**Requirements**

1. EA must have an interface shown on the chart. The interface should be able to do the following:
   1. define profit target. i.e 1:2, 1:3, etc
   2. allow user to key in stop loss and entry price. The target price will be shown calculated automatically based on the RR
   3. RR is calculated as :
      1. Entry Price + (Entry price - Stop Loss price)\*R Factor for buy order
      2. Entry Price - (Entry price - Stop Loss price)\*R Factor for sell order
      3. where R factor is generated as 1 to N. N is the factor that will be keyed in by the user.
      4. automatically calculated the lot size based on the capital and risk/reward ratio. If I have $2000 account, if I will to risk 1% of the capital, then the EA will tell me that based on 1% which is $20, then I am able to put in 0.03 lot based on my risk/reward ratio. Means I am risking $20 to get at $40 profit or $60 profit based on 1:2 or 1:3 input by the user. The programmer must take note that if the capital is too low, then the lowest it can go for lot size is 0.01.
   4. The interface must have two inputs that allow the user to do breakeven.
      1. breakeven - to key in break even profit. Break even profit must be in the value of price of the currency.
      2. breakevenWhen - when the price hit the target price, then the SL must shift to the price defined by the breakeven.
      3. The value for both inputs will need to be present. If it is absent, The EA will not take them in account.
   5. There should be two buttons:
      1. toggle EA - when toggle EA is pressed, there must be an indication that the EA is active. If the user wants to make some changes to the EA, then the user must toggle the EA to ensure that the EA is inactive, make some changes and then turn on the EA again.
      2. submit order - when the submit order is pressed, the EA is to execute a limit order based on the price.
      3. close order - when the close order is pressed, the EA will close the order for that pair that the EA is attached to.
2. Once the parameter is set, then the EA should do the following:
   1. when the price moves in the favour, if it move to the breakevenWhen, then the SL must move to the breakeven value.
   2. as the price keep moving in the favour, if the price hits the profit target, take partial profit and move the stop loss by a factor of RR. E.g If the price in GBPUSD move to 1:2 profit target, then the EA should move stop loss by 1 RR price target and do a partial close. If the price move by 1:3 RR, then the stop loss will be shifted to 1:2 RR profit target.
   3. the remaining price that is locked in profit, the EA will do the following:
      1. Every price move in favour of RR, the SL will move by 1 RR. i.e if the price move by 1:2, SL will move to 1:1. if price move by 1:3, SL is 1:2.
   4. Take note if the user has low capital such that the user can only put 0.01 lot, the default behavior is to close all the trade once the TP is reached.
3. Visualization
   1. when the parameter is set in point (1), the EA should display the following lines:
      1. target profit
      2. entry price
      3. stop loss price
   2. when the EA is in operation defined in (2), the EA will also need to show a new line every time the price move in favour. for example, if the price move in favour, the new line should denote SL 1, SL 2, SL N for stop loss. For profit, then it will display as TP 1, TP 2, TP N for take profit. SL 1 and TP 1 must be highlighted with the same colour for easy reference.
4. Alert
   1. The EA should generate an alert for the following scenario:
      1. when the price move to breakeven.
      2. when the price move to target profit
      3. then the price move to stop loss
      4. when the price keep moving in favour of RR as defined in 2b.
   2. The alert shall be the following:
      1. phone alert where MT4 is installed as an app in phone.
      2. alert it will show as a pop out windows in MT4 installed on desktop
5. parameter used in EA. I may miss out some but do highlight to me
   1. RRvalue - define the RR as 1:2, 1:3, etc
   2. StopLoss - define the stop loss
   3. EntryPrice - define the entry price
   4. breakEven - define the price in value as explained above
   5. breakEvenWhen - define the price in value as explained above
   6. partialProfit – allow the user to close partial profit. In percentage.
   7. SLcolour - the colour that user can choose
   8. EPColour - the colour that user can choose
   9. TPColour - the colour that user can choose
   10. SLTPpairColour - the colour that once the price move and the EA will draw a new line. this colour user can change
   11. EAstatus colour - the colour that will show the EA status: active or inactive.
6. Others
   1. the programmer must ensure that the EA can work on pepperstone broker and on mac/windows platform.
   2. at the end of the work, the programmer must send the source code over and ensure that the EA is completely tested and no bugs.
   3. There must be 3 month warranty period after the completion of the work to ensure that bugs are reported and resolved.
   4. The programmer must not share the source code or put in any online platform.