

# DATA 551 Milestone3 Report

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## Section 1: Received Feedbacks

### User 1:

1. Layout: Keep it within 1 page, and the top panel is better highlighted as a summary.
2. Map: improve readability (for example, adjusting legend, adding units, or instructions)
3. Pie chart: adjust layout to show full pie chart
4. Bar chart: improve readability (for example, focus on company or industry)

### User 2:

Overall, the app is very well done.

I wasn't sure whether to use app\_map.py or app.py, so this review is based on app.py. Initially, the code didn't run because the file path was incorrect. Once that was fixed, I found the app easy to navigate and visually appealing.

However, I'm a bit confused about the meaning of "final worth" and what the charts are displaying. For example, when I click on Canada and filter for technology, I see a data point at age 40, final worth 22.1k. It would be helpful if the meaning of these values were clearer.

On a positive note, I think the map section is well executed, and the hover and country selection features work smoothly.

An optional suggestion if possible would be to change the header based on the selected country. For example, it would show the richest person in that country

Great Job!

### User 3:

1. I like the style of the whole dashboard. For the "Richest Person", I think adding commas to the number would be helpful.
2. The map looks pretty good. One little thing that could be improved is you could add a "Select All Countries" for this graph.
3. It's better to format the axis titles and labels, like "Billionaire Count" instead of "billionaire\_count."
4. I like the filter of the line graph. Sometimes I tried to select multiple industries, it only shows one line instead of multiple lines, but the labels show that there should be multiple lines.
5. It would be helpful if you change the size of the pie chart, or perhaps you could change the pie chart to another type of chart because there are too many industries shown in the pie chart.

## Section 2: Reflection on Improvement

After reviewing the user feedback, we have identified several key areas for improvement in the app, including layout adjustments, chart readability, data clarity, and additional features. Below are the planned improvements based on each category of feedback:

### 1. Layout and Usability Enhancements

- **One-Page Layout & Highlighted Summary.** We will refine the layout to ensure key information like map and summary is presented within the first tab, and other information like age and industries analysis is presented on the second tab.
- **File Structure Clarification.** We will update documentation or include a brief note in the repository to clarify which script (e.g., `app.py` or `app\_map.py`) should be executed to run the application.

### 2. Map Improvements

- **Legend Readability & Units.** We will refine the legend to improve clarity, ensuring units are clearly displayed. Instructions will also be added to help users understand the map's functionality.
- **"Back to Global" Button.** We have introduced a "Back to Global" button, allowing users to easily return to the global metrics view. Additionally, if a user selects a country that has no billionaires, the metrics will automatically default to the global view, ensuring a seamless and consistent user experience.

### 3. Chart Readability & Data Interpretation

- **Pie Chart Adjustments.** We will modify the pie chart layout to ensure the entire chart is visible. And we will tag the industry with the largest proportion.
- **Bar Chart Readability.** We will adjust the bar chart to focus on either specific companies or industries to enhance clarity.
- **Line Chart Filtering Issue.** The issue where selecting multiple industries only displays one line will be investigated and fixed to ensure all selected industries appear correctly.

### 4. Data Clarity & User Guidance

- **Clarify "Final Worth".** Users expressed confusion about what "final worth" represents. We will add tooltips or a short description in the UI to define this term.
- **Formatting Improvements.** To improve readability, we will format numerical values properly (e.g., adding commas to large numbers like the "Richest Person" display).
- **Axis Labels & Titles.** The axis labels and titles will be refined to be more descriptive and user-friendly (e.g., changing "billionaire\_count" to "Billionaire Count").

### 5. Additional Feature Requests

- **Dynamic Header Based on Selected Country.** We will explore implementing a feature where the header dynamically updates to display the information in the selected country.

### **Section 3: Review for Other Dashboard**

#### Review for Green Gold Dashboard: (Huan He)

1. Layout: Keep it within one page or use tabs.
2. Map: When the map type is set to "Both," there is a display issue.
3. Left-side Information Panel: Contains too much information. It is recommended to adjust the font size and remove unnecessary content.
4. Right-side Information Panel: Readability needs improvement. Consider increasing spacing and reducing the amount of notes.

#### Review for Anime Popularity & Ratings Dashboard: (Qijia Zheng)

1. Loading Time: The design takes too long to load, which may negatively impact user experience. Consider optimizing the performance to reduce loading times.
2. Dashboard Title: The dashboard lacks a clear main title, making it difficult for users to immediately understand its purpose. Adding a prominent and descriptive title would improve clarity.
3. Alignment Issues: Elements within the design are not properly aligned, which creates a disorganized and unpolished appearance. Ensuring consistent alignment will enhance the overall visual appeal and usability.

#### Review for Anime Popularity & Ratings Dashboard: (Yuzhu Han)

1. It took me a long time to load the dashboard. I don't know the reason of it but if you can make the dashboard suitable for computers with different capabilities would be better.
2. The dashboard does not include a title banner and the title for each plot, which make it hard to interpret what are the plots showing.
3. The bar plot at the top left corner needs to scroll to see the full plot – it would be better to make it smaller to show the full plot.
4. It looks like the dashboard is talking about animation. It would be better to have a section explaining the terminology used in the dashboard related to animation.