

```
from unittest.mock import Mock
```

```
import pytest
```

```
from supabase import Client
```

```
from swarms_cloud.loggers.supabase_handler import SwarmCloudUsageLogger
```

```
# Create a mock Supabase client for testing
```

```
@pytest.fixture
```

```
def mock_supabase_client():
```

```
    return Mock(spec=Client)
```

```
# Test cases for SwarmCloudUsageLogger class
```

```
def test_swarm_cloud_usage_logger_initialization():
```

```
    logger = SwarmCloudUsageLogger(  
        supabase_url="https://your_supabase_url.supabase.co",  
        supabase_key="your_supabase_key",  
    )
```

```
    assert isinstance(logger, SwarmCloudUsageLogger)
```

```
def test_swarm_cloud_usage_logger_log_usage(mock_supabase_client):
```

```
    logger = SwarmCloudUsageLogger(  
        supabase_url="https://your_supabase_url.supabase.co",  
        supabase_key="your_supabase_key",
```

)

logger.supabase = mock\_supabase\_client

response = logger.log\_usage(

    user\_id="user123",

    api\_key="sk-your\_api\_key",

    usage\_type="get",

    tokens\_used=1,

)

assert response is not None

def test\_swarm\_cloud\_usage\_logger\_log\_usage\_error(mock\_supabase\_client):

    logger = SwarmCloudUsageLogger(

        supabase\_url="https://your\_supabase\_url.supabase.co",

        supabase\_key="your\_supabase\_key",

    )

    logger.supabase = mock\_supabase\_client

    logger.supabase.table(

        "swarm\_cloud\_usage"

    ).insert.return\_value.execute.side\_effect = Exception("Test Exception")

    with pytest.raises(RuntimeError):

        logger.log\_usage(

            user\_id="user123",

            api\_key="sk-your\_api\_key",

            usage\_type="get",

            tokens\_used=1,

)

```
def test_swarm_cloud_usage_logger_check_api_key(mock_supabase_client):
```

```
    logger = SwarmCloudUsageLogger(
```

```
        supabase_url="https://your_supabase_url.supabase.co",
```

```
        supabase_key="your_supabase_key",
```

```
    )
```

```
    logger.supabase = mock_supabase_client
```

```
    mock_supabase_client.table(
```

```
        "swarm_cloud_usage"
```

```
    ).select.return_value.eq.return_value.execute.return_value.data = [
```

```
        {"api_key": "sk-your_api_key"}
```

```
    ]
```

```
    result = logger.check_api_key(api_key="sk-your_api_key")
```

```
    assert result is True
```

```
def test_swarm_cloud_usage_logger_check_api_key_not_found(mock_supabase_client):
```

```
    logger = SwarmCloudUsageLogger(
```

```
        supabase_url="https://your_supabase_url.supabase.co",
```

```
        supabase_key="your_supabase_key",
```

```
    )
```

```
    logger.supabase = mock_supabase_client
```

```
    mock_supabase_client.table(
```

```
        "swarm_cloud_usage"
```

```
).select.return_value.eq.return_value.execute.return_value.data = []
```

```
result = logger.check_api_key(api_key="sk-your_api_key")
```

```
assert result is False
```

```
def test_swarm_cloud_usage_logger_check_api_key_error(mock_supabase_client):
```

```
    logger = SwarmCloudUsageLogger(
```

```
        supabase_url="https://your_supabase_url.supabase.co",
```

```
        supabase_key="your_supabase_key",
```

```
    )
```

```
    logger.supabase = mock_supabase_client
```

```
    mock_supabase_client.table(
```

```
        "swarm_cloud_usage"
```

```
).select.return_value.eq.return_value.execute.side_effect = Exception(
```

```
    "Test Exception"
```

```
)
```

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

```
        logger.check_api_key(api_key="sk-your_api_key")
```