Final Project Design Document

Group Bulldogs - Sprint 3

Andrew Brain, Ryan Christropher, James Collier, Chase Morgan, William Ohms

API Endpoint

http://23.20.185.39:5000/api/unstable

GitHub Repositories

https://github.com/TechnicFyre/augur-bulldogs https://github.com/TechnicFyre/augur view-bulldogs

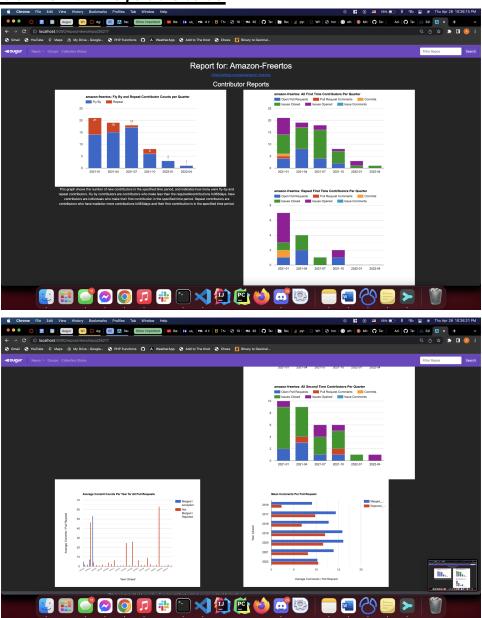
General Design Concept

Our team is wanting to rework the current augur-view chart display so that it's more readable and interactive. In this design document we display a mock-up of the overall design for the website layout. Additionally, as we progress through the project, we've started work and finished several charts and added them to the website. These charts are not just PNG images, but instead interactive elements on the web page created with the GoogleCharts API. To accomplish this, we need to change what sort of data is returned from Augur's API.

<u>Summary of Changes/Feature Developments</u>

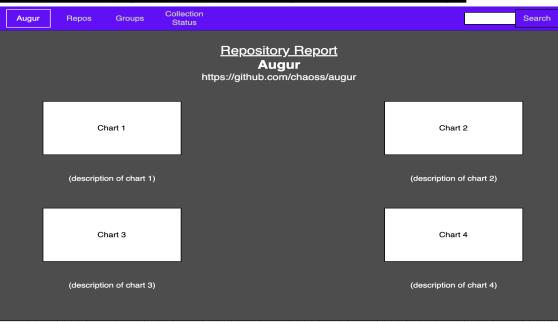
- 1. Convert visualization endpoints so they can return data
- 2. Cache the data to speed up loading times (see chart below)
- 3. Create Google Charts using data returned by the API
- 4. Build well designed UI and UX experience

Current Project State



The webpage currently includes 6 Google chart redesigns of previous Augur-View charts, with more charts being implemented going forward. Hover over information is available for the charts, and we've begun implementing captions for each charts. Certain charts function on their own, but can't be integrated into the webpage without breaking.

Website Diagram-The end product concept



Requirements

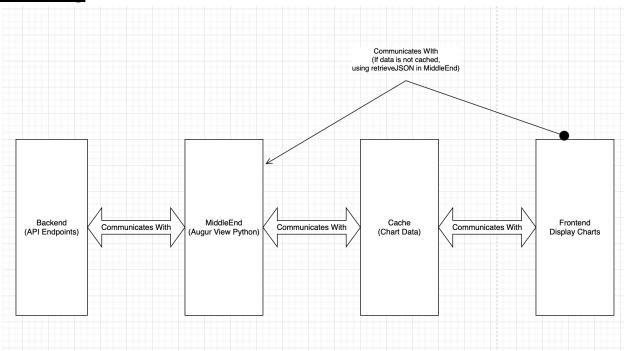
| Component | Priority | Requirement Name | Requirement Description |
|---------------|----------|---------------------|--|
| Usability | 1 | Text-Image Division | On the webpage, divide the text information generated from the graph images generated |
| Usability | 3 | Export Data | Allowing the user to export data to file formats (csv / pdf / docx) |
| Usability | 4 | Caching | Implement a better caching system to allow Augur-View to function faster |
| Interactivity | 2 | Details on Hover | Display details for different parts of the graph on hover, rather than displaying details in a fixed position on the graph (this causes the text to sometime overlap when there is small data) |
| Interactivity | 3 | Pagination | Alternatively (and more easily) paginate the results with hardcoded cutoffs and allow the user to click through |
| Interactivity | 4 | Alternate Formats | Offering alternate formats for certain charts, i.e., bar graph, pie chart |
| Interactivity | 5 | Sliders | Sliders to set limits on what data should be shown, for example a cutoff for repos with 95% completeness on pull requests |
| Readability | 1 | Page Layout | Ensuring the page is readable by the users and that the layout is sensible |
| Readability | 1 | Separate Graphs | Each graph is its own distinct element |
| Readability | 3 | Data Readability | Choose ideal graph type to display the data (or with alternate formats, the default format) |

High Priority: 1 Low Priority: 5

Testing Plan

Given that the modifications are largely to the front end and how users will interact with Augur-View, our team will test the final project by hand. We'll go through several repos and confirm that the interactive charts are being generated properly when data is available, and acting correctly when it isn't.

Caching



https://drive.google.com/file/d/1fEFujzQz2Y-siwMXkdkan7koPwraNP_z/view?usp=sharing

Sprint 3 Progress Screenshots

