# Developing an Auto Trader

Daniel Lobenstein
James Pierce McCarty
Brendan Gross

# Project Introduction



- Trading Application with the ability to simulate trading manually or automatically based on user defined strategies
- Receives live data via Rest API and logs data using in a csv file
- Interactable GUI
  - View net worth, current profit, active trade profit
  - Manually open and close trade
  - Start and stop Auto Trading
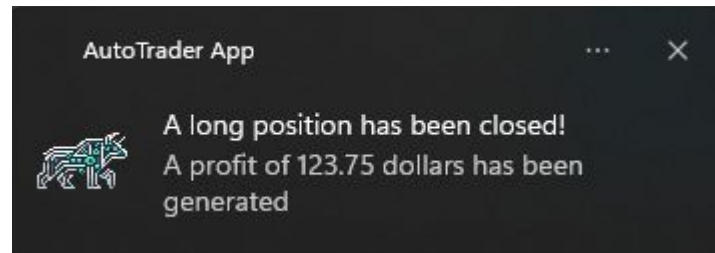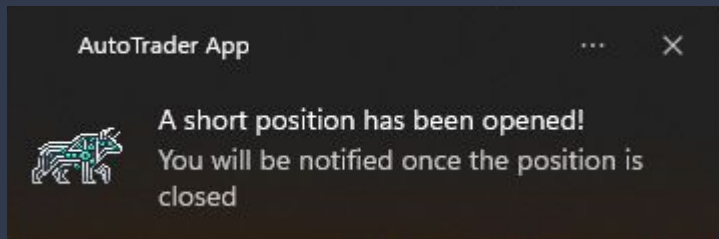  - Change leverage
  - and more

# Strategies

- Users are able to implement their own strategies to back test
- Requires Python programming knowledge
- Requires some programming knowledge to add new indicators
- Manuals have been created

```python
if short_sma > long_sma:
    self.last_higher = self.current_higher
    self.current_higher = "short"
elif short_sma < long_sma:
    self.last_higher = self.current_higher
    self.current_higher = "long"
```

# Notifications

- Notifies users when manual and automatic trades are opened
- done using windows notifications, including pop up and sound
- Gives user essential information about the outcome of the trade, once it has been closed

# Taapi.IO API

-Taapi is a free API for trading indicators and data

-Updates every 15 seconds and can be upgraded for shorter intervals

-Use 2 API keys to get live indicator data and live price data

ta
api
.io

**Launch Settings** — □ ✕

API Key 1: [ ]

API Key 2: [ ]

Launch App

# What has changed?

- No implementation of connection to broker
    - Hard to test without losing money
- Hard to find profitable strategies after fees
- No implementation of strategy creator
- GUI looks different than planned
    - Not as many options in tkinter
- Only implemented Crypto (no stocks/ETFs/etc.)
- Haven't implemented a way to test strategies on historical data

# Further Plans



- Finish up final documentation

- Implementing unit tests

- deploying the application (optional)

# Potential additions and features for the future



- Ability to scale size and capability of the auto trader with subscriptions within the API

- Ability to modify strategies within the application, without needed Python knowledge

- Build upon the current GUI with a different library or extension of tkinter

- Add the ability to view and purchase a variety of assets rather than a single one at one time

# Demo