School of Computing & Information Sciences
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FIU Engineering & Computing
School of Computing & Information Sciences

MetaTrader 5 GitHub Azure DevOps

Empowered Forex Traders Day Trading (EFDT)

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Problem

Currently traders have to closely monitor the market for profitable trades. An Expert advisor opens and closes positions automatically on the forex market based on trend analysis. The Gordon Strategy has been proven to be profitable, but it requires human interaction, and we know humans don't always make the best financial decisions.

Current System

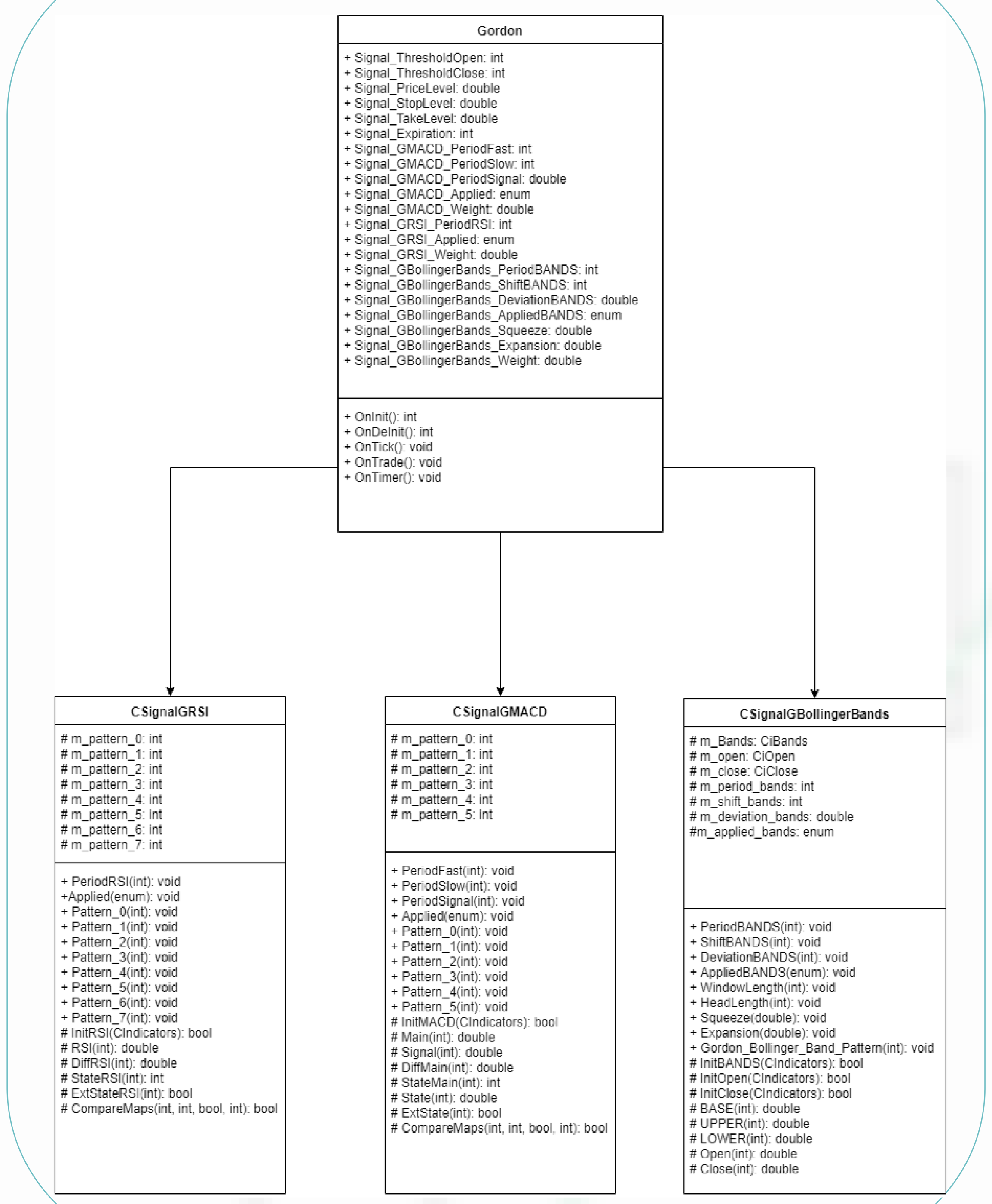
The previous version of the Expert advisor did not have support to open short positions and the implementation was not created using MQL standards resulting in hard to read code.

Requirements

Fully Implement the Gordon Strategy using an Expert advisor and make it profitable.

- Open and close positions when suitable and minimize loses.
- Rework Bollinger Bands

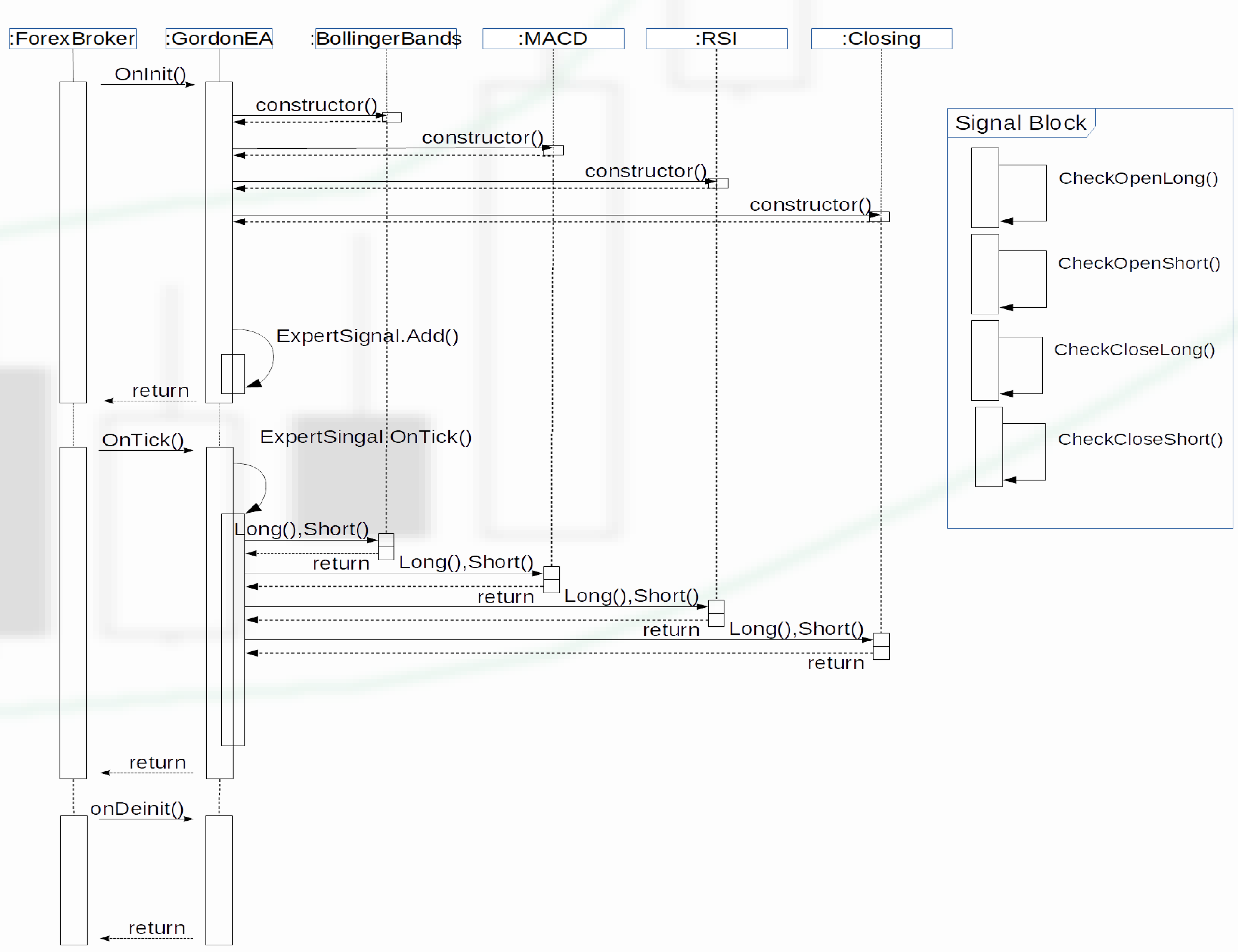
Object Design



Implementation

The Gordon Expert advisor is fully implemented in MQL5 using a modular architecture which allows developers to update and improve the Strategy without needing to change the rest of the system

System Design

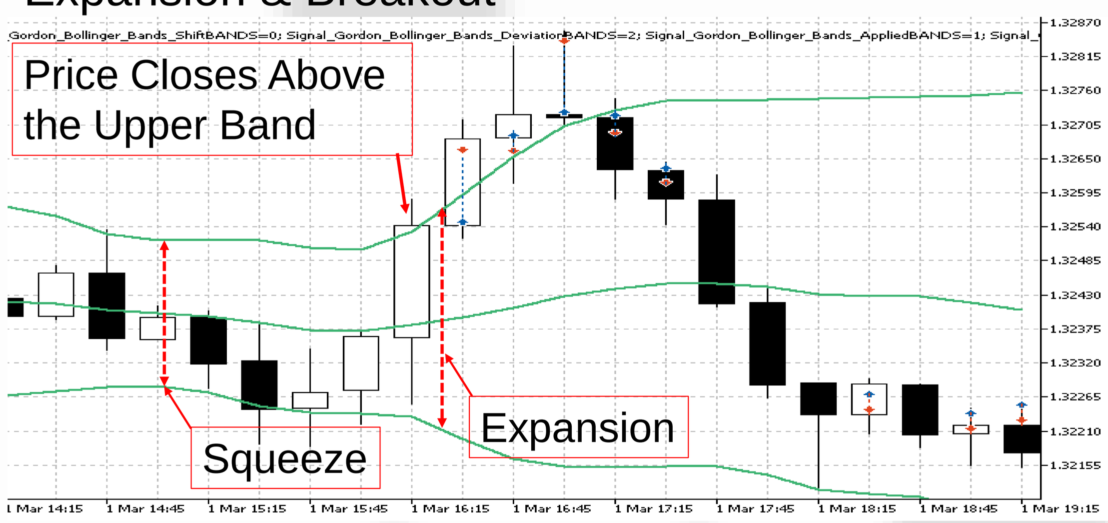


Verification

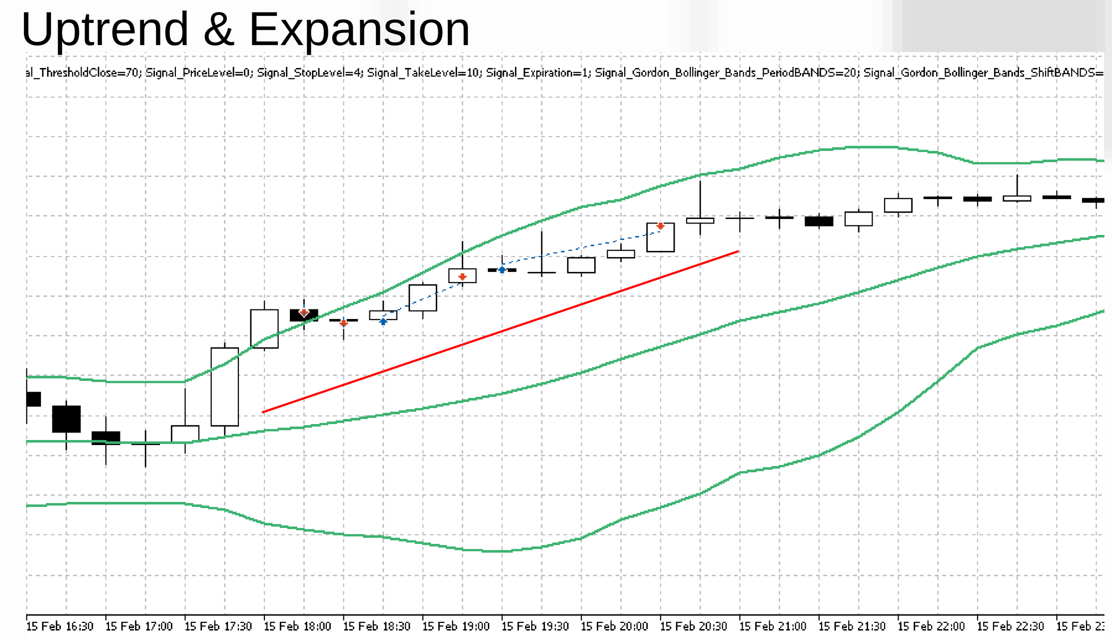
Manual testing was conducted through out the project using the built-in MetaTrader 5 Strategy Tester to test the performance in trading of the Gordon Strategy.

Screenshots

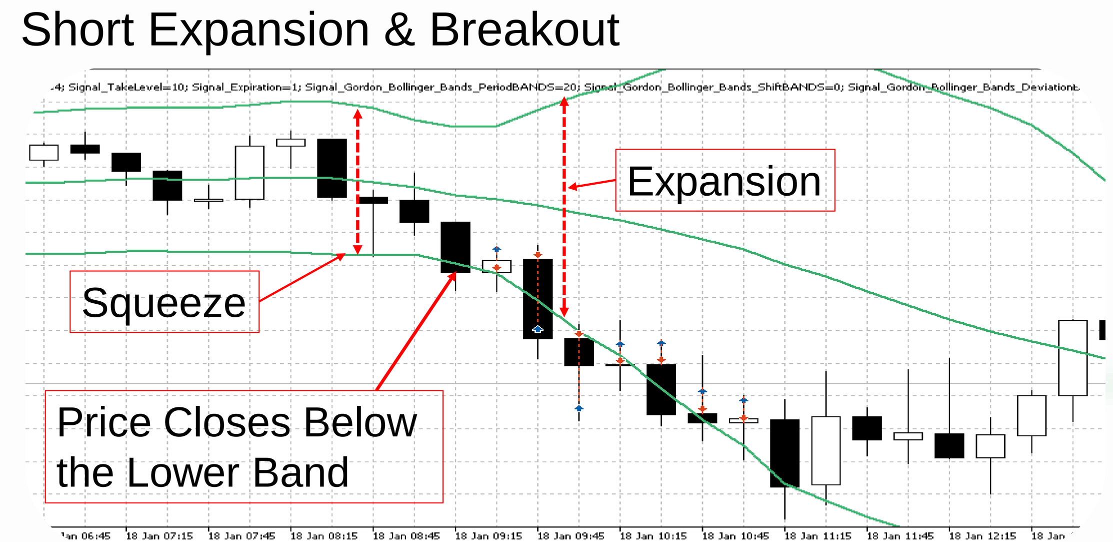
Expansion & Breakout



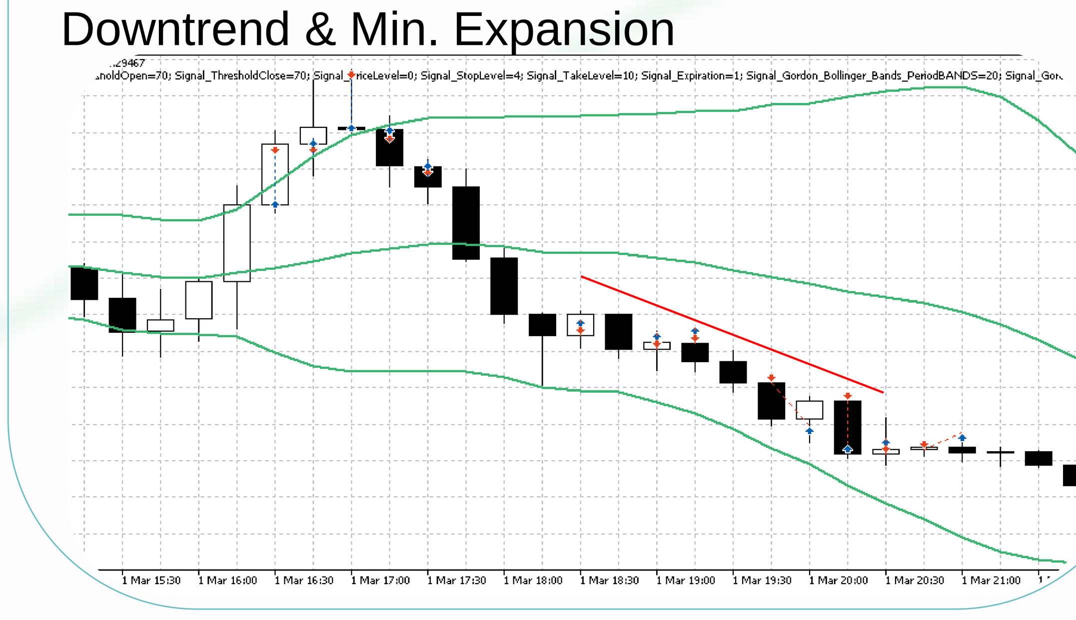
Uptrend & Expansion



Short Expansion & Breakout



Downtrend & Min. Expansion



Summary

- The expert advisor now opens short positions
- The squeeze algorithm has been improved to detect expansion faster thus increasing profit margins
- Quick direction change yields small loses.
- Trailing stop can increase profit and decrease lose ratio
- Code base has been simplified

Acknowledgement

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