

Crypto Alarm

Elevator Pitch

Concept

Description

Crypto Alarm is a web application that displays current cryptocurrency values in relation to the top three crypto exchange currencies when entered as a pair. It features an adjustable price percent change value that triggers animal sounds and an animated gif to display either a bull or a bear in response to a rise or drop in price, respectively. Values are fetched from the Binance exchange platform, and an interactive search history is stored locally and displayed in a clickable menu.

Motivation for development?

Cryptocurrency is a frontier technology that provides fertile ground for a myriad of applications. Our team saw it as an ideal topic for integrating multiple APIs in a fun, humorous light targeted toward crypto's large population of young investors and enthusiasts.

User story

AS a cryptocurrency investor/enthusiast

WHEN I select a cryptocurrency coin pair, set a percentage change trigger value and click "submit"

THEN the live, current value of the base coin in relation to its paired coin is displayed, the submit time is marked, the percentage change in price is tracked live and will trigger a sound effect and a visual alarm in the form of an animated gif that represents "bearish" or "bullish" price movement when the trigger value is reached.

Process

Technologies used:

- HTML
- CSS
- JavaScript
- jQuery
- Materialize API
- Binance API
- CoinCap API
- Giphy API
- Moment.js

Breakdown of tasks and roles

Jeff Johnston: Wrote bulk of the HTML wireframing and JavaScript functions that fetch, coordinate, and display incoming data. Provided baseline code for interactive search history and coin icon displays. Set issues in GitHub and delegated tasks to team members. Directed overall UI appearance using established graphic design principles regarding *contrast*, *repetition*, *alignment*, and *proximity*. Created breakpoints for mobile-responsiveness. Resolved team blockers and merge conflicts. Added sound effects and mute button. Co-designed logo. Created class presentation slides.

Beyazid Yunus: Wrote initial JavaScript code for displaying animated gifs. Replaced standard alerts with modals. Created color-coded indicators of price movement direction. Played a key role in solving visual sizing, responsiveness, and alignment blockers. Contributed extensively to style implementation.

Preston Pham: Researched and selected the Materialize API for styling and played a pivotal role integrating its function along with standard CSS. Assigned multiple style classes to achieve UI appearance goals. Created animated gradient background and co-designed logo.

Challenges

The most significant challenge faced by Team Hulk was time management. Each member had significant obligations outside of the project that often conflicted with the schedules of other members. This made it difficult at times to coordinate development sessions, either through simultaneous collaboration or via expedient communication.

Each team member has their individual strengths and weaknesses regarding familiarity and confidence using various technologies; e.g., one member was less comfortable using JavaScript. With the program being heavily dependent on JavaScript (coupled with the previously mentioned time constraints), this made it challenging at times to delegate tasks appropriately without depriving any members of valuable learning experiences through practice.

Successes

Despite the aforementioned issues, Team Hulk collectively rose to the occasion and managed to accomplish all of the baseline project goals for attaining a *minimum viable product*, and even found time to add a few elements of panache toward the end, such as sound effects, a more salient logo and color-coded price changes.

Ultimately, the product functions reliably and showcases a visually alluring UI. Combined with mobile-response settings that enable a fluid interface at multiple screen sizes, these successes account for our group's pride in our collective accomplishments.

Demo

Directions for Future Development

- Allow multiple coins to be tracked simultaneously.
- Install a drop menu for the coin abbreviation input that displays full names of the top 10 cryptocurrencies, while still allowing manual input.
- Display additional data charts such as candlestick graphs and market cap, and invite advertisers to fill unused space.

Links

- Deployed: <https://team-7-hulk-smash.github.io/Crypto-Alarm/>
- GitHub repo: <https://github.com/Team-7-Hulk-Smash/Crypto-Alarm>