

PROJECT REVIEW	CODE REVIEW 3	NOTES
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Meets Specifications

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Nice job making a clear and concise explanatory visualization. I'm especially impressed with the aesthetics of the visualization.

Code Structure and Functionality

✓	The visualization renders and any interactions or animations work as the reader interacts with the visualization.
✓	Large code chunks are commented and all complex code is adequately explained with comments. Comments are not overused to explain obvious code.
	How much to comment and where is admittedly subjective. A lot of d3 syntax is intuitive and doesn't need comments. Arguably, I found there could be a little bit more commenting in some parts. In general, I'd put a brief comment above each function that says what the function's purpose is. Sometimes this was done and sometimes not.
✓	The code uses formatting techniques in a consistent and effective manner to improve code readability.
	The formatting is general consistent, which makes it easy to read through the code. There were a couple of spots where the chained method indentation was slightly different than the surrounding chained methods. I marked one spot in the code review although there were a couple of others.

Visualization is Explanatory

✓	The visualization centers on a specific, clear finding in the data.
	The visualization centers on the lack of correlation between crimes committed and a neighborhood's community housing ratio.
✓	The selected finding is clearly communicated. Design choices foster communication between the reader and the visualization.
	<p>This is a very slick chart design. Nice job finding a way to concentrate a lot of information into a compact, clean and readable space. I really like the introductory information below the chart title as well as how the neighborhoods were sorted by housing population ratio. The neighborhood map also ads a nice exploratory element to the chart.</p> <p>Here are a couple of ideas that occurred to me when looking at the chart:</p> <ul style="list-style-type: none">housing population was normalized by the total population, but it looks like each circle represents number of crimes. It might be interesting to also normalize the number of crimes by the population size of each neighborhood. A neighborhood with more people could have more crime than a neighborhood with fewer people, but the crime rate could be lower. I might also consider using a different scale for each column so that the circles can be bigger. The visualization's main point is looking at each individual crime type across neighborhoods rather than comparing crime types within a neighborhood. So I think it would be okay to scale each column's circles by the column's min and max values.the circle color encoding is double encoding he x-axis variable. I'd consider using color to give extra information to the reader. For example, all of the circles could be a grey color except for the maximum of each column. If there is no correlation, then the maximums would be randomly scattered throughout the chart.this visualization is almost like a heat map except circle size is being used instead of opacity or color to represent the third variable. Making a heat map could be another option. Maybe each column would still retain a separate color so that each column could have its own scale represented by opacity.another good chart type for showing rank is a slope chart (http://datatodisplay.com/blog/wp-content/uploads/2013/12/fnal_slope.png). Instead of showing changes in rank over time, the slope chart could show housing population ratio rank on the left and crime type rank on the right. There'd probably have to be a separate chart for each crime type.

Design

✓	A reader's summary of the graphic would closely match the written summary in the README.md file, or a reader would identify at least 1 main point or relationship that the graphic attempts to convey.
	The introductory text at the top of the visualization helps make sure that the reader understands the explanatory story.
✓	The visualization includes interaction or animation. The interaction or animation may be simple, such as a hover, tooltip, or transition. Interaction or animation enhances understanding of the data.
	Including the ability to see the actual numbers behind the circle size was really helpful. It allowed me to explore the data to confirm that there wasn't an obvious correlation between number of crimes and housing population ratio.
✓	Initial design decisions such as chart type, visual encodings, layout, legends, or hierarchy are included at the beginning of the Design section in the README.md file.
	The README file discusses the reasoning behind the map being added and the highlighting effect. It gives a general idea of why this bubble chart type was chosen.

Feedback and Iteration

✓	Feedback has been collected from at least three people throughout the process of creating the data visualization. The feedback is documented in the Feedback section of the README.md file.
	Feedback is collected from three people.
✓	The project includes evidence that the visualization has been improved since the first sketch or the first coded version of the visualization. All of the feedback is listed in the Feedback section of the README.md file. Most design choices and changes are accounted for in the Design section of the README.md file. If no changes were made to the visualization after gathering feedback, this decision is explained.
	The README file makes it clear what changes were made based on the feedback. The submission also shows how the project has evolved from the initial sketch.

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