Abstract

CryptHub is a platform that allows for the playing of a standard virtual cryptocurrency trading game. This trading game is defined by a period over which the game is played, and a starting amount of capital for each of the players. Other features can also be defined such as what kind of trades are allowed, trade commission value, etc. Over the course of the game, players compete by virtually trading cryptocurrencies based on their realtime prices. The goal is to achieve the highest net worth by the end of the game. CryptHub allows for users to play instances of this game with other users across the application in a dynamic and competitive environment. Additionally, the application augments the experience of a standard trading game by including the capability for users to write trading bots that will do their trades for them within a game. Users can test what they have written before sending it into play, and the running of the trading bots is handled completely by the backend system. This system uses a docker instance to ensure separate and contained environments with built-in timeout functionality for potentially dangerous user-written trading bots. With the addition of this unique feature, the project puts a higher emphasis on competition surrounding the creation of an intelligent trading bot within an erratic real-world simulated economic market.