**Отчёт о юнит тестах**

Введение: был создан сайт, посвящённый галерее пиксельной графики и его необходимо протестировать, чтобы сайт был целиком и полностью работоспособен.

**Листинг кода**

import unittest  
from selenium import webdriver  
from selenium.webdriver.common.by import By  
from selenium.webdriver.support.ui import WebDriverWait  
from selenium.webdriver.support import expected\_conditions as EC  
  
class FlaskLandingPageTests(unittest.TestCase):  
  
 @classmethod  
 def setUpClass(cls):  
 cls.driver = webdriver.Chrome()  
 cls.driver.get("http://localhost:5000")  
  
 @classmethod  
 def tearDownClass(cls):  
 cls.driver.quit()  
  
 def test\_navigation\_links(self):  
 driver = self.driver  
 links = driver.find\_elements(By.CSS\_SELECTOR, "nav ul li a")  
 self.assertGreater(len(links), 0)  
 for link in links:  
 driver.execute\_script("arguments[0].scrollIntoView();", link)  
 link.click()  
 WebDriverWait(driver, 10).until(EC.presence\_of\_element\_located((By.TAG\_NAME, "section")))  
 self.assertTrue(driver.current\_url.endswith(link.get\_attribute("href").split("#")[-1]))  
  
 def test\_h1\_tag\_presence(self):  
 driver = self.driver  
 h1\_tags = driver.find\_elements(By.TAG\_NAME, "h1")  
 self.assertGreater(len(h1\_tags), 0)  
  
 def test\_header\_presence(self):  
 driver = self.driver  
 header = driver.find\_element(By.TAG\_NAME, "header")  
 self.assertIsNotNone(header)  
  
 def test\_footer\_presence(self):  
 driver = self.driver  
 footer = driver.find\_element(By.TAG\_NAME, "footer")  
 self.assertIsNotNone(footer)  
  
 def test\_form\_elements\_presence(self):  
 driver = self.driver  
 h3 = driver.find\_element(By.NAME, "h3")  
 wrapper = driver.find\_element(By.NAME, "wrapper")  
 logo = driver.find\_element(By.NAME, "logo")  
 self.assertIsNotNone(h3)  
 self.assertIsNotNone(wrapper)  
 self.assertIsNotNone(logo)  
  
 def test\_details\_tags\_presence(self):  
 driver = self.driver  
 details\_tags = driver.find\_elements(By.TAG\_NAME, "details")  
 self.assertGreater(len(details\_tags), 0)  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 unittest.main()

**Результат выполнения**

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ERROR: test\_navigation\_links (\_\_main\_\_.FlaskLandingPageTests.test\_navigation\_links)

----------------------------------------------------------------------

Traceback (most recent call last):

File "C:\Users\mstis\OneDrive\Рабочий стол\Pixel\_Art\_Gallery\_Site\unit test\test.py", line 26, in test\_navigation\_links

self.assertTrue(driver.current\_url.endswith(link.get\_attribute("href").split("#")[-1]))

^^^^^^^^^^^^^^^^^^^^^^^^^^

File "C:\Users\mstis\AppData\Local\Programs\Python\Python312\Lib\site-packages\selenium\webdriver\remote\webelement.py", line 178, in get\_attribute

attribute\_value = self.parent.execute\_script(

^^^^^^^^^^^^^^^^^^^^^^^^^^^

File "C:\Users\mstis\AppData\Local\Programs\Python\Python312\Lib\site-packages\selenium\webdriver\remote\webdriver.py", line 407, in execute\_script

return self.execute(command, {"script": script, "args": converted\_args})["value"]

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

File "C:\Users\mstis\AppData\Local\Programs\Python\Python312\Lib\site-packages\selenium\webdriver\remote\webdriver.py", line 347, in execute

self.error\_handler.check\_response(response)

File "C:\Users\mstis\AppData\Local\Programs\Python\Python312\Lib\site-packages\selenium\webdriver\remote\errorhandler.py", line 229, in check\_response

raise exception\_class(message, screen, stacktrace)

selenium.common.exceptions.StaleElementReferenceException: Message: stale element reference: stale element not found

(Session info: chrome=126.0.6478.61); For documentation on this error, please visit: https://www.selenium.dev/documentation/webdriver/troubleshooting/errors#stale-element-reference-exception

Stacktrace:

GetHandleVerifier [0x00007FF6E3703E52+31618]

(No symbol) [0x00007FF6E367B0B9]

(No symbol) [0x00007FF6E353888A]

(No symbol) [0x00007FF6E354AF2D]

(No symbol) [0x00007FF6E354B9BA]

(No symbol) [0x00007FF6E353F71B]

(No symbol) [0x00007FF6E354B9F8]

(No symbol) [0x00007FF6E353F71B]

(No symbol) [0x00007FF6E353D486]

(No symbol) [0x00007FF6E3541338]

(No symbol) [0x00007FF6E35CD77B]

(No symbol) [0x00007FF6E35AD10A]

(No symbol) [0x00007FF6E35CCA80]

(No symbol) [0x00007FF6E35ACEB3]

(No symbol) [0x00007FF6E357A46B]

(No symbol) [0x00007FF6E357B001]

GetHandleVerifier [0x00007FF6E3A0A02D+3202397]

GetHandleVerifier [0x00007FF6E3A56A4D+3516285]

GetHandleVerifier [0x00007FF6E3A4C4C0+3473904]

GetHandleVerifier [0x00007FF6E37B5D56+760454]

(No symbol) [0x00007FF6E3686B5F]

(No symbol) [0x00007FF6E3681CF4]

(No symbol) [0x00007FF6E3681E82]

(No symbol) [0x00007FF6E367122F]

BaseThreadInitThunk [0x00007FFDA7F27344+20]

RtlUserThreadStart [0x00007FFDA88FCC91+33]

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FAIL: test\_details\_tags\_presence (\_\_main\_\_.FlaskLandingPageTests.test\_details\_tags\_presence)

----------------------------------------------------------------------

Traceback (most recent call last):

File "C:\Users\mstis\OneDrive\Рабочий стол\Pixel\_Art\_Gallery\_Site\unit test\test.py", line 55, in test\_details\_tags\_presence

self.assertGreater(len(details\_tags), 0)

AssertionError: 0 not greater than 0

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FAIL: test\_h1\_tag\_presence (\_\_main\_\_.FlaskLandingPageTests.test\_h1\_tag\_presence)

----------------------------------------------------------------------

Traceback (most recent call last):

File "C:\Users\mstis\OneDrive\Рабочий стол\Pixel\_Art\_Gallery\_Site\unit test\test.py", line 31, in test\_h1\_tag\_presence

self.assertGreater(len(h1\_tags), 0)

AssertionError: 0 not greater than 0

----------------------------------------------------------------------

Ran 6 tests in 9.643s

FAILED (failures=2, errors=3)

PS C:\Users\mstis\OneDrive\Рабочий стол\Pixel\_Art\_Gallery\_Site\unit test>