

# User Manual

New York Restaurant Inspection Software

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## 1. Running Environment

### 1.1. Operating System

It is recommended to run this software on a Mac machine to receive a high quality of Graphic User Interface. Running this software on a Window machine might result in buttons and text overlapping.

### 1.2. Programming Language and Package Library

This software is built on python 3.9, and the package libraries that are used in this software includes:

```
import tkinter.messagebox
from tkinter import *
from tkinter import ttk
from tkinter import filedialog, messagebox
import matplotlib.pyplot as plt
from datetime import datetime
from tkcalendar import *
import pandas as pd
import sqlite3
import os
from PIL import ImageTk, Image # to install: pip3 install pillow
from time import *
import json
```

### 1.3. File Supported

This software supports only CSV, DB, JSON, and PNG file format.

## 2. Home Window



1. Griffith University's Logo

2. Title

3 & 4. Username & Password: The user needs to fill in a valid credential to login.

Note: the default username and password are **admin**.

5. Login Button: The user clicks on the Login Button to log into the software after filling in the username and password entries.

6. Set Up Profile Button: The user needs to set up a profile first before he can log into the software. Or the user can use the default username and password: **admin**.

7. Change Password Button: The user clicks this button to change his password.

8. About Button: Tell a brief information about this software.

9. Exit Button: Exit the software.

10. Date Label: Show the current date.

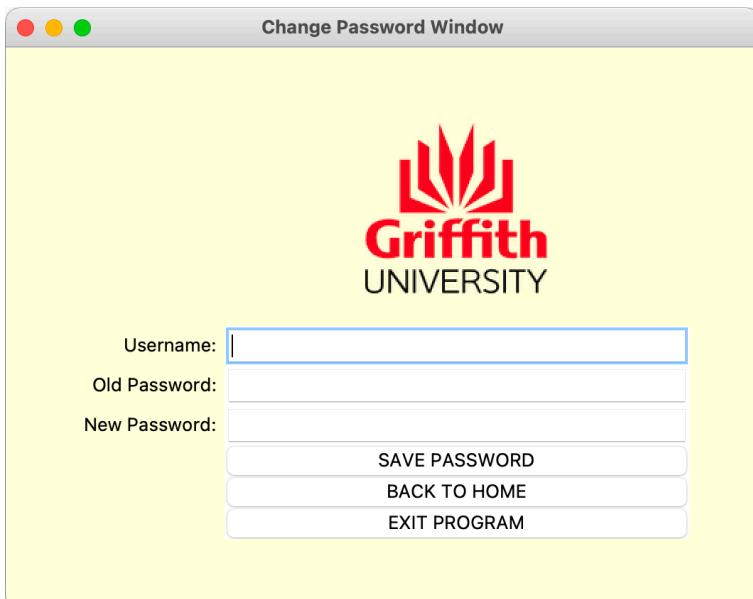
11. Hidden Picture Buttons: Click these buttons to show different pictures.

## 2.1. Profile Window



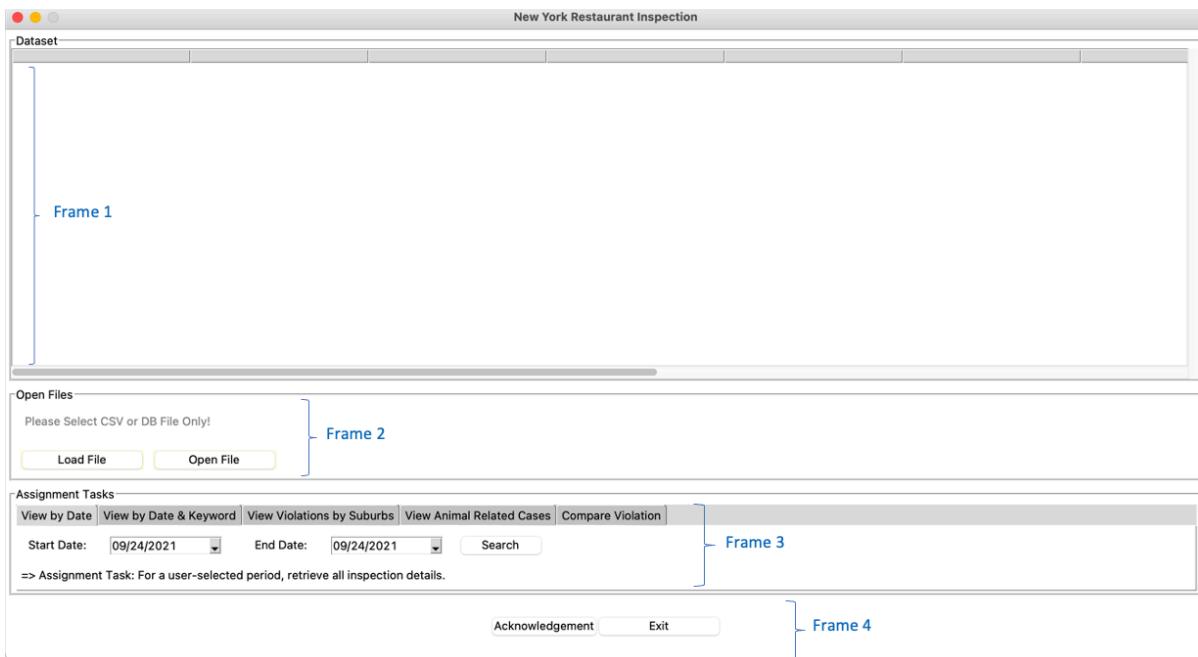
To set a new profile, the user needs to fill in every entry. The software prevents the users from having the same username and email. Then, the user must click the SAVE button to save. If the user clicks the BACK button, the software brings the user back to the Home Window. If the user clicks the EXIT PROGRAM Button, the software will be terminated.

## 2.2. Change Password Window



To change the password, the user has to provide a valid username and password first. Then the user provides the new password. The user clicks SAVE PASSWORD to save the new password. If the user clicks the BACK TO HOME button, the software will bring him to the Home Window. If the user clicks the EXIT PROGRAM Button, the software will be terminated.

### 3. Dataset Window



Frame 1: Show data information in a spreadsheet style.

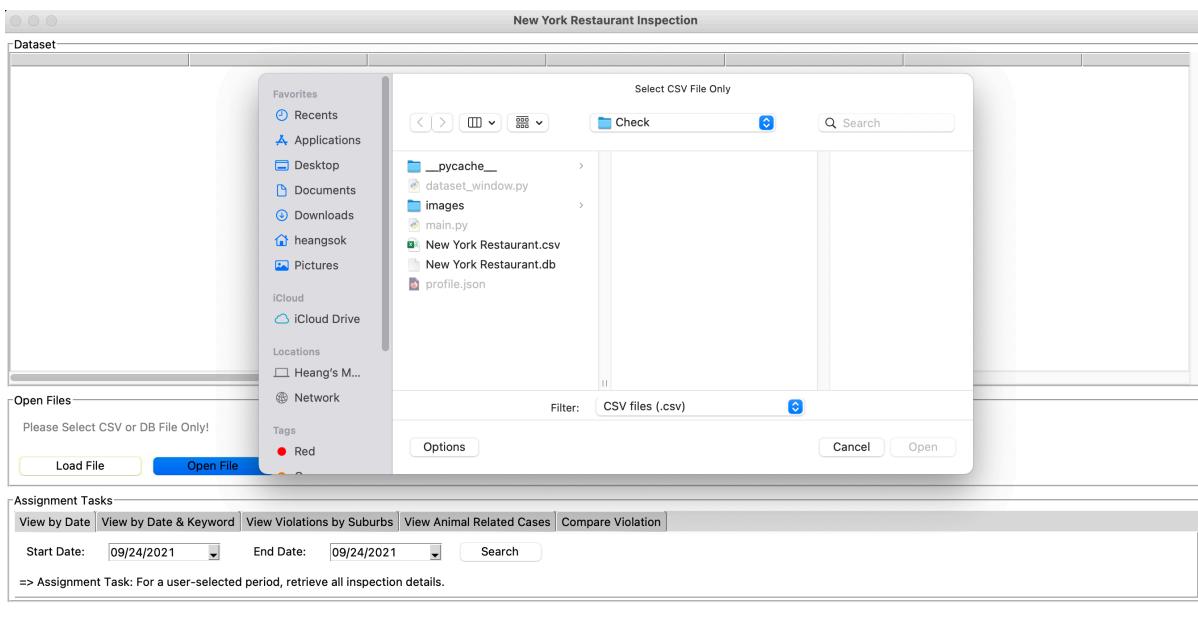
Frame 2: Allow the user to open and load a file. It also shows the path of the file.

Frame 3: Main functions are stored in this frame. These functions are divided into 5 tabs.

Frame 4: Contain Acknowledgement and Exit Button.

The users have to open a file and load it before they can use the software's functions in Frame 3. Note that the software recognises only the CSV and DB file format.

To open a file, the user clicks Open File button.



When the file is opened and selected, the user clicks the Load File button, and the following screen will be shown.

The screenshot shows a window titled "New York Restaurant Inspection". The main area displays a table with columns: CAMIS, DBA, BORO, BUILDING, STREET, ZIPCODE, and PHONE. The table contains approximately 30 rows of data. Below the table, there is a section titled "Open Files" with a single entry: "/Users/heangsok/Documents/trimester2\_2021/7810ICT Software Technologies/Assignment Part B/Check/New York Restaurant.csv". There are two buttons: "Load File" and "Open File". At the bottom, there is a "Assignment Tasks" section with tabs: "View by Date", "View by Date & Keyword", "View Violations by Suburbs", "View Animal Related Cases", and "Compare Violation". Under "Assignment Tasks", there are "Start Date" and "End Date" dropdowns set to "01/01/2016" and "12/30/2016" respectively, and a "Search" button. A note at the bottom says "=> Assignment Task: For a user-selected period, retrieve all inspection details." At the very bottom of the window are "Acknowledgement" and "Exit" buttons.

Now the user can perform the following operation:

- Retrieve all inspection details by selected period
- Plot the distribution of violations over the different suburbs by selected period
- Retrieve all violations by keyword input and selected period
- Analyse the cases related to animals, and their trend over time and distribution over suburbs
- Compare the numbers of violation between two cuisines by selected period

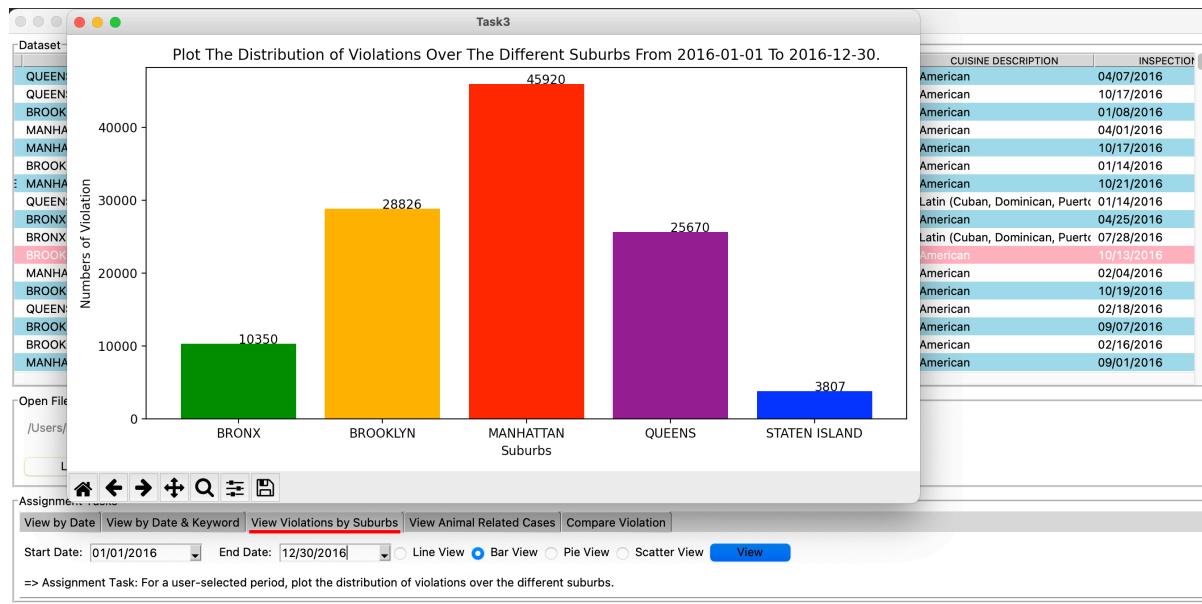
To retrieve all inspection details, the user selects the “View by Date” tab and chooses a range of period; then clicks the search button.

This screenshot is identical to the one above, but the "View by Date" tab in the "Assignment Tasks" section is highlighted with a red border. The rest of the interface and data table are the same.

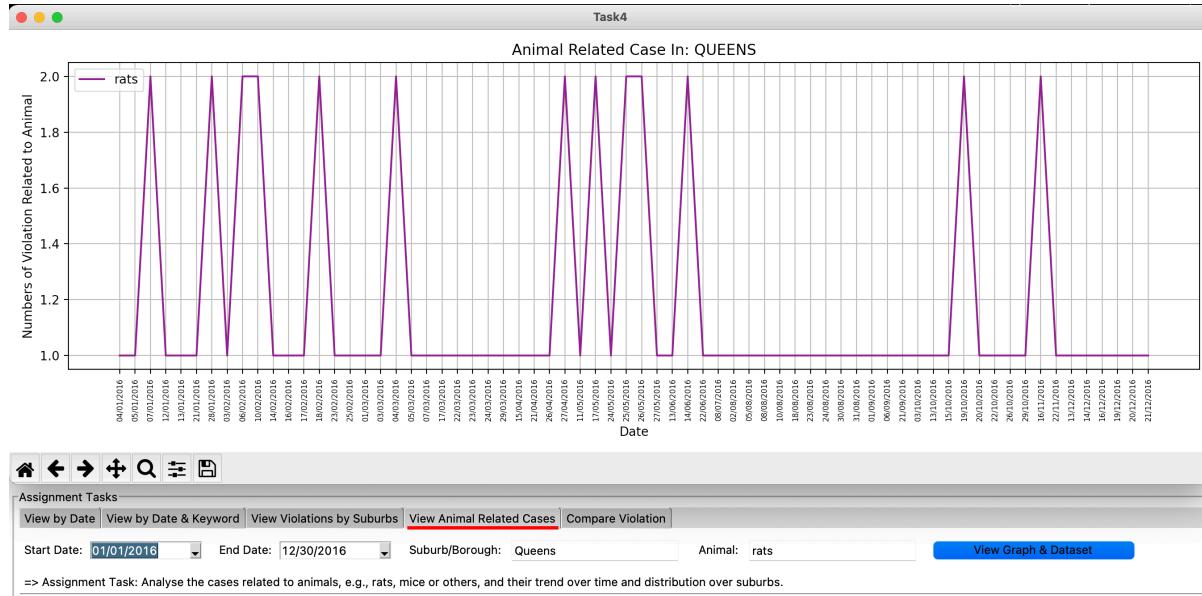
To retrieve all violations by keyword input, the user clicks on “View by Date & Keyword” tab and chooses a range of period; then the user inputs a keyword and clicks the search button.

The screenshot shows the "New York Restaurant Inspection" application interface. At the top, there is a table titled "Dataset" with columns: BORO, BUILDING, STREET, ZIPCODE, PHONE, CUISINE DESCRIPTION, and INSPECTION. The table contains numerous rows of data for various restaurants across different boroughs like Queens, Brooklyn, Manhattan, Bronx, and Staten Island. Below the table, there is a section titled "Open Files" with a single entry: "/Users/heangsok/Documents/trimester2\_2021/7810ICT Software Technologies/Assignment Part B/Check/New York Restaurant.csv". There are two buttons: "Load File" and "Open File". Underneath this is the "Assignment Tasks" section, which includes tabs: "View by Date" (selected), "View by Date & Keyword" (highlighted in red), "View Violations by Suburbs", "View Animal Related Cases", and "Compare Violation". Below the tabs are fields for "Start Date: 01/01/2016", "End Date: 12/30/2016", "Keyword: America", and a "Search" button. A note below the keyword field says: "> Assignment Task: For a user-selected period, retrieve all violations that contain a keyword." At the bottom of the window are "Acknowledgement" and "Exit" buttons.

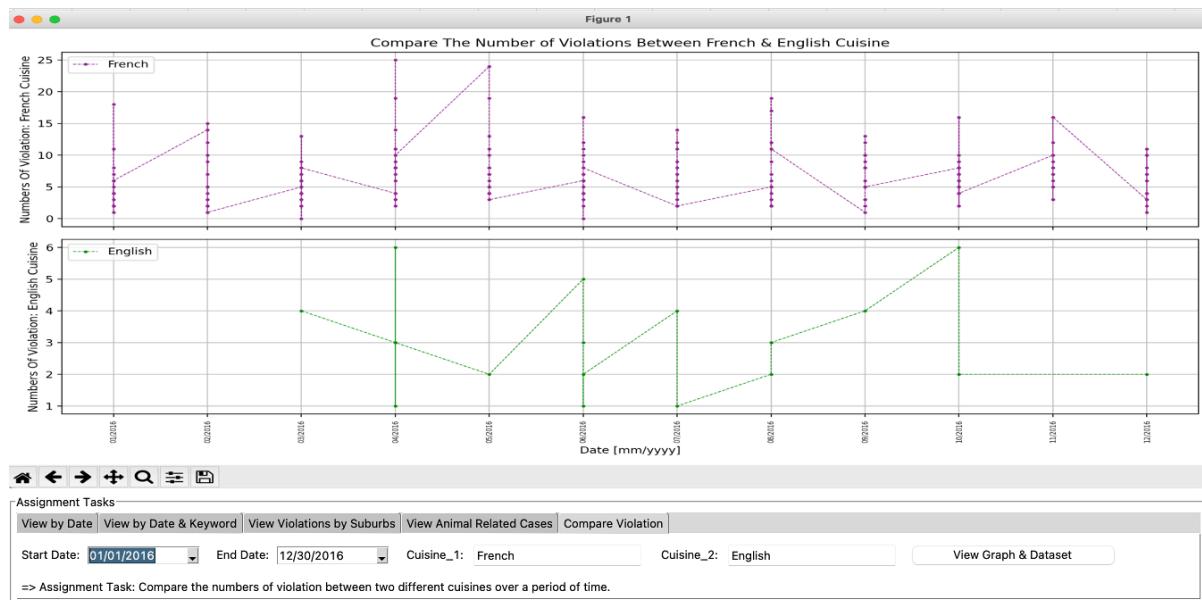
To plot the distribution of violations over the different suburbs by selected period, the user selects “View Violations by Suburbs” tab and chooses a range of period; then the user selects one type of the graph views and clicks the view button.



To analyse the cases related to animals, and their trend over time and suburbs, the user selects the “View Animal Related Cases” tab and chooses a range of period, then the user types in suburb and animal name. Lastly, the user clicks the View Graph & Dataset button.



To compare the numbers of violation between two cuisines by selected period, the user has to select the “Compare Violation” tab and choose a range of period. Then the user types in two different cuisines and clicks the View Graph & Dataset button.



The Acknowledgement button enables this student to thank all professors who have helped in carrying out this project.

The Exit button will terminate this software.