

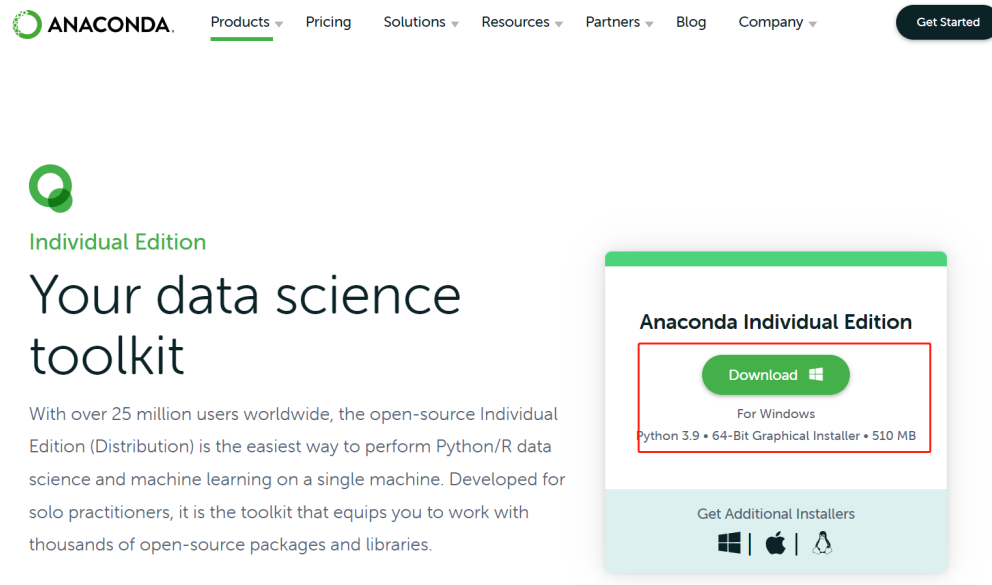
NOTICE: DO NOT open a VPN while running this application. Doing so will result in the rejection of the connection of API, which is used for this application.

Application Operation Video: <https://www.youtube.com/watch?v=72CdC2oSle0>

1. Installation

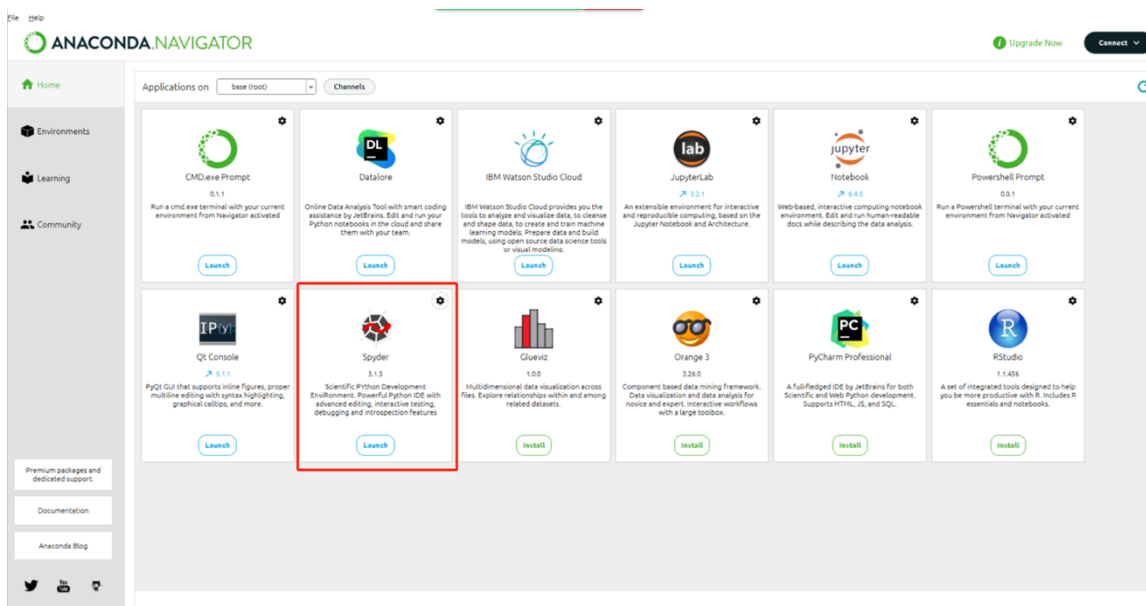
1.1. Anaconda Installation

Website: <https://www.anaconda.com/products/individual>



1.2. Other Installation from terminal pip install tkcalendar

2. Open user_interface.py file in the python project folder with Spyder



3. Usage Instructions

3.1. Main View

3.1.1. To Start:

Once users run the program, the program shows the current month's alert information on the screen. At the same time, this alert data would be written into a .csv file in the program folder. It is easy for users to export the data and print it out for further analysis.

*(default country for COVID and weather data: Australia, default currency exchange: AUS to USD)

*(The alert is based on the comparison between today's data and that of the day before)

The below screenshot is what you would see once you start the program:

my_user_interface

Open File

Date	Covid_alert	Weather_alert	Exchange_rate_alert	Notes
2022-02-01	Up	Cool	Down: 0.0026	
2022-02-02	Up	Cool	Down: 0.0025	
2022-02-03	Up	Cool	Up: 0.0130	happy
2022-02-04	Down	Cool	Unchange	
2022-02-05	Down	Cool	Unchange	Very Happy
2022-02-06	Down	Hot	Down: 0.0083	
2022-02-07	Down	Hot	Down: 0.0014	
2022-02-08	Down	Hot	Down: 0.0076	
2022-02-09	Up	Cool	Down: 0.0076	
2022-02-10	Up	Cool	Up: 0.0085	

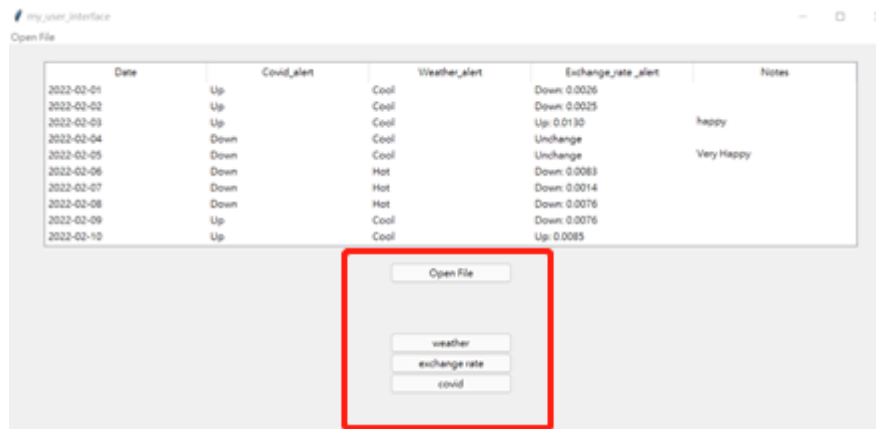
Open File

weather

exchange rate

covid

3.1.2. To Navigate:



3.1.2.1. Open File button:

This allows you to open the “data_sheet.csv” file in the folder, in which you could check what information you have saved so far. You could also navigate back to the alert file if you choose the “alert_sheet.csv” file under the same folder.

3.1.2.2. Weather button:

Will open up a new scene showing weather information. Please check below 3.2 description.

3.1.2.3. Covid button:

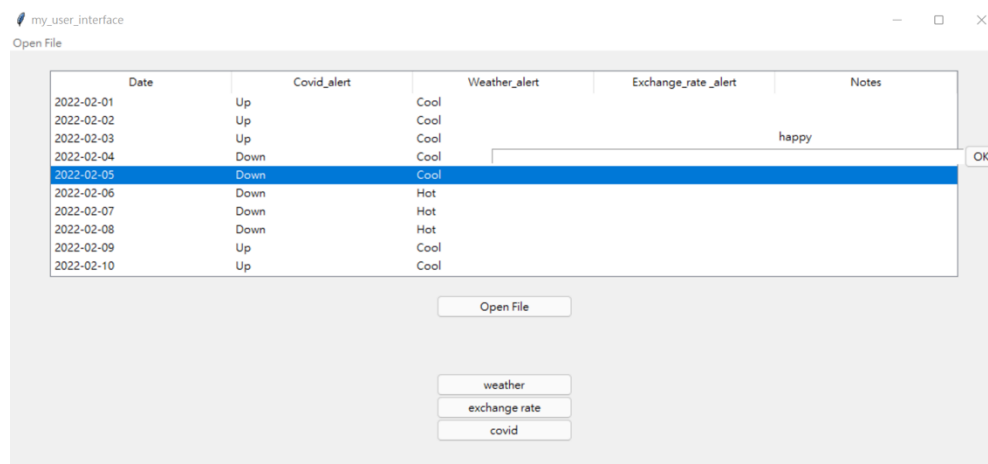
Will open up a new scene showing Covid information. Please check below 3.3 description

3.1.2.4. Exchange rate button:

Will open up a new scene showing exchange rate information. Please check below 3.4 description.

3.1.3 To add notes into the table:

Double click on the cells under the Notes column.



Type the notes in the box and click the ok button to save your edit.

my_user_interface

Open File

Date	Covid_alert	Weather_alert	Exchange_rate_alert	Notes
2022-02-01	Up	Cool		
2022-02-02	Up	Cool		
2022-02-03	Up	Cool		happy
2022-02-04	Down	Cool	Very Happy	
2022-02-05	Down	Cool		
2022-02-06	Down	Hot		
2022-02-07	Down	Hot		
2022-02-08	Down	Hot		
2022-02-09	Up	Cool		
2022-02-10	Up	Cool		

OK

Open File

weather

exchange rate

covid

The notes would be added into the alert_sheet.csv file and would exist the next time you run the program.

my_user_interface

Open File

Date	Covid_alert	Weather_alert	Exchange_rate_alert	Notes
2022-02-01	Up	Cool		
2022-02-02	Up	Cool		
2022-02-03	Up	Cool		happy
2022-02-04	Down	Cool		
2022-02-05	Down	Cool		Very Happy
2022-02-06	Down	Hot		
2022-02-07	Down	Hot		
2022-02-08	Down	Hot		
2022-02-09	Up	Cool		
2022-02-10	Up	Cool		

Open File

weather

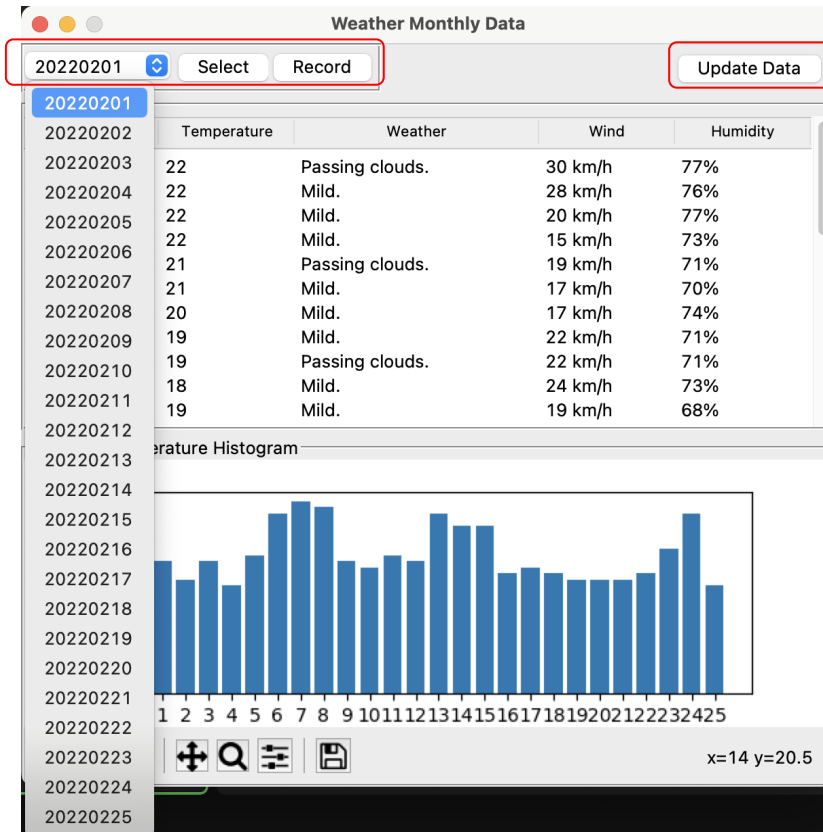
exchange rate

covid

3.2. Weather Function

3.2.1. View Daily Data in Current Month (Take February as Example)

Users can choose the date they want to view from the drop-down menu. After selecting the date, click on the 'Select' button to view data in the table.



3.2.2. Record Data

The date in the drop-down menu can also be used to record data. After selecting the date, click on the 'Record' button to record the midday temperature and weather of the selected date. This record would then be shown when users return to the main view.

3.2.3. Update Data

All the data are previously scrapped. Users can choose to click on the 'Update Data' button to update the newest data from the website.

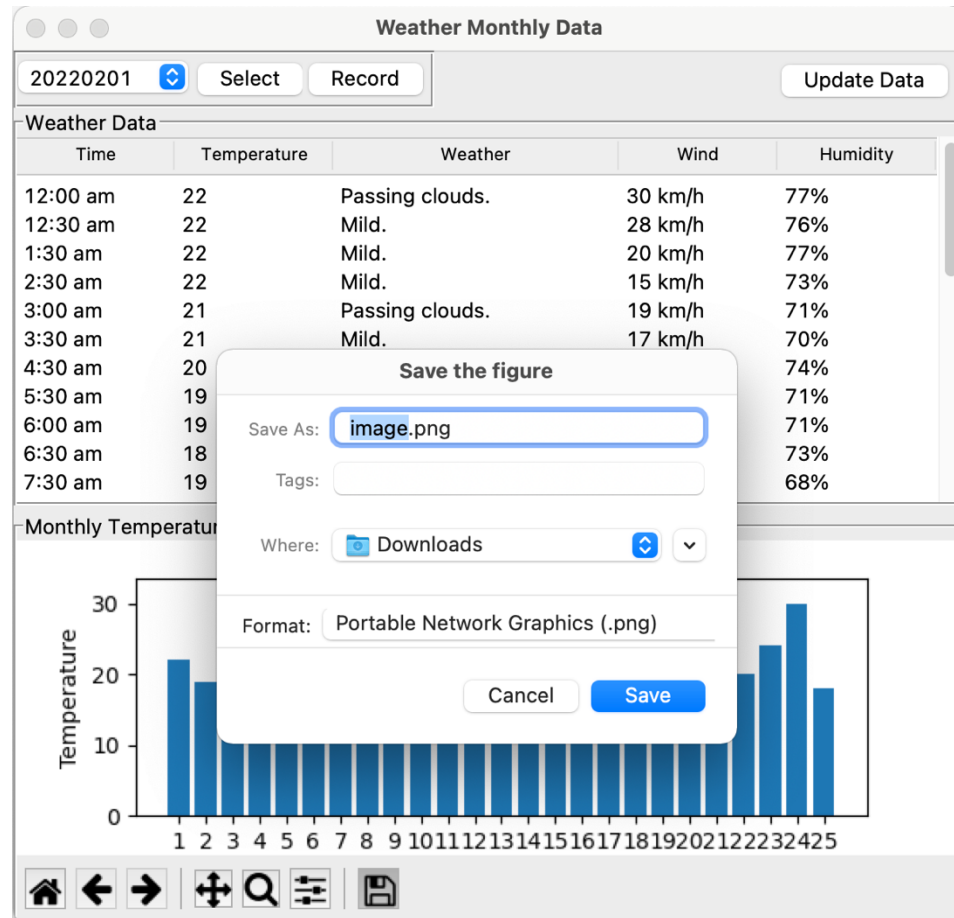
Updating data could take up to 15 seconds.

After finishing updating the newest version of data, a window will pop up showing that 'Data Update Finished'.

3.2.4. Displaying Temperature Histogram Chart and Saving Chart

The histogram shown is the midday temperature from each day from the current month.

Users can click on the last icon to save this chart as a picture.



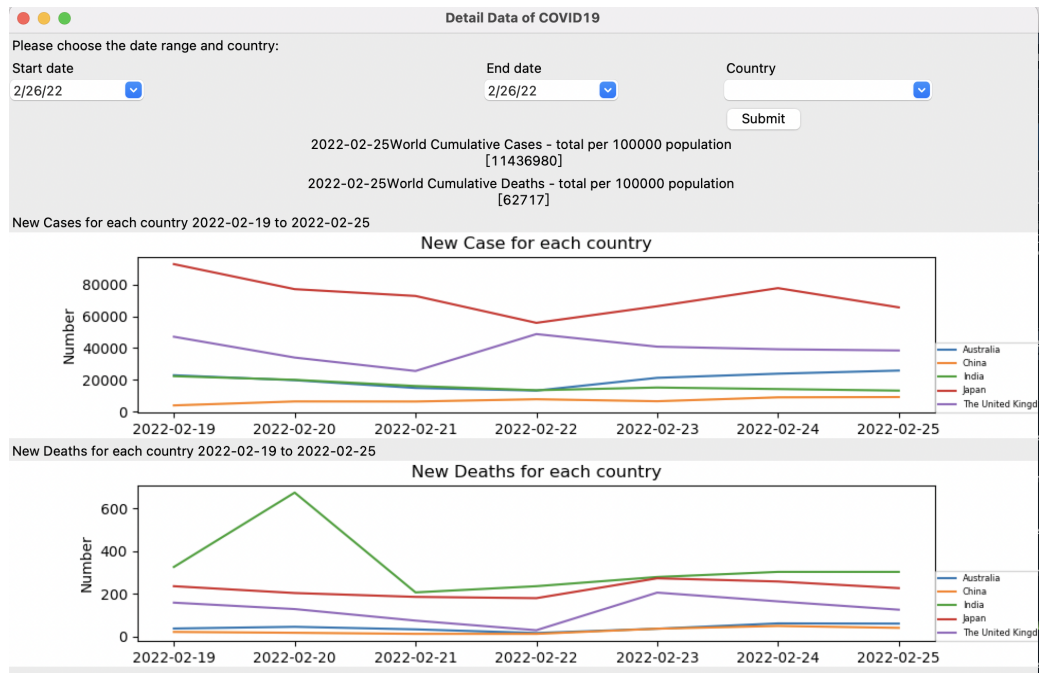
3.3. COVID Function

3.3.1. View the nearest seven days data

After clicking the "COVID" button, the system will auto-display:

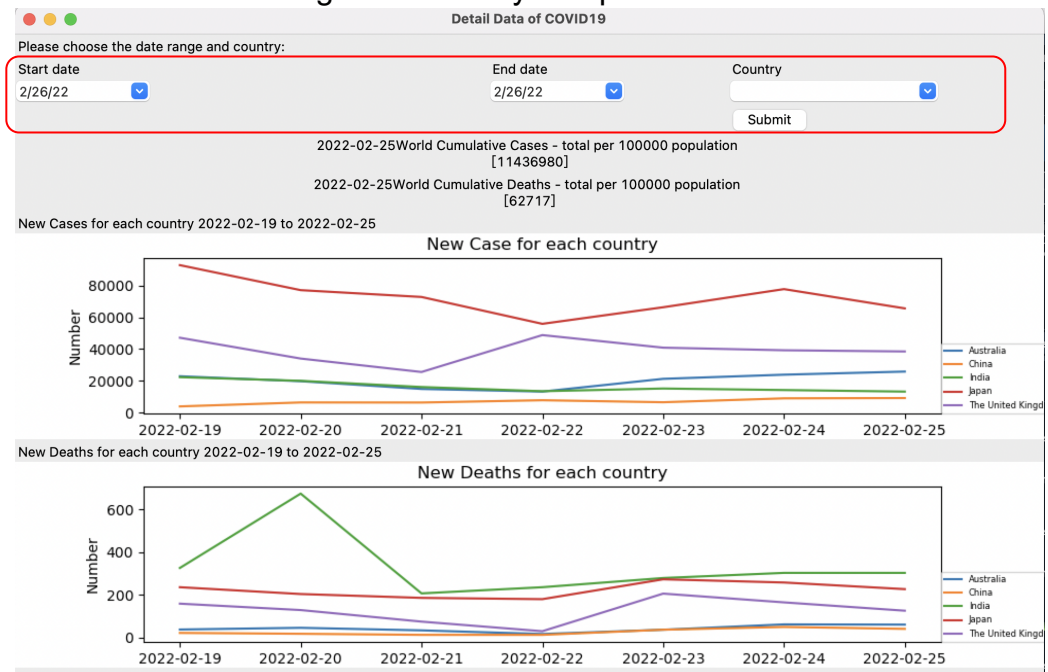
1. World's cumulative COVID cases and deaths

2. New case and new deaths data of nearest seven days for the countries: Australia, China, India, Japan, The United Kingdom



3.3.2. Select the specific dates

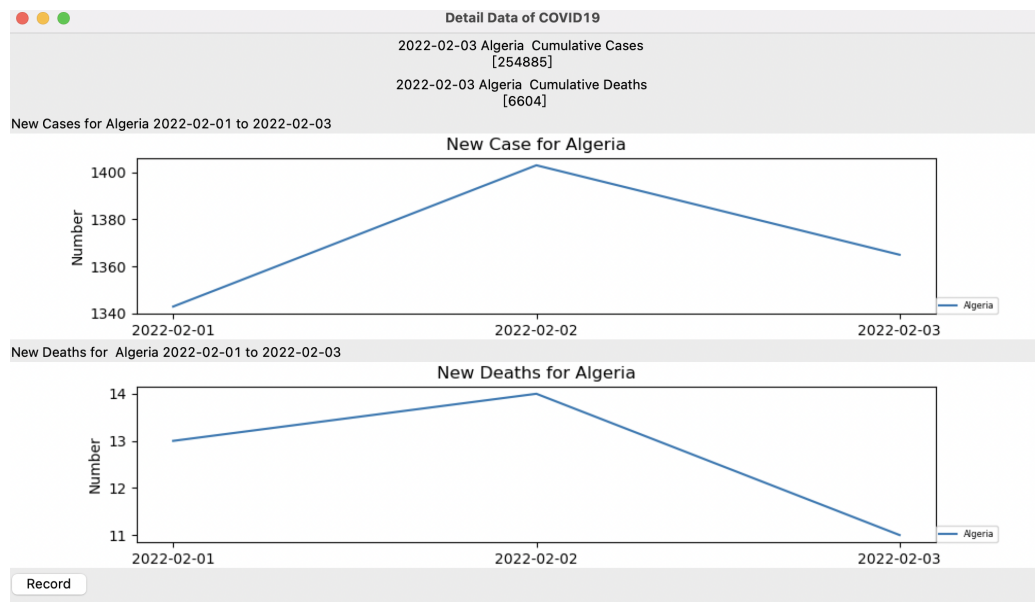
Choose the Date range and country and press submit.



The system will display:

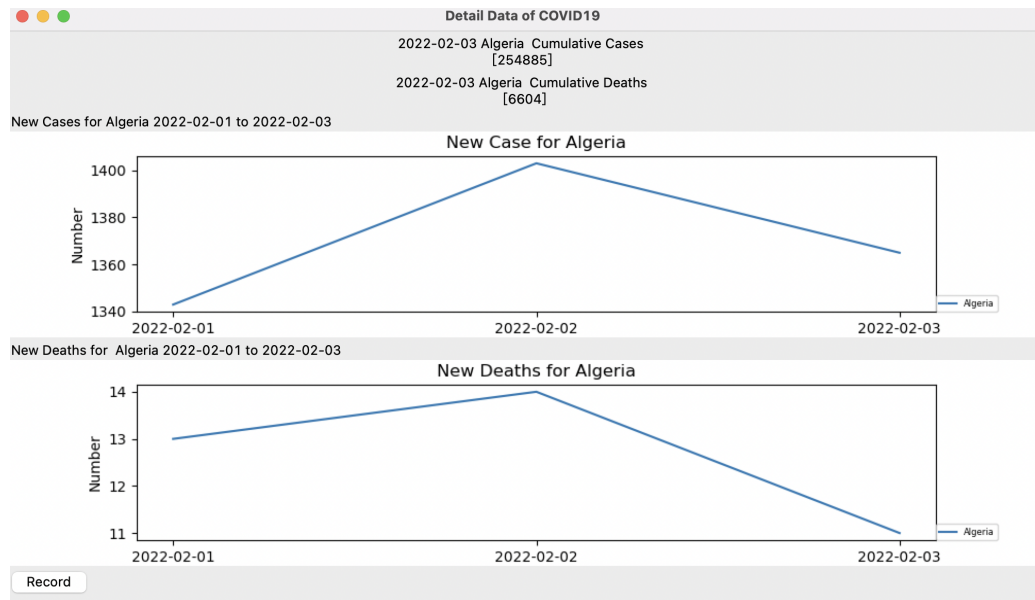
1. Cumulative cases and deaths until the "End date"

2. New cases and new deaths data of the “Country”



3.3.3. Record the data

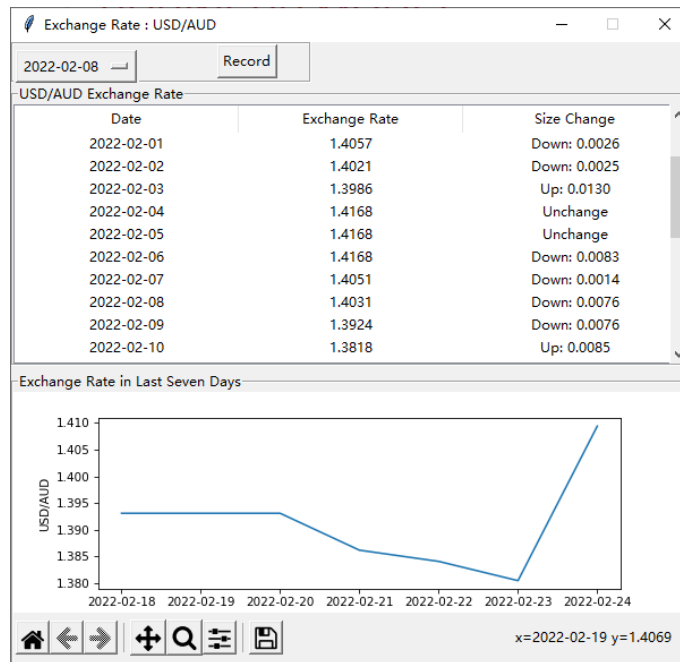
Press the “Record” button, the data will record in the system and can display on the MainView.



3.4. Exchange Rate Function

3.4.1. View Daily Exchange Rate

Users could read the exchange rate data in the current month.



3.4.2. Record Data

If users want to record the exchange rate for the specified date, they should select the date via the "Date" button and click the "Record" button. Then this information will be stored in the user's datasheet.

3.4.3. History Rate Line Chart

In this part, users could see the line chart of the exchange rate in the last seven days. They could save the line chart by clicking the save button at the bottom.

