Job Objective (Phase One):

Smart data extraction form Trading View website, including webpage navigation, clicking/inputting/selecting values in specific fields. Followed by minor data cleansing, followed at placement in excel, ending with clicking on the macros embedded in the excels.

<u>Smart extraction</u> means that there is a small process before during and after the data is extracted from the Website.

- 1- <u>Before the extraction</u>, some modifications in the sittings of the technical indicators has to be selected, then proceed to extract. Each stock "tikker" has different settings in this webpage which has to be selected. All the variables are in one webpage but in different locations and values.
- 2- <u>During</u>: Once data is extracted. Has to be slightly processed to start with specific "opening" date, this is because the extract blindly capture all the visible range in the chart when the extraction request is made.
- 3- After: The built-in controls in the excel must be validated before the software logs a "successful placement"

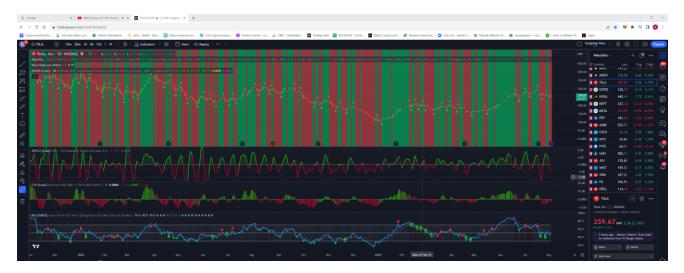
Each tikker in the watchlist has a specific excel file. This excel is what I call "Excel 2", which:

- 1- Contains the specific instructions for the extraction settings that has to be applied in the website before data is download.
- 2- Where the data will be placed.
- 3- Have a built-in macro to be clicked to run the analysis.
- 4- The result will appear post analysis which will have to be logged and reported to master excel file, called "Excel 1"

The Website:

https://www.tradingview.com/chart/

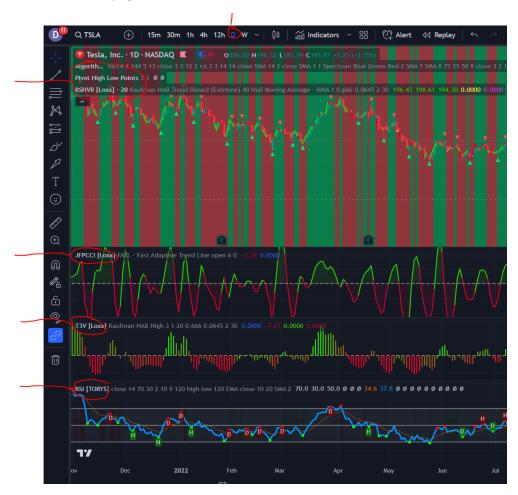
This is the page where most of the action is, the data extract simply capture the data in the chart and the technical indicators, after that "Excel 2" analyses this data. The indicators in this page belong to my account, I will give access to my account during building the software.



The watch list: in the righthand of the above page where the tikkers are found.



Below is The Technical indicators where the specific settings for each tikker has to be applied before the data in extracted. There is the Time Frame (top) and indicators (Left) each has number of variables inside. The software will specify what is the required Time Frame, and if the tikker requires certain settings to be applied/inputted inside the sitting of these indicators. Note, the position of these items is static in the webpage.

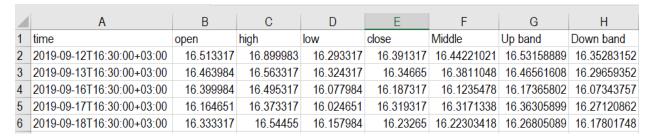


As for the Excels:

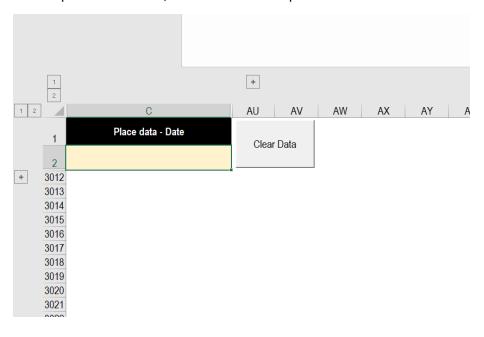
<u>Before the extraction</u>, "Excel 2" (one file for each tikker), will have the below specific information that the software has to apply on the webpage before the data is placed in the excel:

4	A B	С	D	E	F	G	Н
2	Tikker	TSLA	AMZN	NVDA	APPL	VANG	GOOG
3	Time Frame: DAYS	2	1	3	1	1	2
30	T3 Period	3	2	2	2	2	3
31	T3 Type	New	Orig	New	Orig	New	New
34	Midian	2 Days - HAB Trend Extrem	1 Day - HAB Trend Extreme	2 Days - HAB Trend Extreme	1 Day - HAB Trend Extreme	1 Days - HAB Trend Extreme	2 Days - HAB Trend Extreme

<u>During:</u> As you can see the data extract (example) shows a start date of 12-9-2019 this is because during the extract; this date was visible on the far left of the webpage. If I want to see earlier date, I need to zoom-out to capture in the webpage before I request the extract. In contrast, if wider date range was extracted, then lesser data will be scrapped form the excel file (for example if I need starting form 2020 and data starts from 2018).



<u>Data placement</u> once the data range is automatically processed, "Excel 2" has is a built-in macro button to clear previous old data, and new data to be placed.

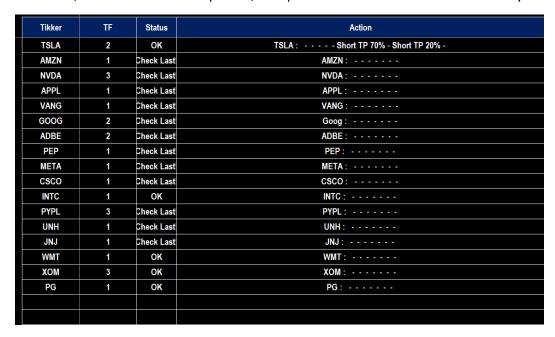


Then, the software must click "Update for live Trading" button which is a built-in macro analyses the data and log the results as hard-code in nearby sell. The software then click the "save" macro button.

The validation control shows "OK" in green as shown below. The software need to check this before moving on.



After that, "Excel 1" links to be updated, to capture all the results from all other analysis excels.



At this point, one data extraction is completed end to end, repeat for tikker 2 in the watchlist, and so forth for all tikkers in the watchlist.

That's it.

Key points to mention:

This is phase one of this project. This means that I need a decent software that have expandability capabilities. <u>now im only concerned about phase 1 for this job</u>. All phases will still use the core Website and two excels types mentioned with little to no change. It will be on top of all these.

Phase one: What was mentioned earlier.

Below phases is for your Information only, outside the scope of this job:

Phase two: "Excel 2" was and still a "Back Tester" of the data, currently I landed manually at best data extract settings, However, manual back testing has limitation due to time spent. So I need to untap its full potential, meaning that I need it to run hundred of back-test per tikker on the same date range and population number, each test will have one variable changed in the technical indicators, and results are logged, searching for highest score in the analysis. The software would need to run these tests back-to-back with no stop, and log all the results, sorting the top settings per tikker after all these tests have been completed. This will show the most optimal sittings.

Phase 3: Now the software will have a new kit: "Automated Deal Execution". The commands are not complicated as its saved for each tikker and to be applied if the deal entry conditions are met in the analyses from previous phases. Deal placement will take place in the same website since this website is linked through API to my trading broker. Each deal placed will have specific Unit amount, Take profit and Stop loss, and could be closed at market price pre-maturely if the new data extract of the following candles detected certain deviations. Certain validation will be checked, and final approval has to popup and clicked by me before any action is executed.