```

```
# Test when the request is invalid
```

```
def test_create_chat_completion_invalid_request(invalid_request):
```

```
    with pytest.raises(HTTPException):
```

```
        create_chat_completion(invalid_request)
```

Test when the request has no messages

```
def test_create_chat_completion_no_messages(valid_request):
```

```
    valid_request.messages = []
```

```
    with pytest.raises(HTTPException):
```

```
        create_chat_completion(valid_request)
```

Test when the request has streaming enabled

```
def test_create_chat_completion_streaming(valid_request):
```

```
    valid_request.stream = True
```

```
    response = create_chat_completion(valid_request)
```

```
    assert isinstance(response, EventSourceResponse)
```

Test when the request has a high temperature

```
def test_create_chat_completion_high_temperature(valid_request):
```

```
    valid_request.temperature = 1.0
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```

Test when the request has a low temperature

```
def test_create_chat_completion_low_temperature(valid_request):
```

```
    valid_request.temperature = 0.0
```

```
    response = create_chat_completion(valid_request)
```

```
assert response.model == valid_request.model
```

```
# Test when the request has a high top_p
```

```
def test_create_chat_completion_high_top_p(valid_request):
```

```
    valid_request.top_p = 1.0
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```

```
# Test when the request has a low top_p
```

```
def test_create_chat_completion_low_top_p(valid_request):
```

```
    valid_request.top_p = 0.0
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```

```
# Test when the request has a high max_tokens
```

```
def test_create_chat_completion_high_max_tokens(valid_request):
```

```
    valid_request.max_tokens = 2048
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```

```
# Test when the request has a low max_tokens
```

```
def test_create_chat_completion_low_max_tokens(valid_request):
```

```
valid_request.max_tokens = 1
```

```
response = create_chat_completion(valid_request)
```

```
assert response.model == valid_request.model
```

```
# Test when the request has a different model
```

```
def test_create_chat_completion_different_model(valid_request):
```

```
    valid_request.model = "gpt-2"
```

```
    response = create_chat_completion(valid_request)
```

```
    assert response.model == valid_request.model
```