Customizable Analysis and Visualization Tool for COVID Cases

Milestone 4

Team Members

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Progress Matrix

Task	Completion %	Stian	Sam	Nicole	CJ	To do
1. Continue work on scatter plot/plot utility	90%	80%	10%	0%	0%	More useful type of dataset for scatter plot
2. Continue work on plot creation tool	90%	0%	0%	0%	90%	Operations card update to be more intuitive
3. Continue work on creating lab testing plot/Start API auto update	90%	30%	60%	0%	0%	API auto update
4. Dataset management and application system	85%	0%	0%	60%	25%	User Edit/Delete data

Task 1 - Scatter plot/plot utility

- Needed to find a good use case for the scatter plot

    - Initially decided to use the scatter plot to see if there was a correlation

        between positivity rate and duration of mask mandates in Florida

        - Lack of mask mandate data in FL counties

    - Idea could be to plot positivity rate for cases in the US vs. lockdown or

        international flight restrictions

- Finishing up the plot utility

    - Can now display data on pie charts, line charts, bar charts and maps.

Demo - Map
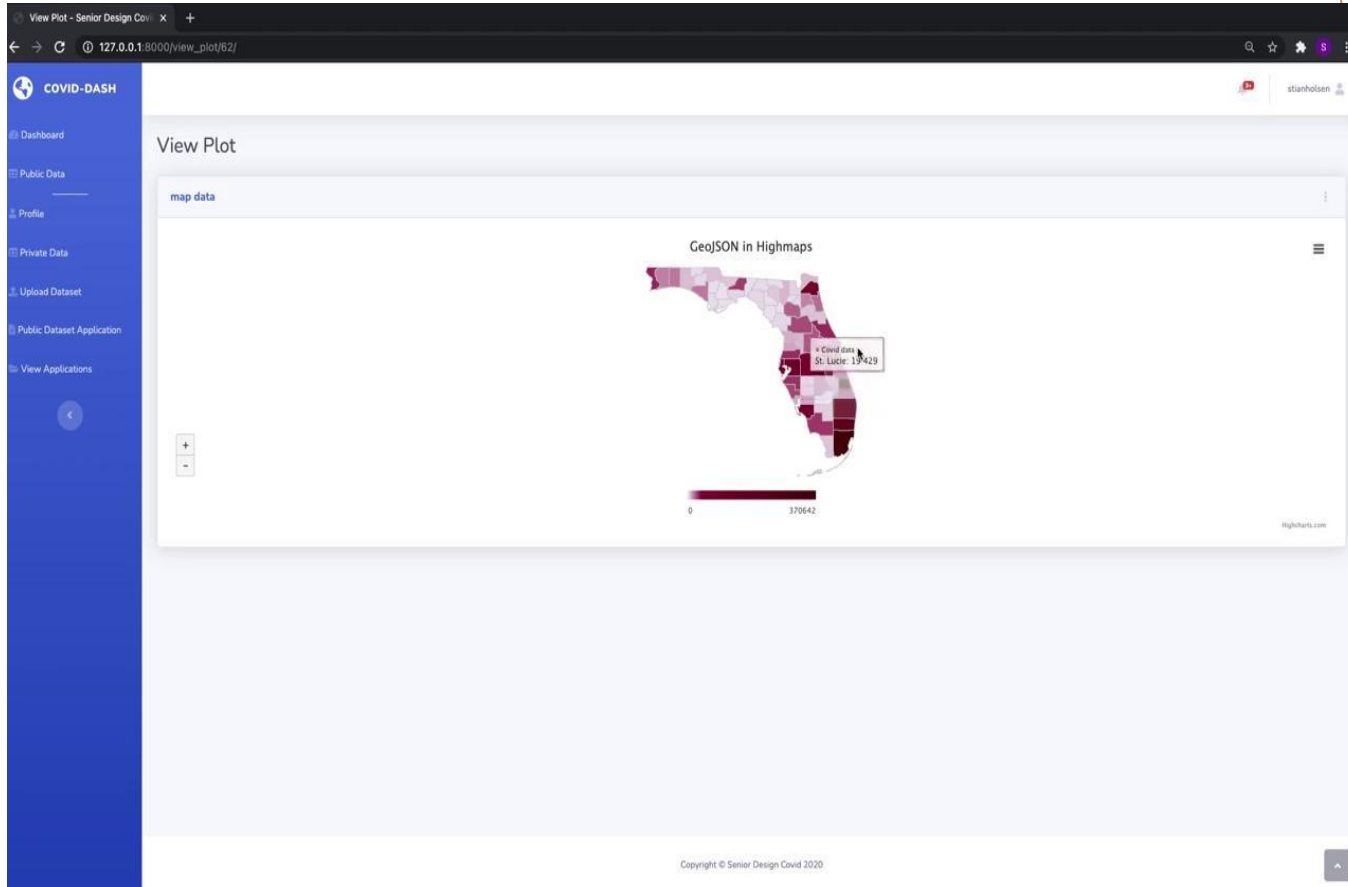
Task 2 - Plot creation tool

- Redesigned the create plot tool

- Updated the filters card

  - Split into 3 dropdowns for each filter

  - 1)Column, 2)Conditional, 3)Value

  - Columns are loaded dynamically based on dataset selected.

  - Values are loaded dynamically based on the selected column

To do: Redesign the UI for applying operations. Develop a way to have operations and filter stored and applied together.

Demo - Create Plot 1

Demo - Create Plot 2

Task 3 - Lab Testing plot

- Creation of a lab testing line plot that showed positivity rate over time

- The operations involved in this plot (count, sum, and division) could be bundled into a positivity rate operation for the GUI in the next milestone

- Obstacles included being able to format the timestamp column from the dataset into a way that would render properly on the frontend

Demo - Create Line Graph

Task 4 - Dataset management and application system

- Created a new model that represents a submitted application.

- Created pages for submitting, viewing, and reviewing applications.

- Automatic transition to public data when something is approved.

Todo: Update to use idea of "private, shared, and curated". Add functionality for plots and dashboard. Add ability for user to edit and delete their private data.

Demo - Application Process

Task Matrix for Milestone 5

Task	Stian	Sam	Nicole	CJ
1) Continue work on scatter plot	Find a useful dataset and plot in on a scatter plot (100%)	-	-	-
2) Operations card update to be more intuitive	-	-	-	Develop a format and UI to have operations and filters mixed together (100%)
3) Save unique workspaces	-	-	Research and develop a format for saving multiple plots in order with options (25%)	Develop a utility to render and transmit multiple plots to one page (75%)
4) Layering plots	Research and develop rules for what plots can be layered. Frontend work (75%)	-	-	Research and develop rules for what plots can be layered. Develop a utility to take two plots and combine them (25%)
5) API auto updates for datasets	-	Ensure that all datasets, both private and public, have some associated endpoint for frequent updates (80%)	-	Assist with starting point (20%)
6) Finish Application Feature	-	-	Update to use curated, shared, and private (100%)	-

Questions?