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EE 551 Final Project

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I pledge my honor that I have abided by the Stevens Honor System.

<u>cryptoPrice</u>

I have built a cryptocurrency price history checking webapp. This app runs on the Dash framework that is build upon the Flask framework. In browser, the user can cycle through interactive graphs of any of the digital assets available on the Binance trading market. The user can also select a date resolution (otherwise known as candle size) anywhere from one minute to one year.

The dataset is pulled from the Binance price history API and populated in an sqlite3 database. A script can be run (scrape.py) that continuously and asynchronously updates the database based on what price data is missing from it.

The frontend operates on port 8050 of the localhost. To run the webapp, dashboard.py must be run. An HTML layout is setup in this script that includes an interactive graph and menus for selecting trading pairs and candle size. The data for these graphs comes from the database interface module, database.py, which includes several functions for querying data in the sqlite3 database.

This project lays the groundwork for future use cases including but not limited to a modular trading dashboard with technical analysis, an automatic algorithmic trading bot, or a portfolio tracking platform. The data scraping module itself could be used for a wide variety of future projects.