In the third milestone, we included interactive data visualizations to examine and investigate patterns in the complaints that automobile insurance companies have received. The main visualizations consist of a dynamic bar graph showing the number of complaints by insurance companies for a chosen year, and an interactive scatter plot analyzing different complaint types in comparison to premiums written. The purpose of these visualizations is to offer stakeholders, such as consumers, companies, and regulators, with practical information on service quality and patterns in customer discontent.

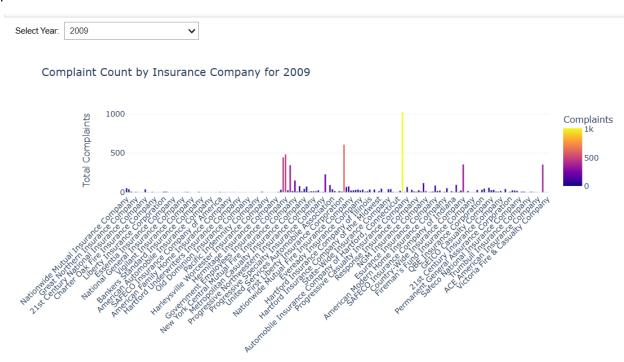
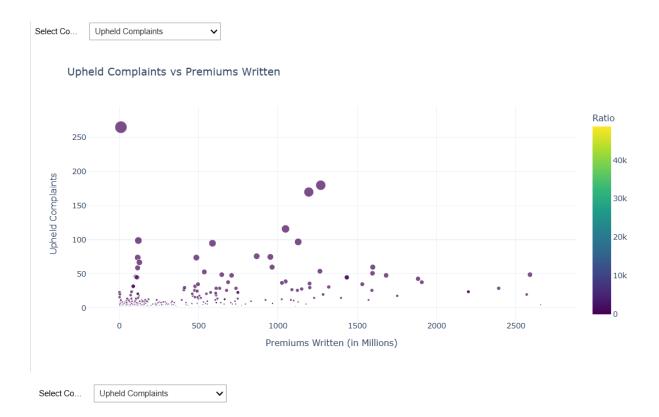
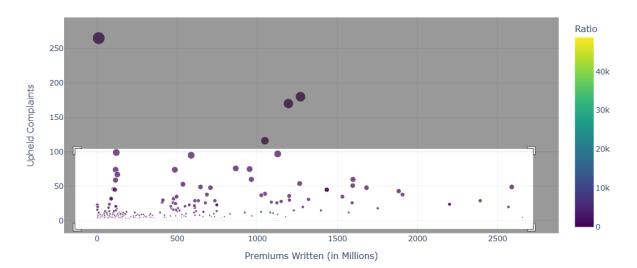


Fig1. Bar Plot: Complaint Count by Insurance Company

The bar graph allows users to sort data by year, providing a straightforward look at how companies stack up in complaint volumes over time. This assists in determining the companies that are successful and those that may need to make operational enhancements. The scatter plot enhances this information by examining complaint categories and how they correlate with written premiums, providing a more detailed understanding of issues like billing disputes or claims resolution. Characteristics such as zoom, hover interactivity, and color gradients improve usability and facilitate data comprehension.



Upheld Complaints vs Premiums Written



Upheld Complaints vs Premiums Written

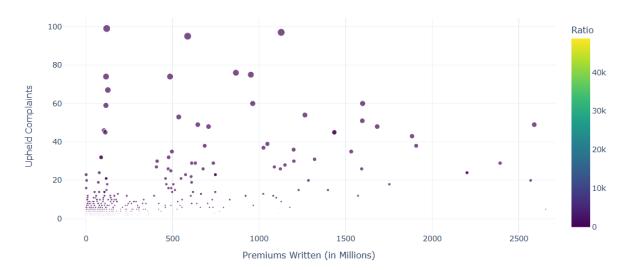


Fig2. Zooming the scatter plot Complaints by Complaint Type vs. Premiums Written

These visuals are crucial instruments for making decisions. Consumers can recognize trustworthy insurance providers, companies can evaluate their performance and address areas of improvement, and regulators can identify places for oversight and policy adjustments. Milestone 3 offers a strong platform for analyzing complaint trends in the insurance sector through a combination of interactive features and visual clarity.