User-Defined Algorithm Electronic Trading

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 61/253,315, entitled "Trading Application with Futures Ranking and Order Tool, Price Level Indicator Tool, and Market Change Audio Indicator Tool", filed October 20, 2009; U.S. Provisional Application No. 61/253,324, entitled "System and Method for Building User-Defined Algorithms for Electronic Trading Exchange", filed October 20, 2009; U.S. Provisional Application No. 61/263,300, entitled "System and Method for Building User-Defined Algorithms for Electronic Trading Exchange", filed November 20, 2009; U.S. Provisional Application No. 61/312,003, entitled "System and Method for Launching Automated Trading Applications", filed March 9, 2010; U.S. Provisional Application No. 61/318,685, entitled "System and Method for Virtualizing User-Defined Algorithms for Electronic Trading Exchange", filed March 29, 2010; U.S. Provisional Application No. 61/320,061, entitled "System and Method for Automating Feedback-Based User-Defined Algorithms for Electronic Trading Exchange", filed April 1, 2010; U.S. Provisional Application No. 61/393,313, entitled "User-Defined Algorithm Electronic Trading", filed October 14, 2010; U.S. Non-Provisional Application No. 12/905,709, entitled "User-Defined Algorithm Electronic Trading", filed October 15, 2010; and U.S. Non-Provisional Application No. 12/905,726, entitled "Virtualizing for User-Defined Algorithm Electronic Trading", filed October 15, 2010. Each of these applications is herein incorporated by reference in its entirety.

SUMMARY

[0009] The embodiments described herein include, but are not limited to, various devices, systems, methods, and computer program products.

[0009a] According to a first aspect of the present invention, there is provided an apparatus including: a client device, wherein the client device is adapted to display a design canvas area, wherein the design canvas area includes a plurality of placed blocks arranged by a user to specify a definition for a trading algorithm; wherein the client device is adapted to determine a first live feedback value for a first placed block of the plurality of placed blocks, wherein the first live feedback value is determined based on market data and the definition; and wherein the client device is adapted to display the determined first live feedback value.

[0009b] According to a second aspect of the present invention, there is provided an method including: displaying, by a client device, a design canvas area, wherein the design canvas area includes a plurality of placed blocks arranged by a user to specify a definition for a trading algorithm; determining, by the client device, a first live feedback value for a first placed block of the plurality of placed blocks, wherein the first live feedback value is determined based on market data and the definition; and displaying, by the client device, the determined first live feedback value.

[0009c] According to a third aspect of the present invention, there is provided a computer readable medium having stored therein instructions executable by a processor, wherein the instructions are executable to: displaying a design canvas area, wherein the design canvas area includes a plurality of placed blocks arranged by a user to specify a definition for a trading algorithm; determine a first live feedback value for a first placed block of the plurality of placed blocks, wherein the first live feedback value is determined based on market data and the definition; and display the determined first live feedback value.

[0010] Certain embodiments provide building block buttons and an algorithm area to define an algorithm. Certain embodiments may allow for adjusting both the parameters and the logic of an algorithm rapidly, even during a single trading session. Certain embodiments provide live evaluation of an expression as the algorithm is being defined. Certain embodiments can reduce the risks of traditionally programmed algorithms such as syntax

errors, unclear logic, and the need for a non-trader programmer to develop the algorithm as specified by a trader by reducing or eliminating the writing of programming code by a user. Certain embodiments provide a single application for building, debugging, and simulating (with real market data) an algorithm all at the same time. In addition, the single application may also provide for initiating the placement of orders using the algorithm.

[0011] Certain embodiments provide a design canvas area and blocks for designing an algorithm. Certain embodiments provide blocks with complex functionality for use in an algorithm. Certain embodiments provide for grouping blocks placed in the design canvas area. Certain embodiments provide for virtualized group blocks enabling dynamic instantiation of portions of an algorithm to handle particular discrete events. Certain embodiments may allow for adjusting both the parameters and the logic of an algorithm rapidly, even during a single trading session. Certain embodiments provide live feedback for blocks as the algorithm is being designed. Certain embodiments provide safety features to reduce potential errors when an algorithm is designed. Certain embodiments provide for operation of some or all portions of an algorithm when a connection between a client device and an algorithm server is broken. Certain embodiments can reduce the risks of traditionally programmed algorithms such as syntax errors, unclear logic, and the need for a non-trader programmer to develop the algorithm as specified by a trader by reducing or eliminating the writing of programming code by a user. Certain embodiments provide a single application for building, debugging, and simulating (with real market data) an algorithm all at the same time. In addition, the single application may also provide for initiating the placement of orders using the algorithm.