

Visualization Project Documentation of my Design Process

Initial Designs

The project began with identifying a suitable dataset that would offer meaningful insights. The dataset I chose had financial data for Baidu a company in China, I decided to use this because it has a high usability score on the Kaggle website, and I've watched shows on IQIYI before. The focus was on designing a specific visualization to display trends, but I then decided to show three different visualizations to offer a better representation of the data.

1. Line Chart: To show trends over time for multiple metrics like revenue, costs, and operating income. It was also easier to use in order to show the different months of revenue for specific sectors.
2. Bar Chart: Baidu Core Revenue for each quarter (simple chart)
3. Pie Chart: To illustrate the proportional breakdown of revenue and expenses across categories.

Design choices and changes:

- first tests focused on loading the dataset using logs to see issues with data parsing.
- Adjustments were made to ensure interactivity, such as tooltips for the line chart.
- A legend was added to the pie chart to make it more legible.
- Colors and layouts were chosen based on different costs associated with them.
- Hover effects and contrasting text colors were implemented for interactivity and readability.

Line chart:

- Selected for its ability to show trends over time across multiple metrics.
- Color-coding was used to distinguish between different metrics, such as revenue, costs, and income.
- The vertical stacking of the charts ensures a logical flow:
 - High-level trends (line chart) are displayed first.
 - Granular details (bar and pie charts) follow for deeper exploration.
- Spacing and margins were adjusted to ensure readability, especially for axes labels and legends.

This visualization project demonstrates how interactive charts can uncover insights from complex datasets. The combination of line, bar, and pie charts effectively communicates different aspects of the data, offering a clear narrative of Baidu and iQIYI's financial performance