FX1

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Real-time musical composition, an interpretation of FOREX data.

Using real-time values of most traded currency pair (EURUSD) at biggest and most liquid market (FOREX) to musicaly reflect the immediate character and changes of this currency pair and therefore the whole world which directly and indirectly infulece it. Capturing the emotions and reflecting them through basic musical means.

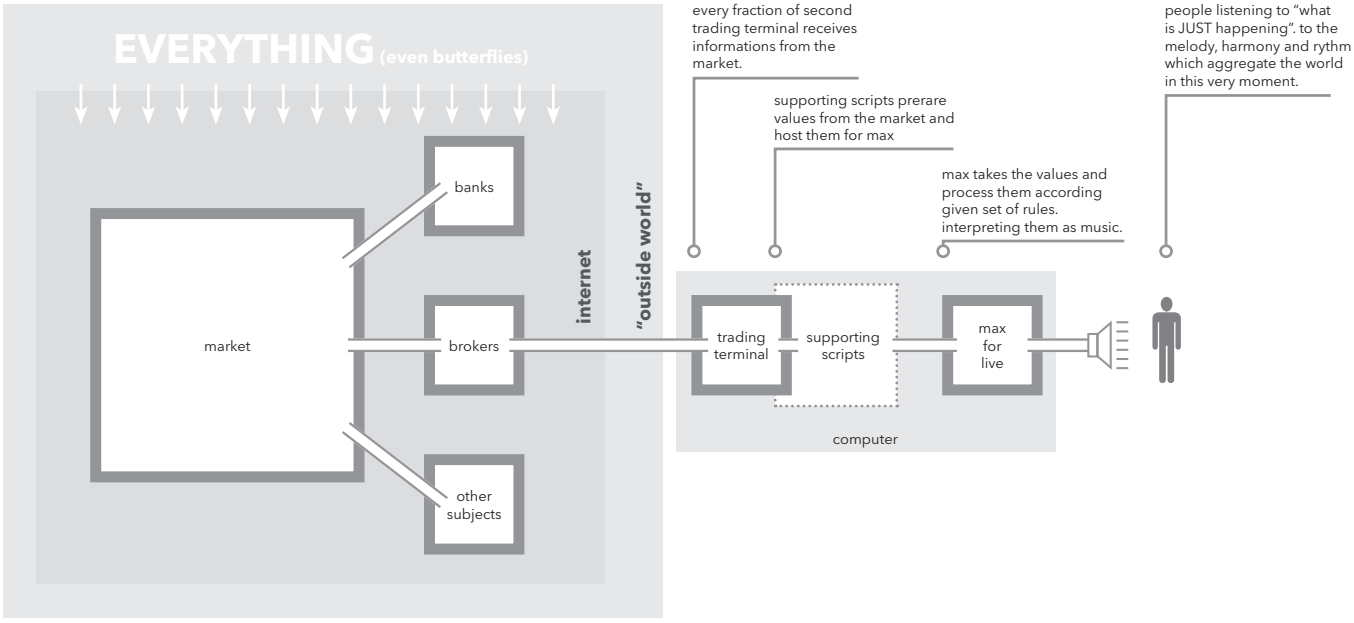
The concept

The relation between two major world currencies, the financial instrument EURUSD, aggregates, sums, reveals and quantifies moods and emotions of staggering amount of people. It mirrors peace, hopes, fears, false hopes, expectations, satisfaction, restlessness, rush (...) of people who directly deal with forex. Of course, these people are calm professionals, but if we look on the result (analyzed price moves) we see panic, hope, fear, ...what's happening now and what will happen next. They do behave the same way as anyone else, they do have their families and go on holidays do watch footbal and are particularly sensitive to world events and express this sensitivity almost immediately. If something in the world happen, it's almost immediately reflected in the progression of price of EURUSD. Technical indicators used to analyze the price moves show these emotions. 'Standard Deviation' for example reveals some kind of indeciveness present. Together with 'Williams' Percent Range' (saturation), 'Moving Avarage" (longer period progression/trending) and others it can give us nice image of world's emotions in the very moment. This project aims to capture and analyze these 'world emotions' and interpret them as music. Formal simplicity and sound legibility alows to "read" and "go through" or follow and feel current situation.

The composition

The composition itself is defined by a set of rules which are composing it and playing it *now*. The rules deal with traditional musical elements: melody, harmony, rhythm and dynamics, intentionaly leaving out everything else (sound alchemy) to make the conceptual layer more legible and clear as much as possible (a single software grand piano is used for final output). The basic elements which define the composition are: the price which determines the pitch, then is used one of the basic technical indicator, the Standard Deviation (volatility), to determine dynamics of the current tone, similarly to pitch: when volatility (we can say restlessness) rises the intensity of tone is nearing the maximum, when the market (i.e. the people that move it) is still and calm the expression becomes more subtle. Other indicators like Williams' Percent Range (overbought/oversold/balanced market, it's like false-hope-meter), Volumes (volumes of trades, activity in current period) etc. are used for harmonization and rhythm. All these algorithms are context aware which means they look behind and interpret the current values in context of what happenned in near past. This happens in cycles several times per minute/second according the activity of the market at the moment (of course, there's also strong temptation to 'playback' historical data of significant or seemingly insignificant historical events which is also possible and interesting. To playback 9/11, to playback 18 March 2011 when no-fly zone and air strikes in Libya were set up, Olympic Games, earthquake in Asia, Superbowl match ...).

The Schema



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