Python-Based Strategy Development and Backtesting

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Trading Strategy

1. Check for Weekly Timeframe to determine directional bias.

    a. Use 30 SMA Indicator Setting

    b. If price is Above SMA - Buy

    c. If price is Below SMA - Sell

2. Move to Daily Timeframe, now we have triggers for both the scenarios

If Weekly is Buy

- Use the RSI Length 14 Indicator Setting
- Trigger: Buy if RSI < 55

Stop Loss

- Dynamic Stoploss, ATR length 14 Indicator Setting
- Trigger : If prices drops below [30 SMA-2*ATR]

Partial 50% Take Profit

- RSI length 14 Indicator Setting
- Trigger : On or above 75 RSI value

Full Take Profit

- Trigger: At 25% profit

If Weekly is Sell

- Use the RSI Length 14 Indicator Setting

- Trigger: Sell if RSI > 70

Stop Loss

- Dynamic Stoploss, ATR length 14 Indicator Setting

- Trigger : If prices surges above [30 SMA+2*ATR]

Partial 50% Take Profit

- RSI length 14 Indicator Setting

- Trigger : On or below 43 RSI value

Full Take Profit

- Trigger: At 25% profit

Strategy Performance – Multiple Trades at same time *[Performance Tracked using past 365 days data]*

Asset	Total Trades	Wins	Losses	Win / Loss	Maximum Drawdown
BTC:	160	39	121	0.32	-0.26
ETH:	42	18	24	0.75	-0.45
SOL:	177	85	92	0.92	-0.38
INJ:	15	7	8	0.88	-0.71
JUP:	19	7	12	0.58	-0.6
DOGE:	241	105	136	0.77	-0.57
BONK:	29	17	12	1.42	-0.63
POPCAT:	170	131	39	3.36	-0.85

Potential improvements

- Could impliment more than one entry trigger for more advanced system.
  - By doing so, we could impletement dynamic position size, increasing position size with more no. of triggers satisfied.
- Could use more advanced metrics to evaluate the performance of the algorithm.