Software Testing Report
New York Restaurant Inspection Software

Heang Sok

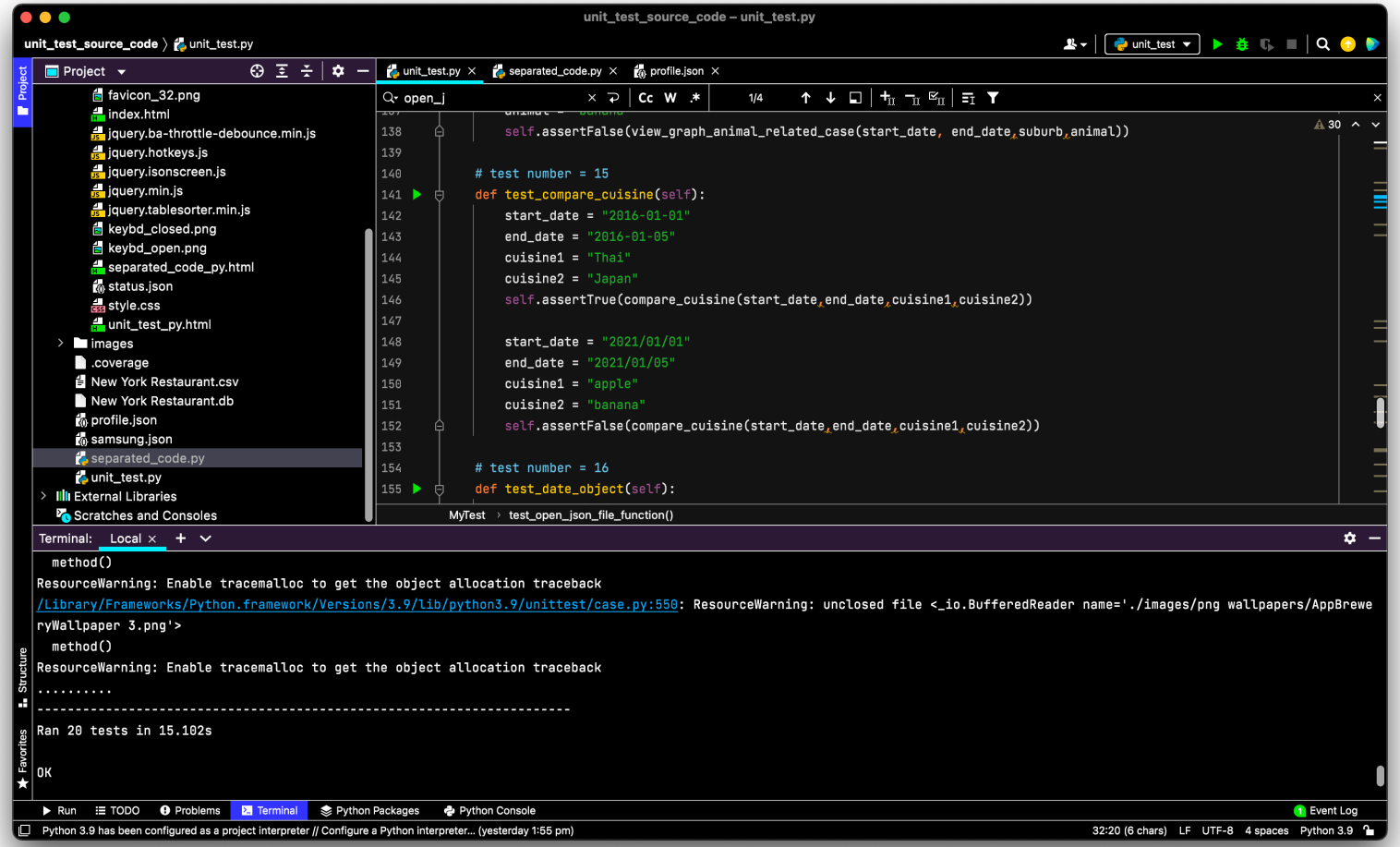
Table of Contents

1.0 Unit Tests

No	Test Case	Expected Results	Actual Results
1.	date_time()	Return the current date and time	Return the current date and time
2.	acknowledgement()	Display acknowledgement message	Display acknowledgement message
3.	check_credential(username, password)	Check user's credential using json file	Check user's credential using json file
4.	open_json_file()	Exception Handle	Exception Handle
5.	save_profile(username, contact, password, filename)	Exception Handle	Exception Handle
6.	open_file_dialog()	Display file dialog; Exception Handle	Display file dialog; Exception Handle
7.	loadfile()	Exception Handle	Exception Handle
8.	Convert_date_format(date)	Convert date format from mm/dd/yyyy to yyyy-mm-dd	Convert date format from mm/dd/yyyy to yyyy-mm-dd
9.	make_a_list_of_img()	Automatically loop through a directory and produce a list of images	Automatically loop through a directory and produce a list of images
10.	convert_csv_to_db(filename)	Automatically convert a csv file to SQLite; Exception Handle	Automatically convert a csv file to SQLite; Exception Handle

No	Test Case	Expected Results	Actual Results
11.	search_by_date(start_date, end_date)	Return all inspection details by selected date	Return all inspection details by selected date
12.	search_by_date_keyword(start_date, end_date, keywords)	Return all inspection details by selected date and keyword input	Return all inspection details by selected date and keyword input
13.	view_chart_suburbs(start_date, end_date)	Return violation data by selected date and group it by suburb	Return violations data by selected date and group it by suburb
14.	view_graph_animal_related_case(start_date, end_date, suburb, animal_name)	Return violations that are related to animal case by selected date and suburb	Return violations that are related to animal case by selected date and suburb
15.	compare_cuisine(start_date, end_date, cuisine1, cuisine2)	Return violations from two different restaurants	Return violations from two different restaurants
16.	date_object(date)	Return a date object	Return a date object
17.	get_column_name()	Get column name from the database	Get column name from the database
18.	Get_radio_button_value()	Return radio button value	Return radio button value
19.	write_json_file(filename, text)	Write the json file with a text	Write the json file with a text
20.	read_data_by_row()	Read the database row by row	Read the database row by row

The picture below shows that all 20 functions are tested in 15.102 seconds; the unit testing source code is attached in a directory called “unit_test_source_code”.



2.0 Coverage Report

According to the results that are shown in the picture below, we received 94% for the total test of separated_code.py and unit_test.py. We also learn from the results that there are 17 lines of codes that were not covered in this test (separated_code.py missed 14 lines and unit_test.py missed 3 lines). This is because the test involved the user's choices. Taking open_file_dialog() function as an example, if the user selects a correct type of file, the system will return True; and if the user select a wrong type of file or does not select any file, the system returns False. This means that the system returns either True or False (cannot be both). Thus, if the system returns True, the coverage test will ignore the line of code that returns False, and vice versa.

Please open a directory called htmlcov and select index.html to get more information about the coverage test.

Coverage for **separated_code.py** : 92%

182 statements | 168 run | 14 missing | 0 excluded

```
""" This student has separated the software functions and made it to small chunks so that it can be tested using
unittest """

import tkinter.messagebox
from tkinter import *
from tkinter import filedialog, messagebox
from datetime import datetime
import pandas as pd
import sqlite3
from PIL import Image  # to install: pip3 install pillow
from time import *
import json
import os

```

Coverage for **unit_test.py** : 98%

120 statements | 117 run | 3 missing | 0 excluded

```
import datetime
import PIL.PngImagePlugin
from separated_code import *
import unittest

# please use pycharm to test these codes instead of terminal
class MyTest(unittest.TestCase):

```

3.0 Requirements Acceptance Testing

Software Requirement No	Test	Implemented (Full /Partial/ None)	Test Results (Pass/ Fail)	Comments (for partial implementation or failed test results)
R1	The software shall retrieve all inspection details from the datasets based on a selected date.	Full	Pass	Not Applicable
R2	The software shall plot the distribution of violations over the different suburbs by a selected date.	Full	Pass	Not Applicable
R3	The software shall view all violations by keyword input and a selected date.	Full	Pass	Not Applicable
R4	The software shall retrieve all animal related violations and show it on the screen based on keyword input and selected date.	Full	Pass	Not Applicable
R5	The software shall be able to generate charts or graphs according to the violation code and selected date.	None	None	This team replaced this requirement with: “Compare the numbers of violations between two cuisines by selected period”. This new requirement has passed the test before the deployment of the software.
R6	The software shall allow the users to set up a new profile.	Full	Pass	Not Applicable

Software Requirement No	Test	Implemented (Full /Partial/ None)	Test Results (Pass/ Fail)	Comments (for partial implementation or failed test results)
R7	The software shall check the user credential when the user log in.	Full	Pass	Not Applicable
R8	The software shall display an error message when the users provide an invalid username or password.	Full	Pass	Not Applicable
R9	The software shall allow the users to edit their profile and change their password.	Partial	Pass	The software allows the users to change their password only.
R10	The software shall be able to execute all datasets that have csv as the extension	Full	Pass	In addition, the software also allows the users to execute the DB file format.
R11	The software shall only accept English keyword when searching through the dataset	Full	Pass	Not Applicable