EA strategy is to open buy/sell position when 2 MAs cross at opening of new bar. A 3rd MA should be used for filtering the buy/sell position but the filter MA should be a true/false option specified when launching the EA.
A buy/sell position should only be opened (or pending order) if the 3rd MA shows it's a uptrend for buy, and downtrend for sell, e.g. for a Buy, fast MA should cross slow MA from below at opening of new bar and the filter MA value should be less than the value of the fast MA at opening of new bar.

If there is no filter MA, positions and orders should be placed whenever the two MAs cross at opening of new bar. All parameters of all MAs should be user specified

EA should have an option for using pending orders specified before activating and all user input like TP, SL, slippage, Trailing stops, MA parameters etc. should be specified when the EA is opened

If Pending Orders is enabled, when 2 MAs cross, (**and depending whether 3rd MA filter is used or not**) buy signal is when fast MA crosses slow MA from below at opening of new bar and sell signal is when fast MA crosses slow MA from the top at opening of new bar:

1. At every **successful** buy signal, 1 **buy position** should be opened and 1 **pending buy order** should be placed at a break out level of x pips from the take profit, e.g. if TP=20 pips then buy order will be placed at 20 + x pips. (This is in case the uptrend continues for long without making correction to enable a second buy position)
2. At every **successful** sell signal, 1 **sell position** should be opened and 1 **pending sell order** should be placed at a break out level of x pips from the take profit (just like when buying)
3. If **pending order is disabled**, buy/sell position should be opened at respective signals
4. When a position is opened and pending order is enabled, pending order entry point/break out level should be temporary indicated by a line on the chart, and this line should be removed when the pending order is cancelled.

How pending orders and open positions will be **closed/cancelled**

1. A **pending buy order** should be cancelled when a sell signal has occurred and
   A **pending sell order** should be cancelled when a buy signal has occurred
2. If no Stop loss, Take profit or Trailing stop is indicated (set to zero),
   buy position should be closed when sell signal has occurred and a
   sell position should be closed when buy signal has occurred

Opening, closing and cancelling of all positions should be attempted in a maximum of 4 tries, if after 4 tries any of them failed, EA should report error description e.g.' failed to close buy position (or buy order) EUR/USD – (error description) ', the EA should show desktop notification for failed attempts only (not successful ones) and have an option of sending the error to an email and push notification.

When 2 MAs cross (at opening of new bar) several times giving multiple buy signal and sell signal and all opened positions have not yet met their conditions to be closed, each pair should have a **maximum of 3 open positions.**

Trailing stop should be optional, if option for using trailing stop is true, it will consist of the following:

Type 1, moves the stop loss without delay as price moves.
Type 2, waits for price to move the amount of the trail Stop before moving stop loss then moves like type 1

Type 3 uses up to 3 levels for trailing stop, when price reaches:

Level 1 pip gains, Move stop to 1st level

Level 2 pip gains, Move stop to 2nd level

Level 3 pip gains, Trail like type 1 by fixed amount other than 1

Example: Initial TRstop is 15 pips,
if price reaches level 1 pip gain (25 pips), move TRstop to 1st level (Initial 15 pips TRstop + 25 pips),
if price reaches level 2 pip gains (40 pips) move TRstop to 2nd level (level 1 TRstop +25 pips),
if price reaches level 3 pip gains (50 pips) move TRstop like Type 1 by a fixed amount (3 pips)

Lot size is defined by user or from money management (MM) when MM is activated.
If MM is activated, user should specify percentage of the CURRENT account BALANCE (not equity) willing to lose on a single trade, lot size should then be determined from percentage loss of 1 position and the given stop loss. The result lot size should be rounded to 2 decimal places if possible, like if lot size is 0.456, lot = 0.47, (if second decimal place is not possible, lot size should be simply 0.4)

The EA should stop trading and not open any position if the available margin decreases to a certain percentage level given by the user, the EA should then give/send a notification that the margin cut off has been reached.

The EA should have this option: **Use time limit true/false** (true for default). For each day it should start trading e.g. from 5:00 to 18:00 when true. On Fridays it should stop trading at 18:00 and close all orders and positions at 22:00. (Since time depends on the servers, just write in comments where to change this times to match the user's time zone). The EA should make an alert when it failed to close all orders on Fridays

The EA should have a magic number and it should only deal with positions made by it so that it leaves room for any other position done manually.

The EA should change parameters like TP, SL, and slippage to pips, everything from user should be in pips and it should work for any broker digits in pips

The EA should work on all standard time frames and it should work with the following currency pairs:
GBPUSD,
GBPJPY,
USDJPY,
USDCHF,
USDCAD,
EURUSD,
EURJPY,
EURGBP,
AUDUSD,
AUDCAD