Lab 6 Test Report

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SDEV 300

Purpose

This document serves to cover the test scenarios used to evaluate the SDEV 300 Lab 6 application as well as the source code compliance to PEP 8 Code Styling.

Overview

This testing focused on navigating the various routes of the Python Flask based web interface. The application is accessible from the localhost:5000 URL after the web server is started by issuing “python wsgi.py” from within the Lab6 directory. There are three original pages that exist:

1. index.html
2. server_time.html
3. utc.html

Pages 2 and 3 may be accessed via page 1 (index.html) which is the root route of the site. Each HTML template extends base.html which utilizes background image “bigben.png” and links with base.css and favicon.ico

The site topic is time, and index.html provides an ordered list of external resources for knowledge on time that is nested within an unordered list.

The web interface aimed to use each HTML component called out in the Lab 6 requirements.

Code Style Guide

On Lab 6, I utilized the PyCharm IDE for development. PyCharm enabled me to write compliant code during development and each pylint evaluation received a score of 10.00.

Below is a copy - paste of the pylint evaluation of wsgi.py source code.

Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)

Test Scenarios

Below is an overview of the test scenarios, the purpose of each test, the expected result, the final result, and the associated figure where a screenshot may be viewed.

Test Case	Purpose	Expected Result	Final Result	Figure
Test 1 - WSGI Server Starts Without Error	Demonstrate that the Flask based web server can start and run without failure upon launch	The Flask server starts and does not report an error or issue	Pass	Figure 1
Test 2 - Root Route Page Rendering Without Error	Demonstrate that the index.html page may be viewed without error via web browser	The web browser displays the page as designed	Pass	Figure 2
Test 3 - Server Time Route Rendering Without Error	Demonstrate that when the appropriate link is clicked from the root route, the server_time.html page may be viewed without error via web browser	The web browser routes to the server_time route and displays the server_time.html page as designed	Pass	Figure 3
Test 4 - UTC Time Route Rendering Without Error	Demonstrate that when the appropriate link is clicked from the root route, the utc_time.html page may be viewed without error via web browser	The web browser routes to the utc_time route and displays the utc_time.html page as designed	Pass	Figure 4
Test 5 - HREF Links to External Pages May Be Called From The Root Route	Demonstrate that each of the three links, provided via HREF from index.html, properly resolve when selected from the index.html page	The web browser properly navigates to and resolves each of the external web pages as selected from the root route / index.html	Pass	Figure 5 Figure 6 Figure 7

Figure 1: Test 1 - WSGI Server Starts Without Error

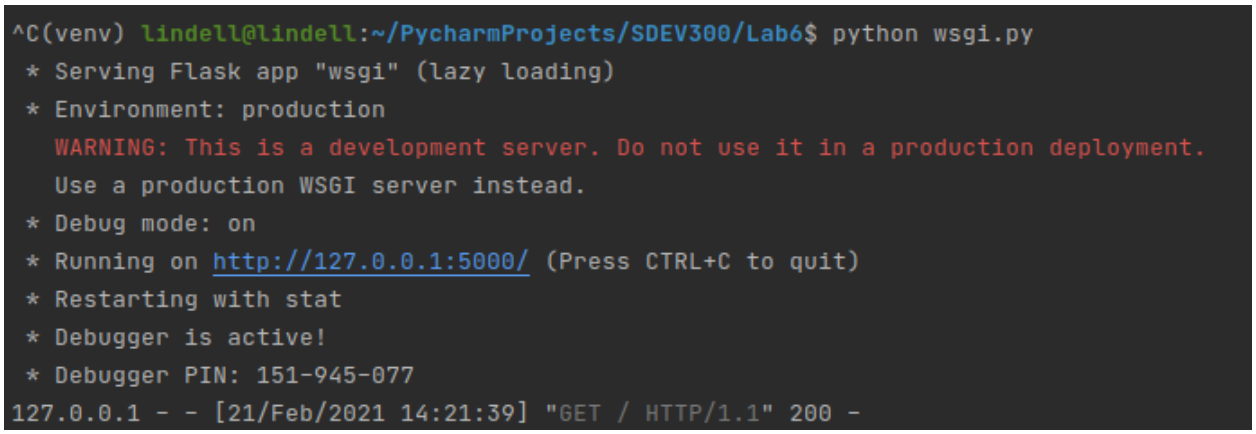

Figure 2: Test 2 - Root Route Page Rendering Without Error

Figure 3: Test 3 - Server Time Route Rendering Without Error

Figure 4: Test 4 - UTC Time Route Rendering Without Error

Figure 5: Test 5 - HREF Links to External Pages Called From Root Route

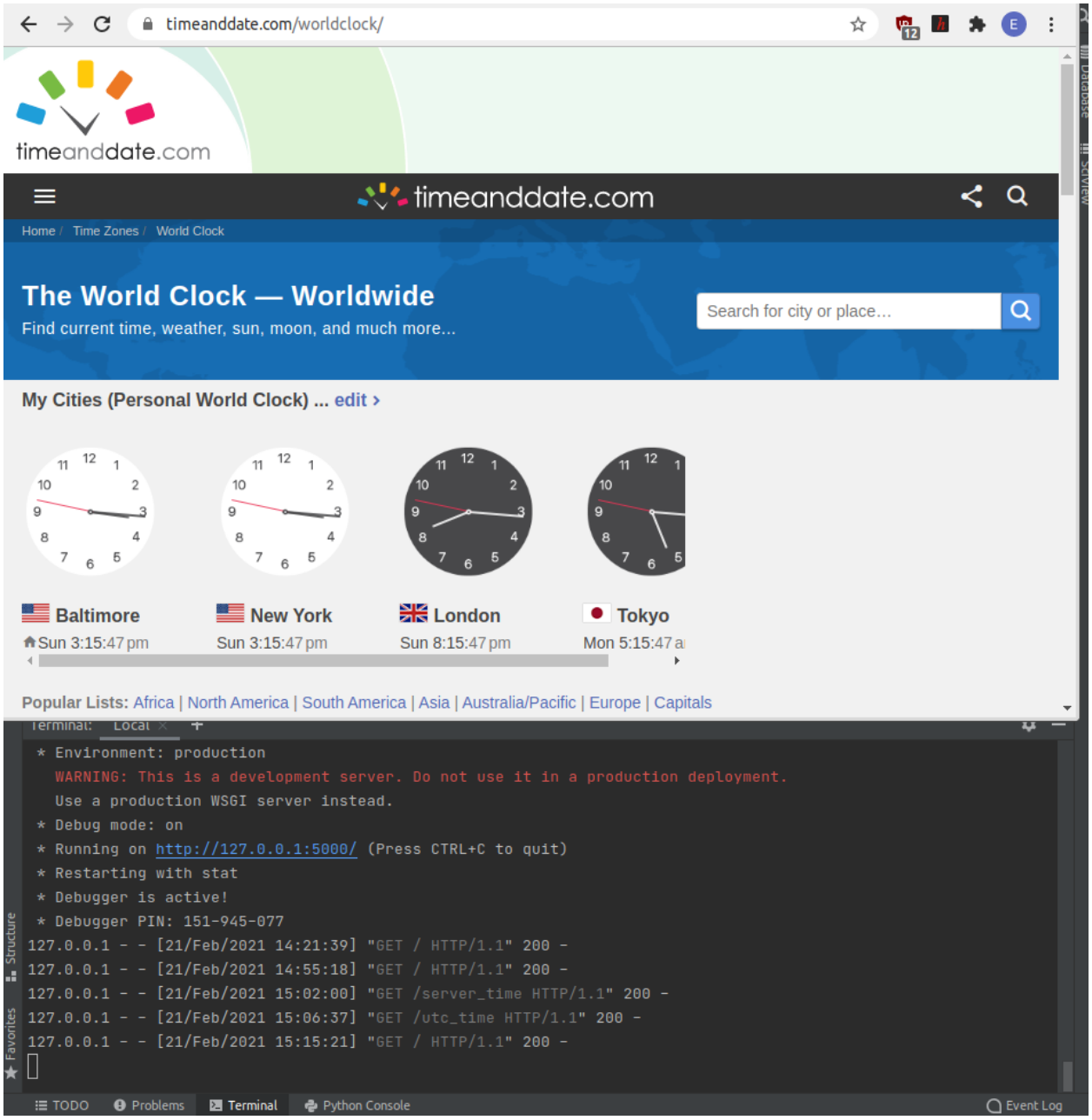

Figure 6: Test 5 - HREF Links to External Pages Called From Root Route

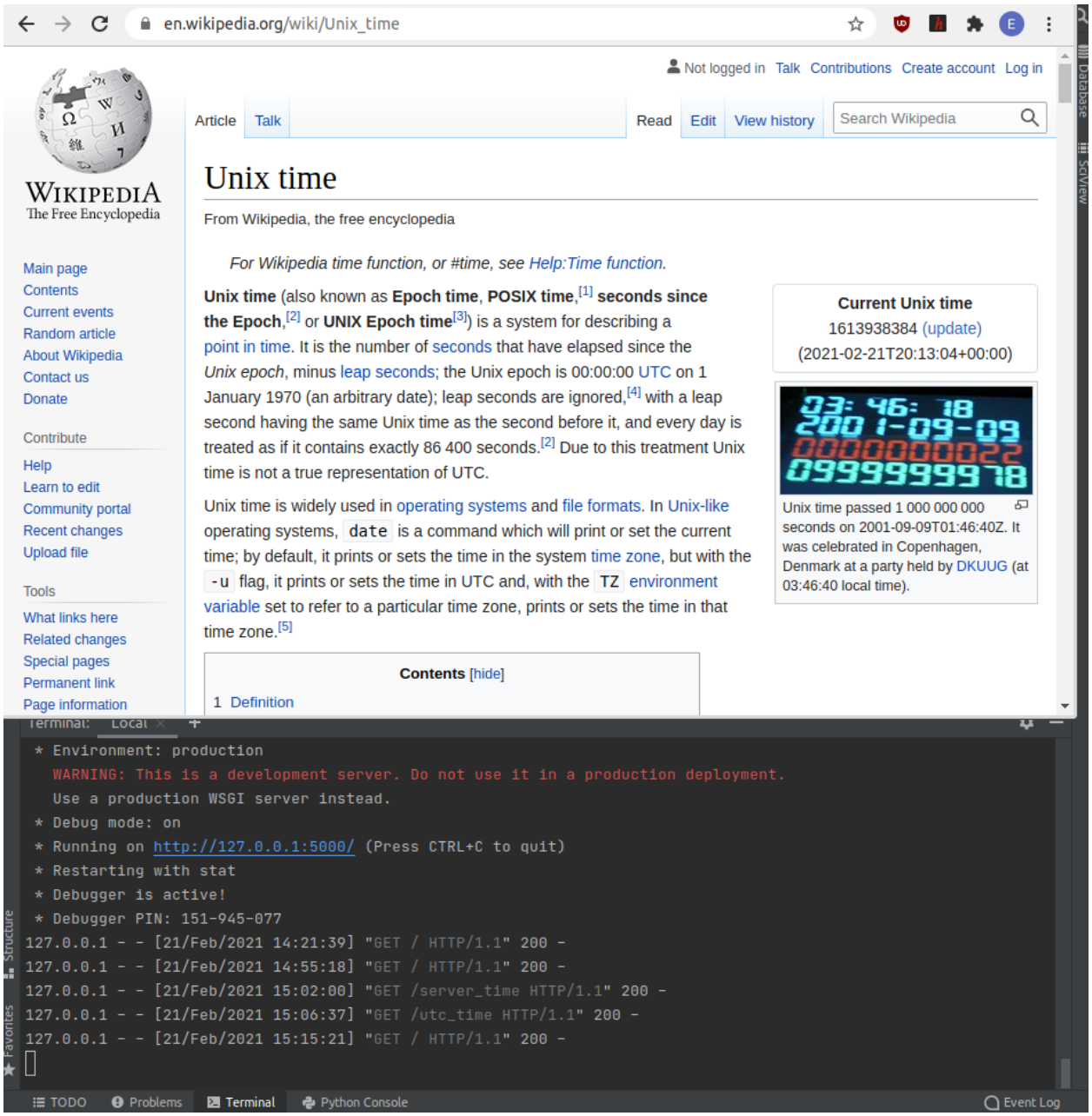

Figure 7: Test 5 - HREF Links to External Pages Called From Root Route