# Requirements

We use the below code (at the end) for generating Android notifications. We want to convert this Notification EA to a Trading EA ie instead of sending Android notifications we want the EA to do automated trading. We have the below requirements

1. The EA should be coded using MQL4
2. The EA should be **timeframe independent** and should run on any timeframe (1 min, 5min 15min etc)
3. **EA should run once per candle at the candle start**
4. **EA should be able to run on Metatrader4 terminal ie compatible with Metatrader 4**
5. EA/Script Should be **able to be migrated to virtual server** and run there
6. The EA should use default **MQL4 stochastic indicator to initiate trades** (**iStochastic**)
7. The **below parameters should be defined by the user and they can change the value of any of these parameters at any time**
   - **K period, D period and slowing period** for the default MT4 stochastic indicator (**iStochastic**)
   - The **starttime**: when the EA should start trading everyday.
   - The **endtime**: when the EA should liquidate any open position
   - The **lot size: the size of the order to be placed by the EA everytime. This should range from 0.01 to any possible higher number.**
   - The **take profit pips**: number of pips the EA should keep as a target for any trade opened by it. For buy orders it should be Orderprice+ take profit pips and for sell orders it will be Orderprice- take profit. If EUROUSD is at 1.08551 the on buy the take profit of 10 points will be 1.08651 and for sell order it will 1.8451

## Conditions for trade

Entering the trade:

1. When **the K line crosses over the D line the EA should place a buy order** at market pricefor the **specified lot size**.
2. When the **K line crosses under the D line the EA should place a sell order** at market price for the **specified lot size.**
3. **At any time, by the above condition there will be only one order possible**

## Exiting the trade:

The long or short trades should be closed for below conditions

1. **For buy order:** The K line crosses under the D line (at market price) or the take profit point whichever comes earlier
2. **For sell order**: The K line crosses over the D line (at market price) or the take profit point whichever comes earlier
3. **At the endtime the EA should close all trades and wait for the starttime to start trading again**.

**Payment Terms;** to consider the product to be delivered successfully for payment I will test the script on the below cases

1. Customise the EA settings and Run the script on MT4 windows terminal on 1, 5, 15,30, min, 1 hour charts

2. Check if the migration to my virtual server of the charts along with the EA/Indicator works fine.

3. Check if the scrip is running fine on the Virtual server and perform the same trades

I will test the script on EUROUSD,

**Code used for reference (the developer need not use the same code if they have better way to implement the above functions.**

```
#property version   "1.00"

#property strict

input int           MagicNumber  = 000;     //Magic Number

input int           k_period     = 14;      //Stochastic K Period

input int           d_period     = 3;       //Stochastic D Period

input int           slowing      = 3;       //Stochastic Slowing

input ENUM_MA_METHOD ma_method    = MODE_EMA; //Stochastic Moving Average Type

input int           price_field  = PRICE_CLOSE;       //Price field parameter. 0=Low/High or 1=Close/Close

input bool           SendNotification = TRUE;

double sto_main_curr,sto_sign_curr,sto_main_prev1,sto_sign_prev1,sto_main_prev2,sto_sign_prev2;

datetime TimeCurrent;

datetime LastActiontime;

//+------------------------------------------------------------------+

//| Expert initialization function                                   |
```

```
//+------------------------------------------------------------------+

void OnTick()

  {

if(LastActiontime!=Time[0]){

   sto_main_curr  = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_MAIN   ,0);

   sto_sign_curr  = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_SIGNAL ,0);

   sto_main_prev1 = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_MAIN   ,1);

   sto_sign_prev1 = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_SIGNAL ,1);

   sto_main_prev2 = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_MAIN   ,2);

   sto_sign_prev2 = iStochastic (Symbol() ,PERIOD_CURRENT ,k_period ,d_period ,slowing
,ma_method ,price_field ,MODE_SIGNAL ,2);



   {if ((sto_sign_prev2<sto_main_prev2) && (sto_sign_curr>sto_main_curr) &&
((TimeHour(TimeCurrent())>1) && ((TimeHour(TimeCurrent())<21))))



   SendNotification("EURUSD 5MIN BEARISH");

   }



   {if ((sto_sign_prev2>sto_main_prev2) && (sto_sign_curr<sto_main_curr) &&
((TimeHour(TimeCurrent())>1) && ((TimeHour(TimeCurrent())<21))))



   SendNotification("EURUSD 5MIN BULLISH");

    }

    LastActiontime=Time[0];

  }
```

```
}
```