**Design Documentation**

Design Process:

* Initially, I went through all the files provided to me.
* Then I tried various visualization which could be used to display the data.
* Here are some of the rough sketches.

Diagram, engineering drawing

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Design Choices:

* So, I decided to extract more csv files from the given files like, “By\_Gender”, “By\_Age”, these two csv files tells about deaths with respect to gender and different age groups respectively. I also created some other files to show other areas in the map like work house, brewery etc.
* I created two different graphs to show the deaths by gender and age.
* I created pie chart to show deaths by different age groups in the data set, while I used bar chart to display deaths with respect to gender.
* The pie chart was static whereas bar chart was interactive. Whenever you will hover the mouse on the bar graph, it will show the number of the deaths in males or females and color will be changed.
* For the timeline graph, I created a line graph.
* For the colors, I referred to various color design tools like “color brewer” , “color oracle” and colorgorical”.
* Here are the rough sketches for my graphs used in the project.Chart, pie chart

  Description automatically generatedChart, bar chart

  Description automatically generated

Chart, line chart

Description automatically generated

Facts:

* It was clear from the data that people who were in the age group 0-10 over 80 had higher deaths than the rest. This is because people of these age groups have weak immune system. Also, less deaths occurred near the workhouse and brewery, maybe they did not drink water from the pumps.

Reference:

* https://www.tutorialsteacher.com/d3js/create-svg-chart-in-d3js
* https://d3js.org/
* https://www.youtube.com/watch?v=\_8V5o2UHG0E
* https://www.youtube.com/watch?v=2LhoCfjm8R4