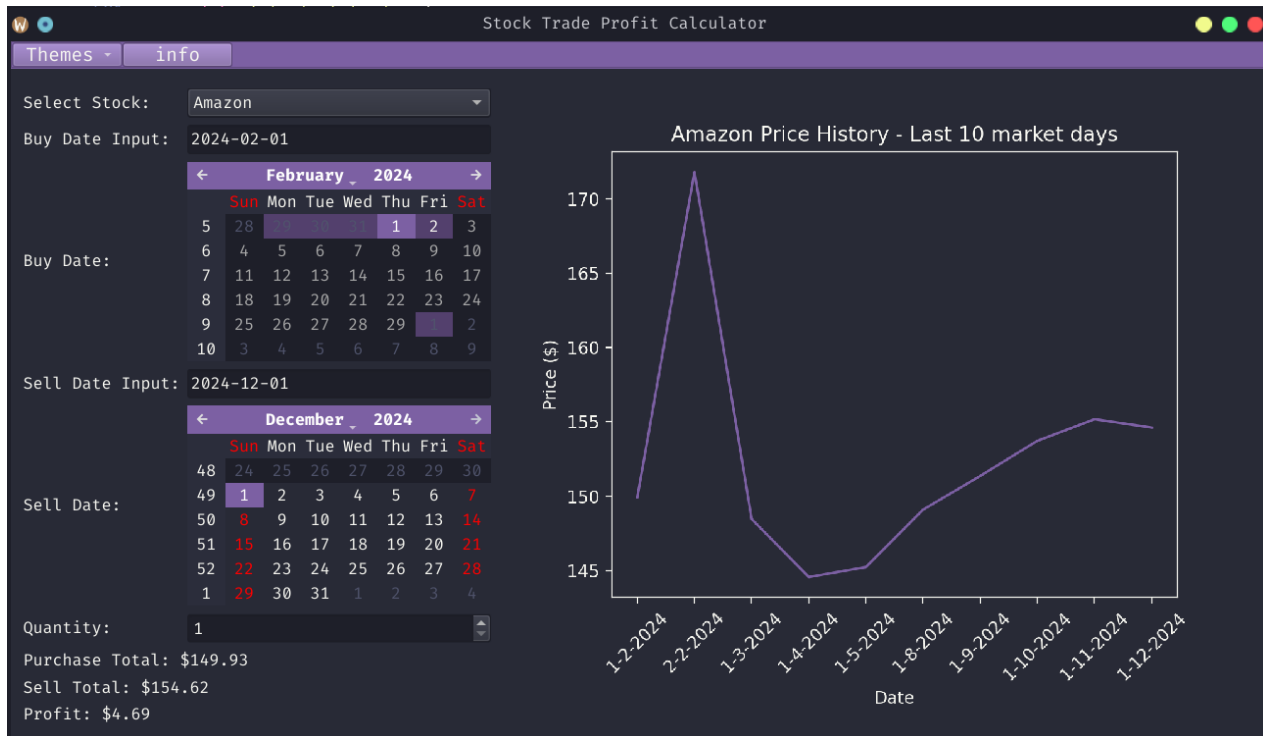# BSC – HGP- Assignment 01
CryptoCurrency Profit/Loss Calculator
UI Design Document

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1) First and global vision of the ui

So, we created a bar at the top of the window where we put two buttons, one to change themes and the other to obtain information on elements in the Ui. They are on the top left as it is the most common place for buttons like that.

Then we created a combo box to choose from the stock we have the data on the top as it's the first thing you would do when you want to compute profit on stock exchange.

Under it we placed a text input for the buy/purchase date of the stock which by default is the ten stock price before the default sell date which is by default the most recent stocks value that we have.

Next, we have the buy date calendar where you can choose the date by clicking on a day. Then under we have the same repetition for the sell date. We put Buy date before sell date as it's more intuitive to start by the date the more far and then do the most recent one.

Under we put the possibility to choose the quantity of stocks exchanged. We put it under the calendars as it's more natural to choose the quantity after the dates.

Then under we showed the result of the calculus in order of the inputs, so first the total purchase and the total sell then the profit or loss.

On the left of all of this we put the Stock Price History between the buy and sell date.

Also, the top bar is sticked to the window border as it's a commodity and the main body (the calculator and graph) is separated by blank space to have a better visual.

2) The themes
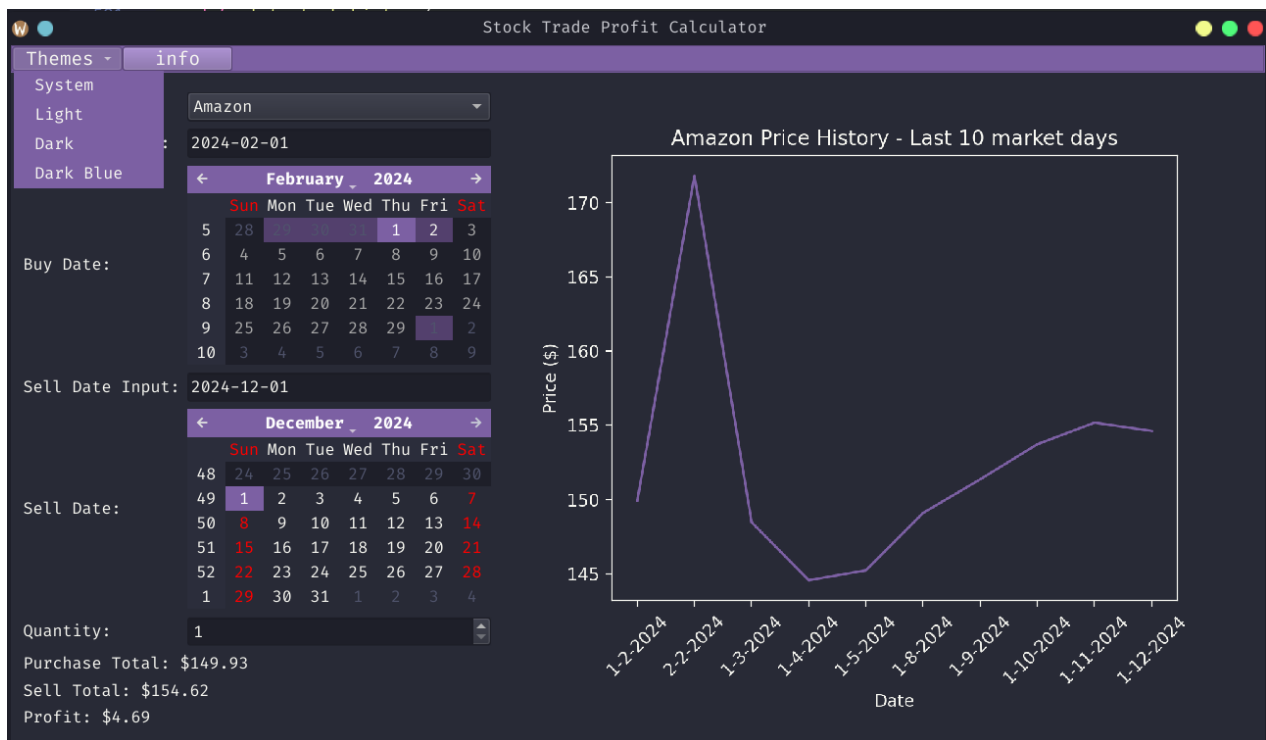
By clicking on themes a menu, the same color of the top bar for better visual distinction appear which will permit you to choose a theme between the system theme as on the overall screens. A light and dark theme as they are the most common, so most people tend to use them. And a dark blue theme which is inspired from dracula theme, a theme very used on linux.
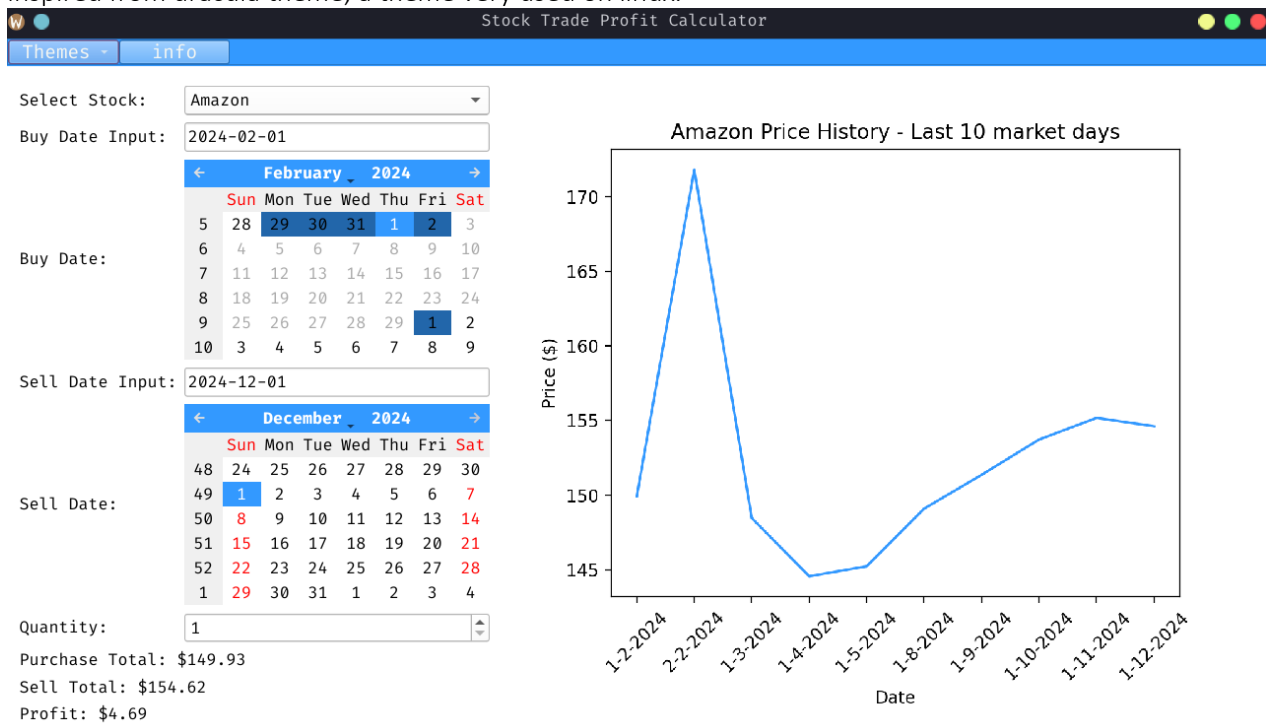
Whe choose blue as the contrasted color on light theme as it as a good combination with white.
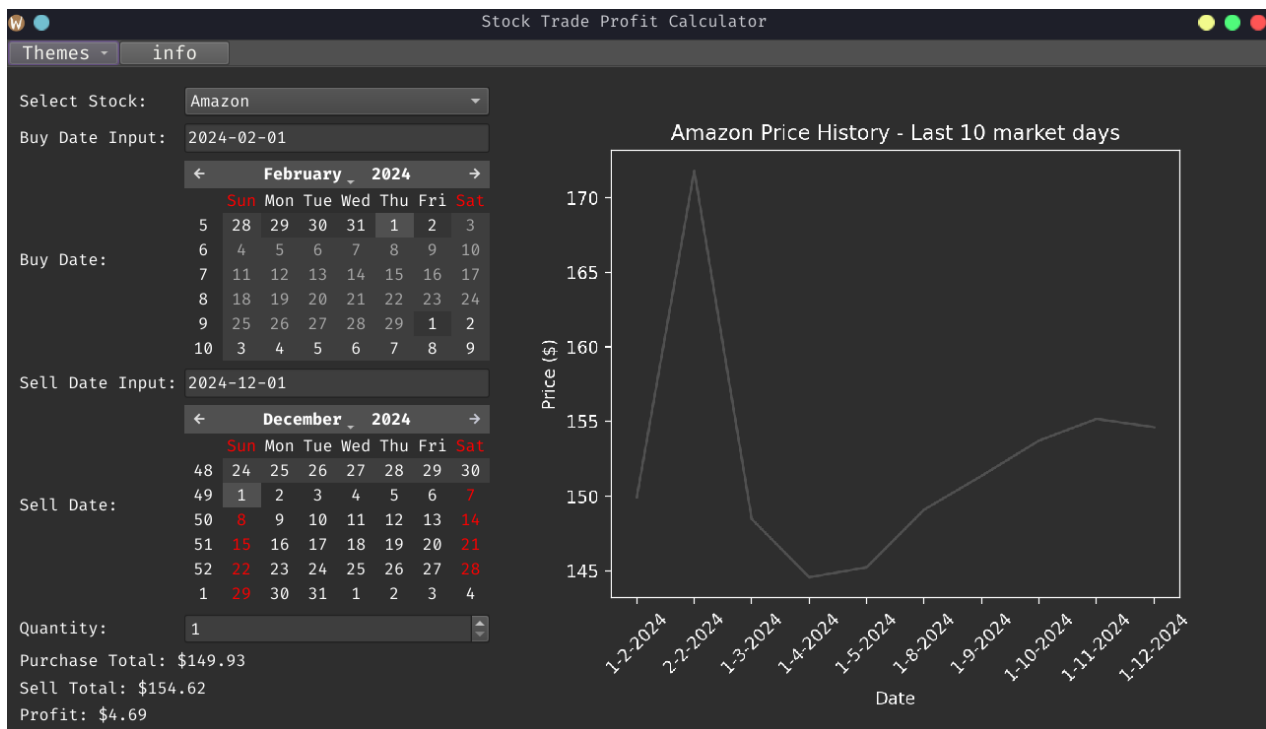
For the dark theme we choose grey to mark a difference but not create a big contrast which would not be appreciated.
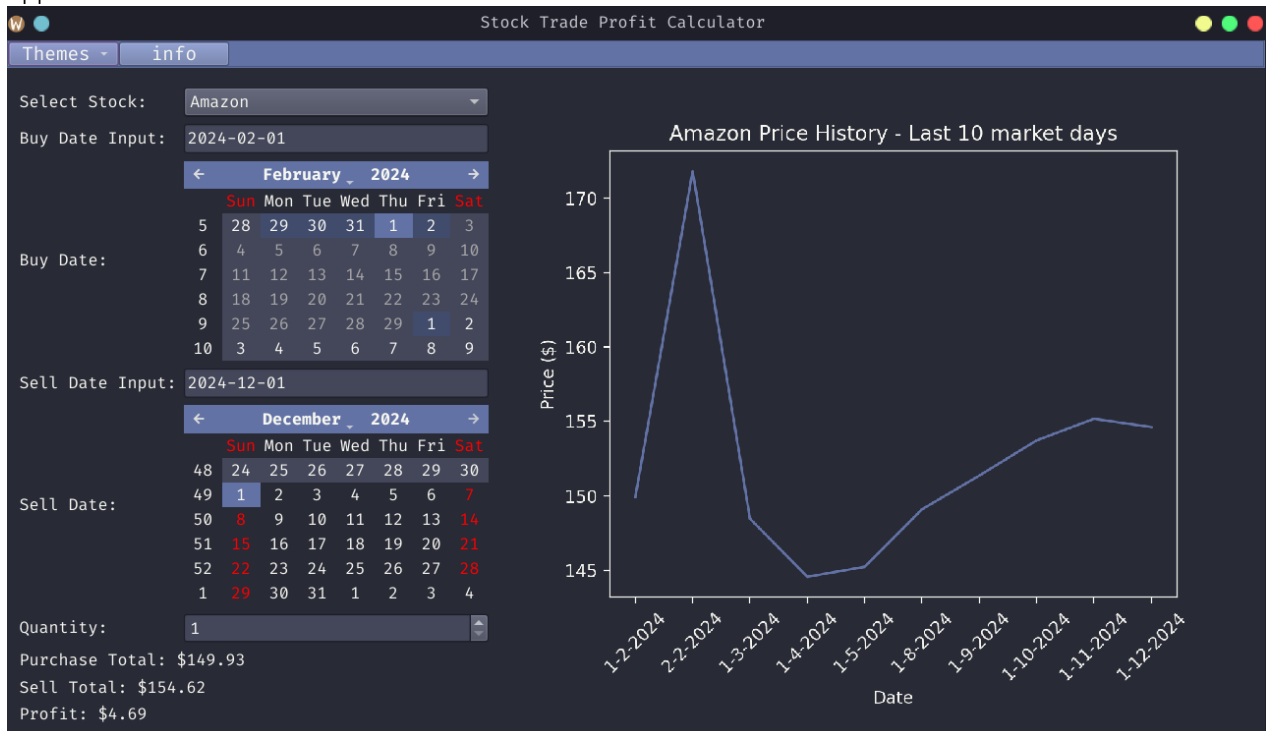
As for dark blue the color used to contrast and attract attention is a slightly lighter blue than the background.

3) Calendar effects.

Here we can see that the quantity can be changed by typing but the most important thing is that we can see that on the calendar for each theme the selected cases would be of a highlight color (here purple but blue for light) so it's more visible and we can see that the days we do not have data are in grey font and the day in a darker highlight color is the day were we have stocks data. We did this so it's more visual for the user and the color stay in the theme, so it does not attract to much attention nether distrub the user.

4) Info button
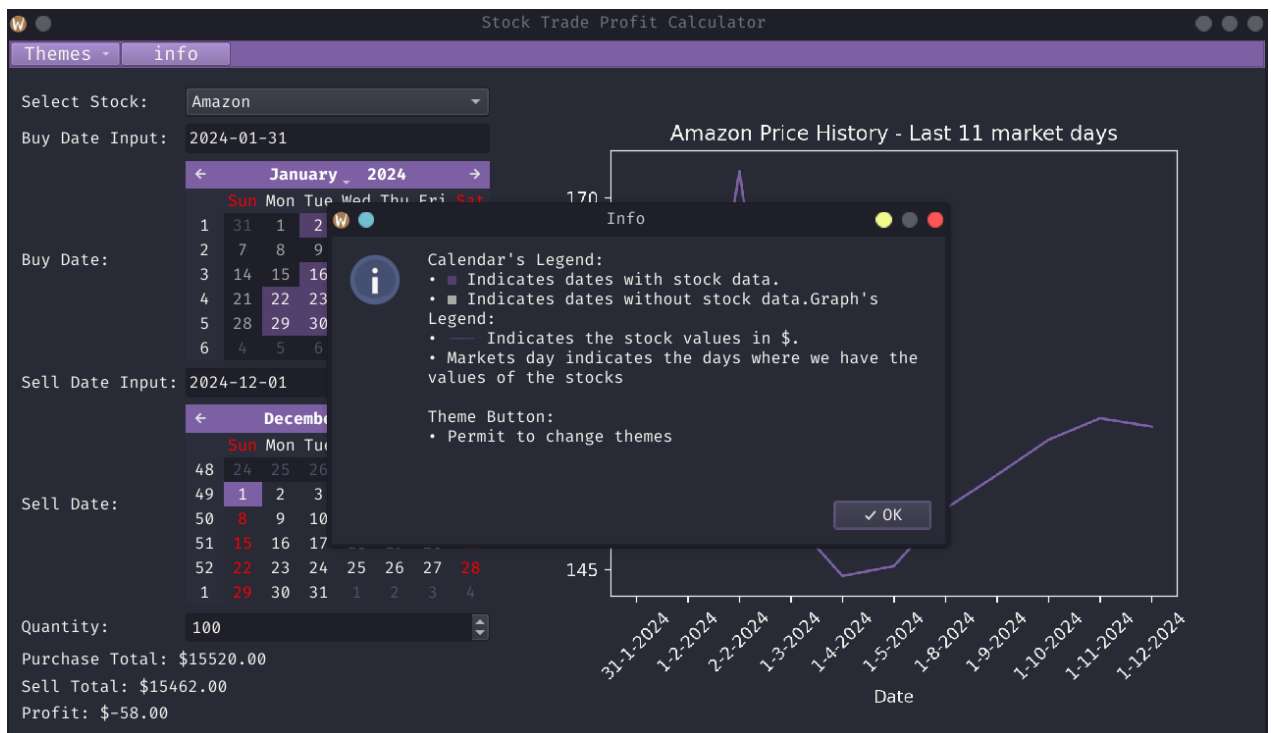
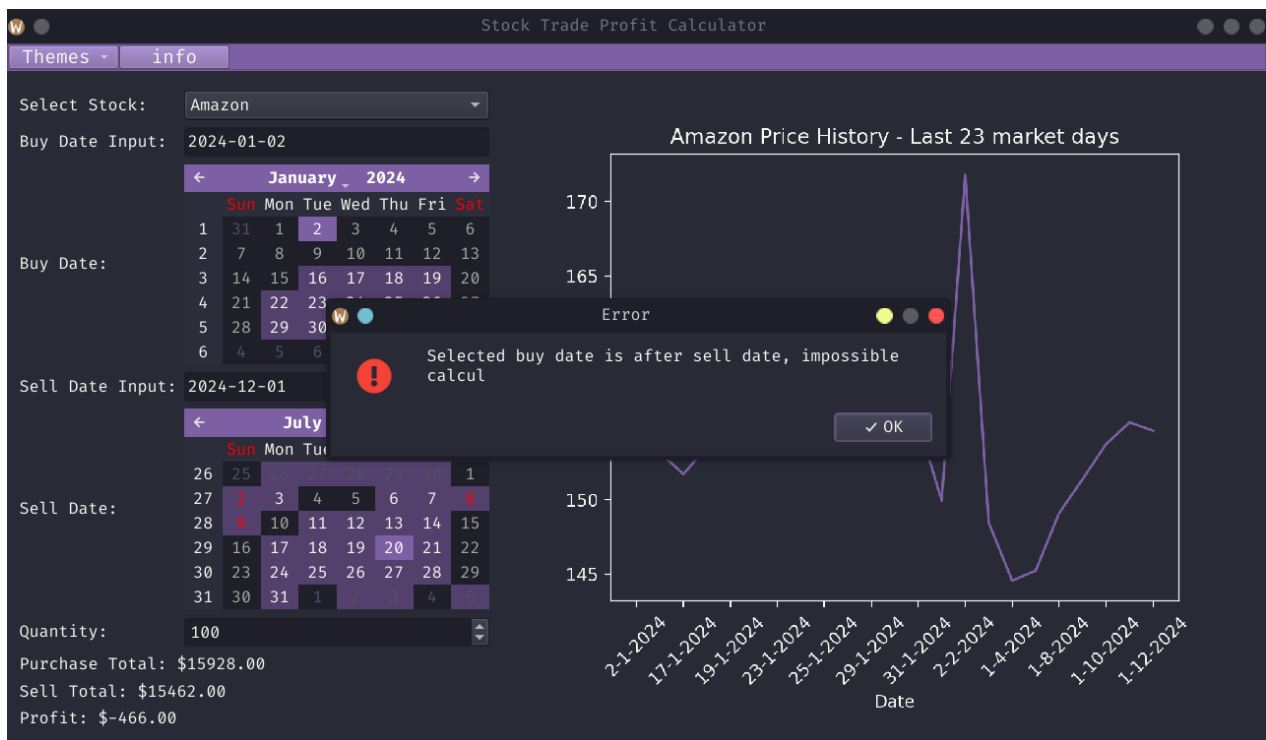The info button shows an info box where we set the title as info, the icon is commonly used info icon, and it shows info on the calendar highlights the graph's legend and the use of theme button. We did it into another window to not destruct the primary window layout.

5) Error in calculus
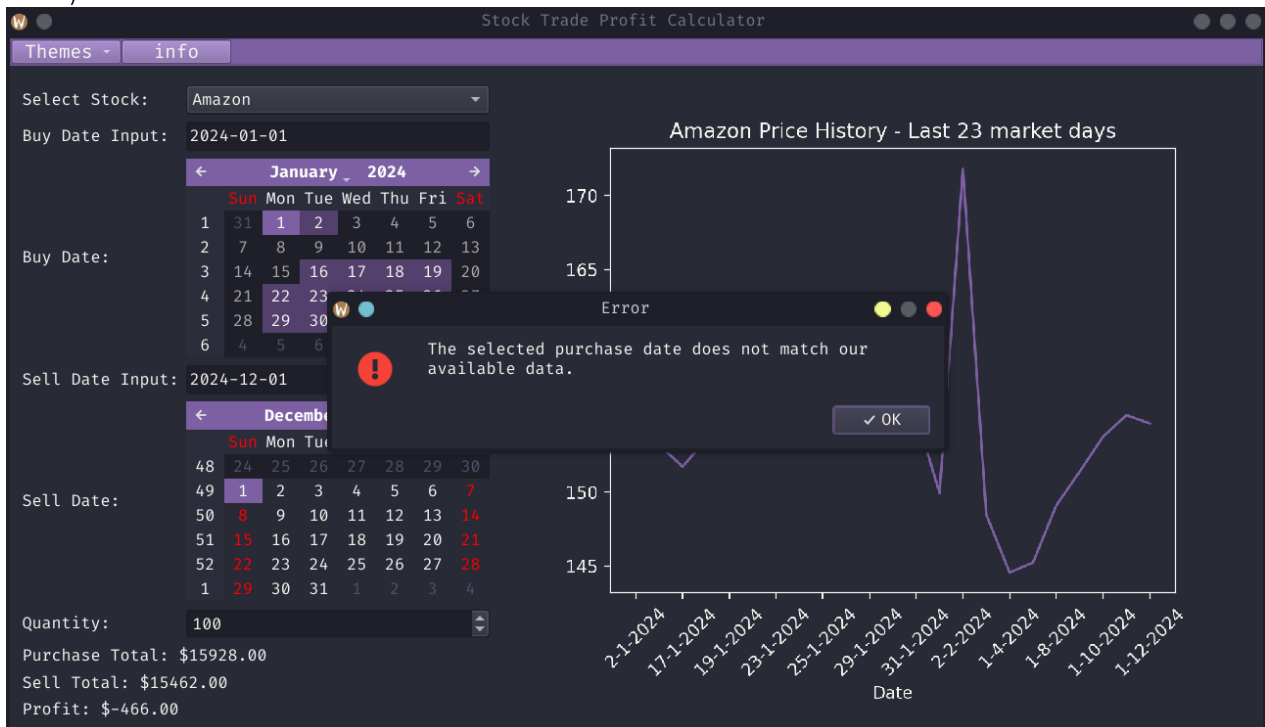
We added an error widget with a commonly used error icon to be more visual for the user in case of purchase date after sell date and no available stock data.
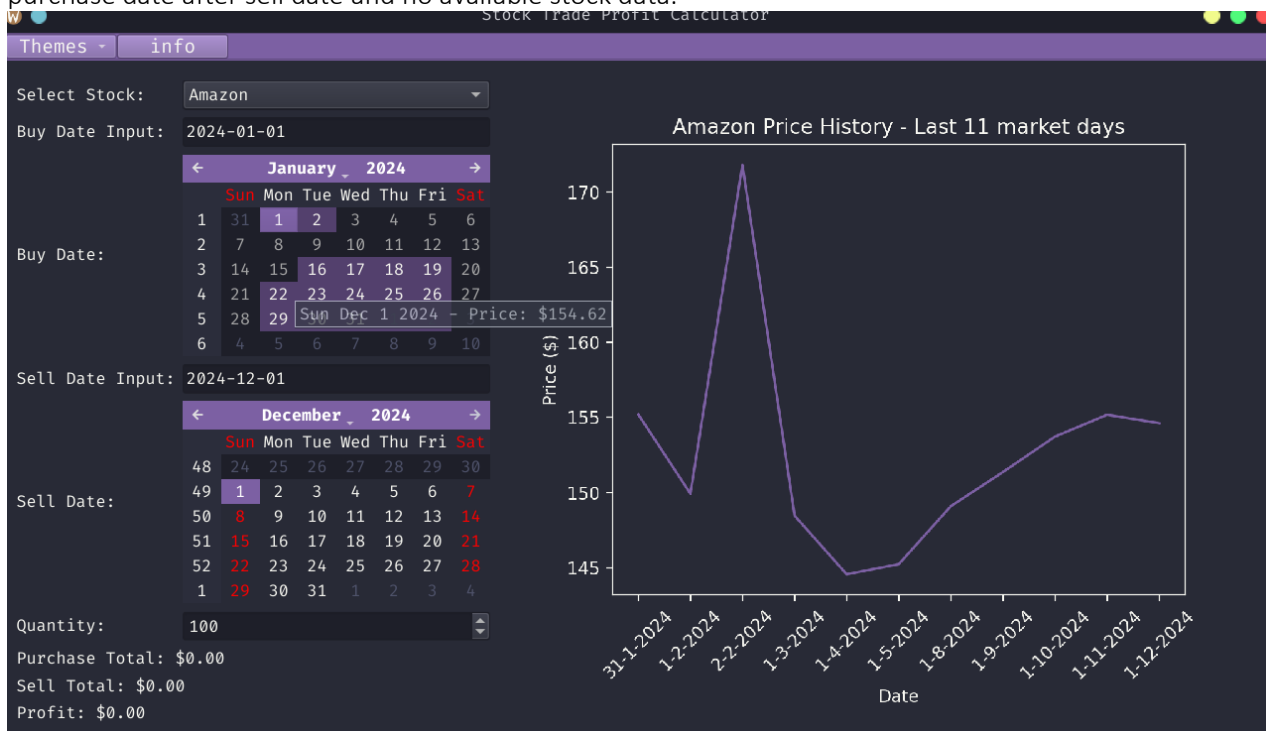
But in case of problem after clicking on okay in the box message you would be able to restart from where you were as for the date in case of a click error, only the last calculus operation would be rest to 0, the quantity not and the graph too.

Proof that the 1 of Jannuary 2024 is not in our data:

Themes ▾   info

Select Stock: Amazon ▾
Buy Date Input: 2024-01-02

| ← | January ▾ | 2024 | → |

Buy Date:

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	31	1	2	3	4	5	6
2	7	8	9	10	11	12	13
3	14	15	16	17	18	19	20
4	21	22	23	24	25	26	27
5	28	29	30	31	1	2	3
6	4	5	6	7	8	9	10

Sell Date Input: 2024-12-01

| ← | December ▾ | 2024 | → |

Sell Date:

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
48	24	25	26	27	28	29	30
49	1	2	3	4	5	6	7
50	8	9	10	11	12	13	14
51	15	16	17	18	19	20	21
52	22	23	24	25	26	27	28
1	29	30	31	1	2	3	4

Quantity: 100

Purchase Total: $15928.00
Sell Total: $15462.00
Profit: $-466.00

6) Sorted stocks

Themes ▾   inf

Select Stock:

Buy Date Input:

| Amazon |
| Apple |
| Berkshire |
| Bitcoin |
| Copper |
| Crude_oil |
| Ethereum |
| Gold |
| **Google** |
| Meta |
| Microsoft |
| Nasdaq_100 |
| Natural_Gas |
| Netflix |
| Nvidia |
| Platinum |
| S&P_500 |
| Silver |
| Tesla |

Buy Date:

Sell Date Input:

Sell Date:

Quantity: 100

Purchase Total: $0.00

Sell Total: $0.00

Profit: $0.00

The stocks are sorted for better practicity.