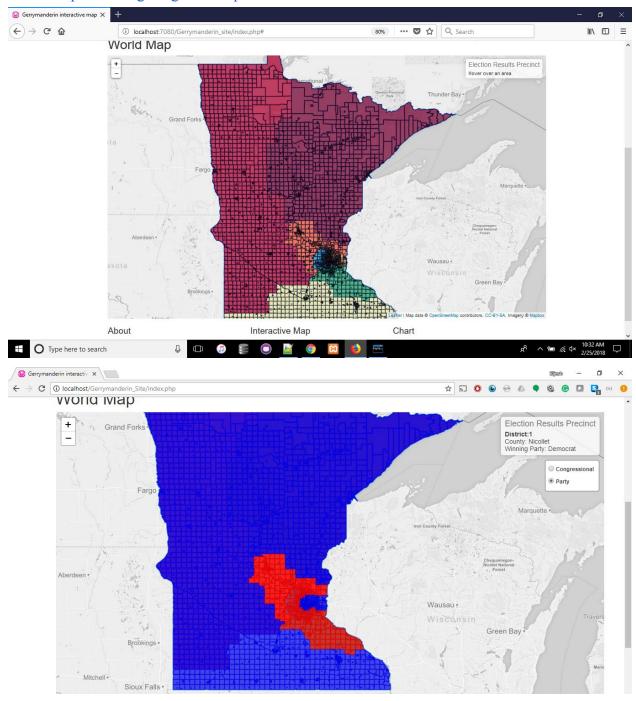
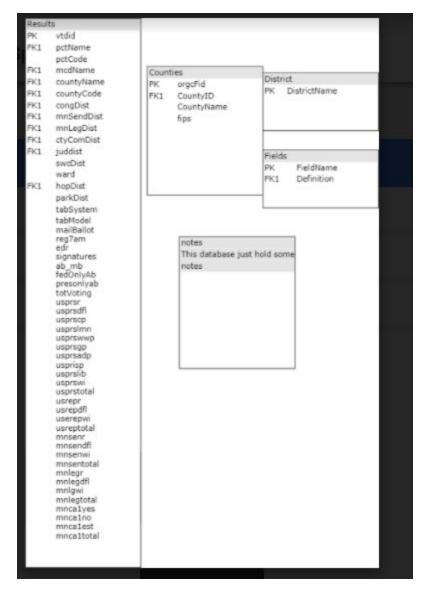
## **Design Document**

- <a href="http://leafletjs.com/examples/choropleth/">http://leafletjs.com/examples/choropleth/</a>
- https://www.gis.leg.mn/iMaps/elections/2016/all/index.html



- Modify GeoJson with Java
  - o Classes
    - Main
      - Runs the program

- Parser
  - Reads the geojson into each line in ArrayList
- Writter
  - This writes the either Republican or Democrat into the geojson code
- Create Boundaries with Java
  - Classes
    - Main
      - Runs the program
    - Read and Write
      - Reads the GeoJson code
      - Writes new GeoJson code File
    - LongLat Holder
      - Holds longitude, latitude, Congressional district ID, County ID, Senate ID, legislative district
    - Line
      - Holds 2 points each point is data type LongLat Holder
    - Boundary Creator
      - This class runs a loop on all the lines. Example, if looking for congressional district lines, it adds into a ArrayList the line only if the points are the same but the congressional districts are different.
- DataBase



Javascript Functions:

Function: MapFunction: prop

- Updates the map information from the geoJson file
- getColor
  - Colors the map according to the presidential district
- Style
  - Styles the map divisions
- HighlightFeature
  - Highlights a map area when cursor is pointed
- resetHighLight
  - Resets style updates the layer information
- zoomToFeature
  - Zooms into the area when clicked in that area

- onEachFeature
  - Controls the mouserhover, house click and zoom functions
- o secondLayerFeature
- o mouseoverSecondLayer
  - Works as same function but for the second layer

## **Use Case Diagram**

