Test Objective: Unit Test
Tester: Cong Du

运行: app × Python 测试 (test_config.py 内) ×

测试 已通过: 3共 3 个测试 – 0毫秒

测试结果   0毫秒

C:\Users\Administrator\AppData\Local\Programs\Python\Python39\python.exe "D:/pycharm/PyCharm Community Edition 2
Testing started at 16:39 ...
D:\pycharm\PyCharm Community Edition 2023.1.3\plugins\python-ce\helpers\pycharm_jb_pytest_runner.py:8: Deprecat
    from pkg_resources import iter_entry_points
Launching pytest with arguments C:\Users\Administrator\PycharmProjects\pythonProject\capstone-project-2024-t3-99

============================= test session starts =============================
collecting ... collected 3 items

test_config.py::TestConfig::test_db_uri PASSED   [33%]
test_config.py::TestConfig::test_secret_key PASSED   [66%]
test_config.py::TestConfig::test_sqlalchemy_track_modifications PASSED   [100%]

============================== 3 passed in 0.03s ==============================

进程已结束,退出代码0

运行: app × Python 测试 (test_app.py 内) ×

测试 已通过: 2共 2 个测试 – 644毫秒

测试结果   644毫秒

C:\Users\Administrator\AppData\Local\Programs\Python\Python39\python.exe "D:/pycharm/PyCharm Community Edition 2
Testing started at 16:50 ...
D:\pycharm\PyCharm Community Edition 2023.1.3\plugins\python-ce\helpers\pycharm_jb_pytest_runner.py:8: Deprecat
    from pkg_resources import iter_entry_points
Launching pytest with arguments C:\Users\Administrator\PycharmProjects\pythonProject\capstone-project-2024-t3-99

============================= test session starts =============================
collecting ... collected 2 items

test_app.py::TestApp::test_upload_image
test_app.py::TestApp::test_upload_zip

======================= 2 passed, 3 warnings in 6.62s =======================
PASSED   [50%]PASSED   [100%]
进程已结束,退出代码0

unit test
  > .pytest_cache
    processed_zips
  > static
  > uploads
    test_app.py
    test_config.py
    test_exts.py
    test_models.py
    test_test.py
    test_Transform.py
    test_Unet_Model.py

运行: app × Python 测试 (test_Transform.py 内) ×

测试 已通过: 1共 1 个测试 – 5秒 282毫秒
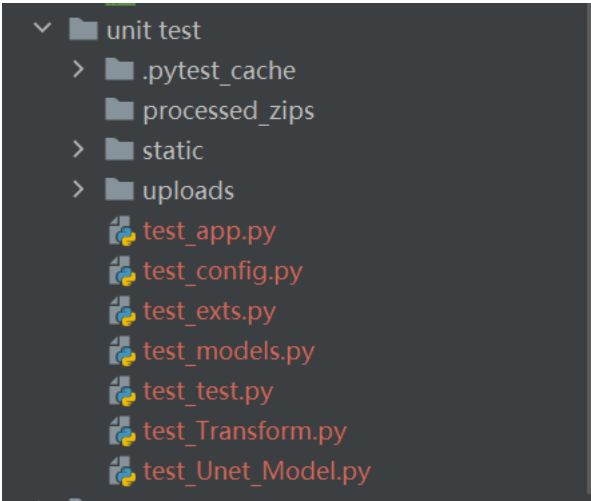
测试结果   5秒 282毫秒

C:\Users\Administrator\AppData\Local\Programs\Python\Python39\python.exe "D:/pycharm/PyCharm Community Edition 2
Testing started at 16:56 ...
D:\pycharm\PyCharm Community Edition 2023.1.3\plugins\python-ce\helpers\pycharm_jb_pytest_runner.py:8: Deprecat
    from pkg_resources import iter_entry_points
Launching pytest with arguments C:\Users\Administrator\PycharmProjects\pythonProject\capstone-project-2024-t3-99

============================= test session starts =============================
collecting ... collected 1 item

test_Transform.py::TestSegformerTraining::test_train_segformer

============================== 1 passed in 11.60s ==============================
PASSED   [100%]Loss: 0.825926661491394
Loss: 0.7886117100715637
Loss: 0.7832985520362854
Some weights of SegformerForSemanticSegmentation were not initialized from the model checkpoint at nvidia/segfor
- decode_head.classifier.bias: found shape torch.Size([150]) in the checkpoint and torch.Size([2]) in the model
- decode_head.classifier.weight: found shape torch.Size([150, 256, 1, 1]) in the checkpoint and torch.Size([2, 2
You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

Test Objective: Basic verification of functionality and UI elements across multiple uploaded web pages
Test Tool: Manual Testing
Tester: Yiyu Chen

Page	Test Case	Expected Result	Actual Result	Notes
register	Verify that the 'Username' input field is required	Form submission should be blocked if the username is not filled and should display an error message	Passed	Correctly blocks form submission and displays error message
register	Validate minimum length requirement for 'Password' input (6 characters)	Form submission should be blocked if the password is shorter than 6 characters and an error message should be displayed	Passed	Correctly displays an error message for short passwords
register	Test 'register' button functionality	Form should submit or trigger validation	Passed	Form submission works as expected
register	Verify 'Back' button functionality	Clicking the button should redirect to the login page	Passed	Button redirects correctly
login	Verify that the 'Username' input field is required	Form submission should be blocked if the username is not filled and should display an error message	Passed	Correctly blocks form submission and displays error message
login	Verify that the 'Password' input field is required	Form submission should be blocked if the password is not filled and should display an error message	Passed	Correctly blocks form submission and displays error message
login	Test 'Login' button functionality	Form should submit or trigger validation correctly	Passed	Form submission behavior works as expected
homepage	Verify file selection functionality	File input should allow selecting images or ZIP files	Passed	File selection works as expected
homepage	Test model selection dropdown	Dropdown should allow switching between different models (U-Net, LadderNet, etc.)	Passed	Model options can be selected correctly
homepage	Test 'Predict' button functionality	Clicking the button should submit the form and start processing	Passed	Form submission and processing start correctly
homepage	Verify 'View Prediction History' button functionality	Clicking the button should redirect to the history page	Passed	Redirection works as expected
ZIP	Display processed image	Processed image should be correctly displayed	Passed	Image display works as expected
ZIP	Test 'Download Processed ZIP File' button (if applicable)	Clicking the button should start downloading the processed ZIP file	Passed	Download functionality works as expected
ZIP	Test 'Upload Another File' button functionality	Clicking the button should return to the upload page	Passed	Navigation works correctly
history	Verify history table display, including upload date, model used, input image, and result image	History records should display correctly	Passed	Records are displayed as expected
history	Test image preview functionality	Input and result images should display correctly in the preview	Passed	Images display correctly
history	Test 'Back to Main Page' button functionality	Clicking the button should return to the main page	Passed	Navigation works as expected
result	Verify image slideshow functionality	Users should be able to switch between different processed images in a slideshow	Passed	Slideshow works as expected
result	Verify display of processing metrics (Dice Score, IoU, etc.)	Metrics should display correctly	Passed	Metrics display correctly
result	Test 'Upload Another File' button functionality	Clicking the button should return to the upload page	Passed	Navigation works as expected