

Sprint-6 Artifact

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Feature: (incremental analytics)

- When computing the average over the initial data set, incremental design will incorporate latest updates by ranking through either price, market cap, or volume.
- After a create or delete operation, update the stored data and adjust the calculations accordingly, whether it's price, market cap or volume.

User test case: (for measuring the performance of incremental analytics)

- **Feature 1 Test Cases:** As a user, I need to compute the updated data set for average of prices, market cap, or volume.
 - **Test case 1:** As a user, I update the data set when adding a new data with a given name, data, price, growth rate, volume.
Correct Output: The website will update the back-end data CVS.
 - **Test case 2:** As a user, I search for a crypto name while selecting a given week/month/year and find the average.
Correct Output: The website sends a search request to the backend for the given week/month/year that was entered for a certain crypto. Then calculate the selected average and display it.
 - **Test case 3:** As a user, I click on a given option for finding the average trading rates of an already selected crypto name and week/month/year.
Correct Output: The website will display an option button to display the average trading rates of a crypto during a given week/month/year in text, and display graphs or charts even with updated data sets.
- **Feature 2 Test Cases:** As a user, I need to be able to adjust the average price, market cap or volume when inserting or deleting data.
 - **Test case 1:** As a user, in the crypto data page, I click insert which will allow me to apply the prices of a certain time into the data.
Correct Output: The website will insert this data and calculate a new average price including the new data.
 - **Test case 2:** As a user, when I can click on the delete option to remove a value from the dataset.
Correct Output: The website should delete the value and adjust the serial

numbers of the remaining values accordingly and adjust the average prices, marketcaps and volume.

- **Test case 3:** As a user, I can click on the insert button to a new coin with current prices, volume, and market cap.

Correct Output: The insert of new data will adjust the current average volume, price, market cap and serial numbers accordingly.

Taskboard:

Done list of last sprint:

- Front End work: Daniel, Giovanni, Alexander and Ryan
- Back End work: Daniel, Amirreza,
- Add graphs/charts to the analytics for the features.
- Ensure correctness of each feature analytic implementation, such as the average trading rates of a crypto during a given week/month/year, the ratio of volume to a market cap of a crypto coin from a given month and the most popular crypto trading for a given day of the week/month/year.
- Front end, develop the necessary drop down menus / buttons for the new information.
- Re-organize the Front-end styles/format and add a page switch.

ToDo task list for the next sprint:

- how to support incremental analytics?
- breakdown the goals into the actionable tasks
- define task completeness criteria (test cases if needed)