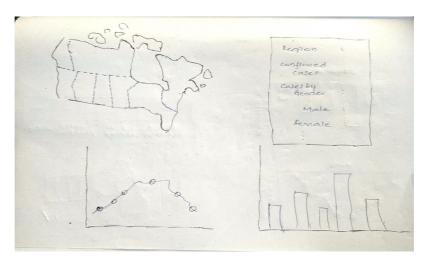
Sketches and Storyboards

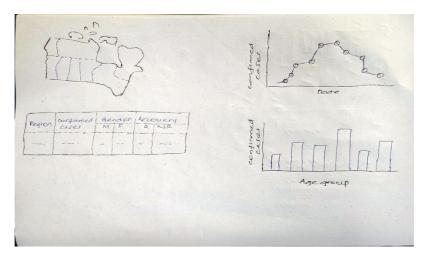
Sketching:

Sketching is an important part of a design process that helps the developer to test the design decisions regarding the use of pre-attentive processing, effective use of colour and Gestalt principles. It is an iterative process that gives a high-level idea on how data can be visualized. In the process of building the visualization, I came up with different sketches.



Initial Sketch

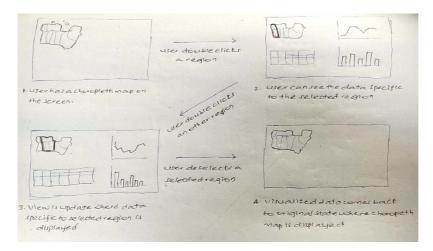
In the initial sketch, I wanted to encode the count of the confirmed cases, on an interactive map. On selecting a specific region, data such as the region name, number of confirmed cases, number of confirmed cases by gender and number of confirmed cases by the recovery that is specific to the region are shown on the right of the map. Additionally, a timeline graph and a bar graph are also shown, which depicts the relation between the count of the confirmed cases and on-set week, number of confirmed cases, and age group respectively. The timeline and the bar graph are independent of the region selected by the user which means that the timeline and bar graph are computed on the entire data irrespective of which region the user selects. As the sketching is an iterative approach, I tried to come up with a better idea of visualizing the data and came up with few approaches.



Final Sketch

In the final sketch, I was able to visualize the data in a better way when compared to the initial design. The count of the confirmed cases is encoded on a map with a single hue of different saturations. When a region is selected by the user, data attributes such as the region name, number of confirmed cases, number of confirmed cases by gender and number of confirmed cases by the recovery that is specific to the region are shown below the map in a tabular format. It shows high-level details of the confirmed cases of COVID-19. Along with the table, the timeline chart and bar graph are also shown. The timeline chart and the bar graph are specific to the region, which means that the timeline chart and the bar graph are updated when the user selects a different region. Once the sketching is done, I was able to make decisions on how preattentive processing, gestalt principles, colours can be effectively used.

Storyboarding:



Storyboard

In the storyboard, there are 4 different sketches that are linked based on the user actions. In the first sketch of the storyboard, a choropleth map is displayed to the user. When user selects a region on the map with a double-click, the data specific to the region is displayed to the user which is indicated in the second sketch of the storyboard. Now, when the user selects another region, the data in the view is updated appropriately based on the selected region which is indicated in the third sketch of the storyboard. Finally, when the user deselects a region, the visualized data is erased where only the choropleth map is displayed to the user.