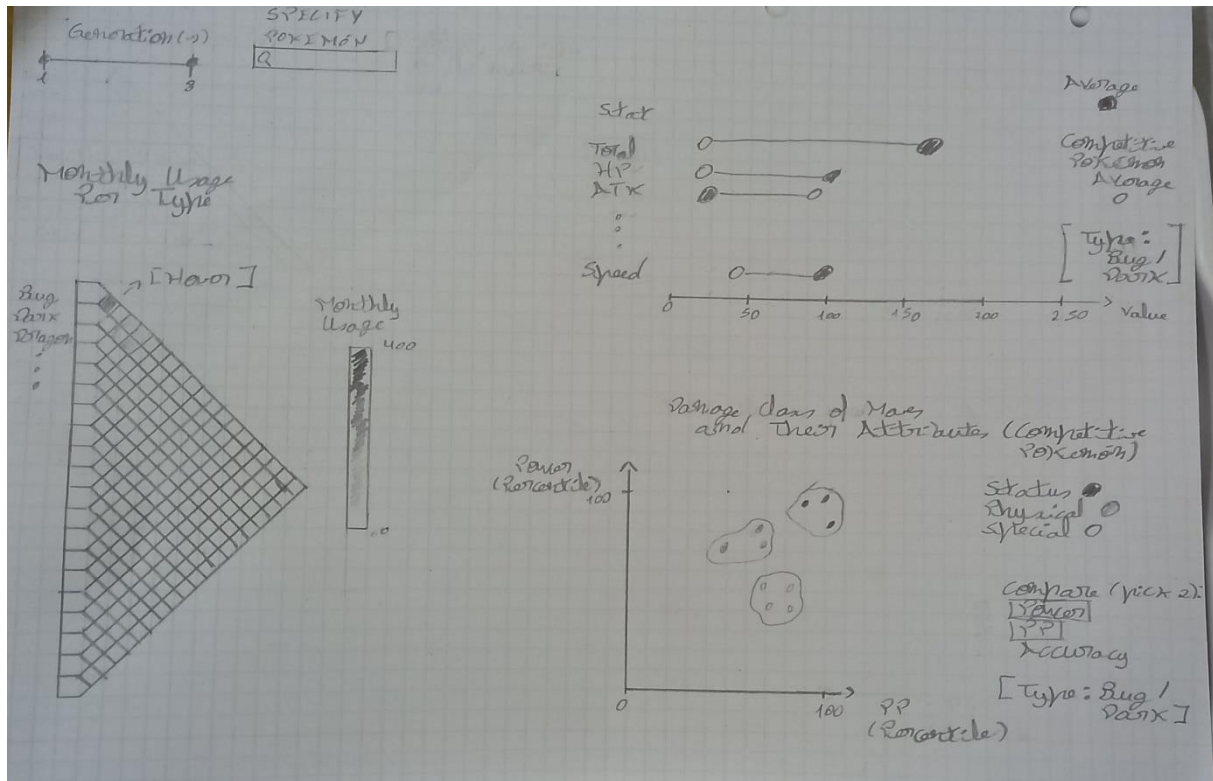


Checkpoint III: Visualization Sketch

Group: G11

Date: 2022/10/05

Overview



Visual Encoding

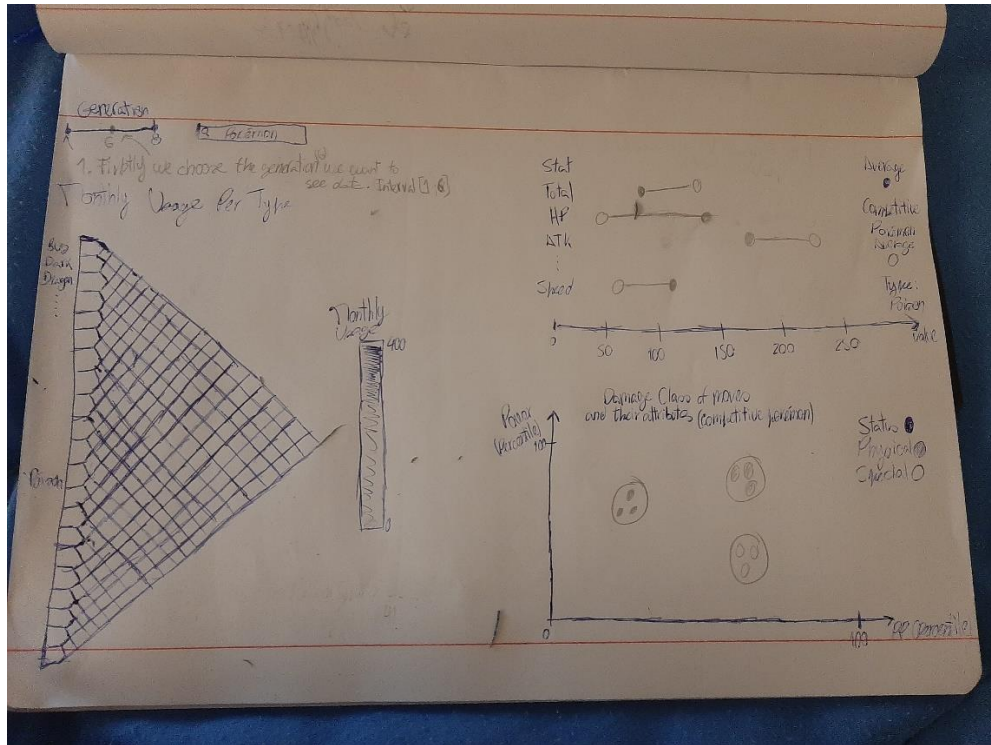
Plenty of data types were discontinued to make a more palatable visualization, and some more were created. For Monthly Usage per Pokémon Type, we used a heatmap for the Monthly Usage of a Type combination, stored in a Matrix Rooftop Diagram, as to encode the Type combination by position and the Monthly Usage by saturation. For the average Stats of a Pokémon Type combination, we used a lollipop graph to encode both the average value of the existing Stats, and the average value of the existing Stats in Pokémon selected for competitive playing (the values were encoded by horizontal position, and the sort of Pokémon they belong to – all, or competitive – was encoded by color). The Damage Class of a Pokémon Move was encoded by color and area selected in a scatterplot, while its Power, Accuracy, and PP Percentile were encoded by position. Generation is encoded in a scented widget on the top left, as is Pokémon. When a Pokémon is selected, its Monthly Usage shows up on the section of its Type combination, its Stats replace the Average Stats on the lollipop graph, and the attributes of the Moves competitive players apply to it are represented on the scatterplot; the same happens when a specific Type combination is selected.

We customized the scatterplot, using the area to agglomerate each Damage Type for easier comprehension of its distribution regarding the attributes Power, PP, and Accuracy.

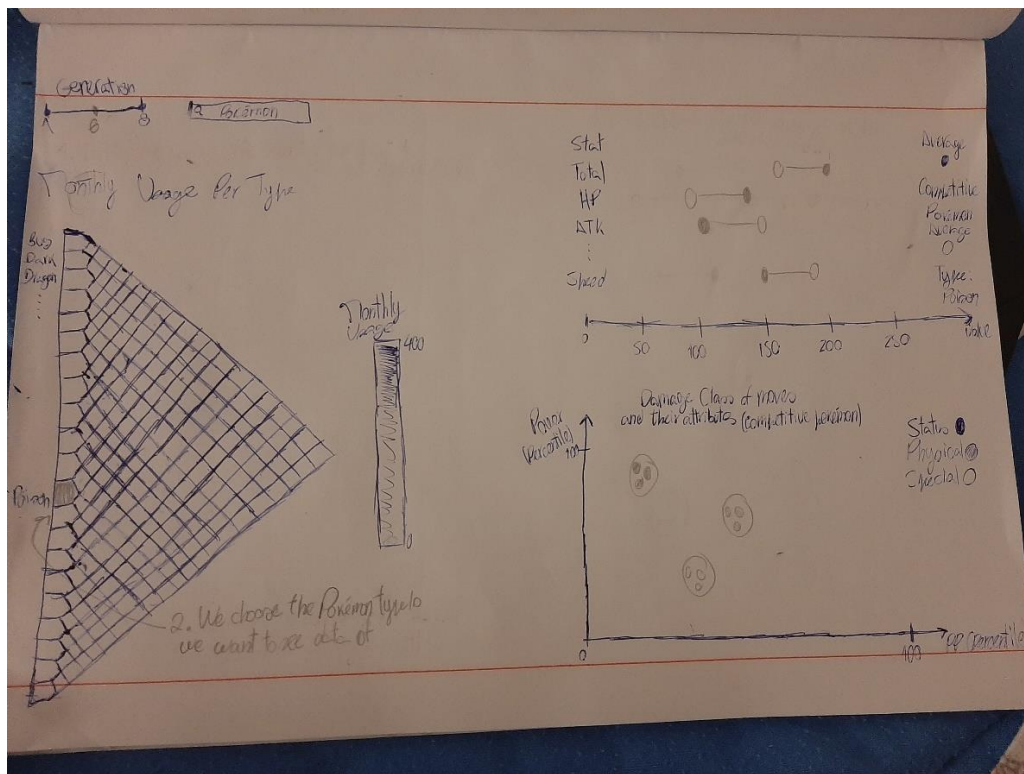
Answering the Questions

- Q: How has the HP Stat of Poison-Type Pokémon evolved throughout generations?

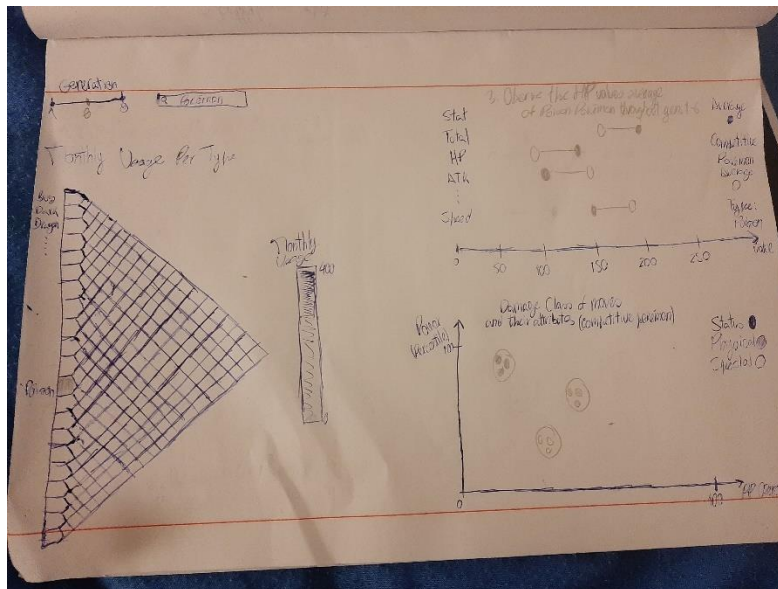
A: Click on the "Poison-Type" section on the Matrix Rooftop Diagram. Drag the "Generations" from 1 to 8 and see how the Type's average HP Stat changes on the lollipop chart.



"Firstly, we choose the Generation interval we want to see (1-6)"



"2. We choose the Poison Type we want to see Stats of"



"3. Observe the HP average of Poison Pokémon for Generations 1 to 6"

- Q: How does a Pokémon's Type (and number of Types) influence its Stats, and the Stats prioritized by competitive players?
A: Hover over the various Type combinations on the Matrix Rooftop Diagram, with all Generations selected. Note how the value of the average Stats and Average Competitive Stats change, both individually and in relationship to each other
- Q: How do a Pokémon's Stats influence the Damage Class of Moves (Special, Physical, Status) chosen by players?
A: Hover over the various Type combinations on the Matrix Rooftop Diagram, with all Generations selected. Note how the Stats change. Now, note how the number of marks for each Damage Class changes, according to those Stats.
- Q: Do competitive players prioritize move availability (PP) or move power, when choosing moves for their Pokémon?
A: Note the scatterplot. Select both PP and Power for comparison. Let's say PP is on the x axis and Power is on the y axis. Note where the mark placement: if its x coordinate is greater than its y coordinate, then PP is more prioritized by competitive players than Power.
- Q: Which Type combinations are preferred by competitive players?
A: Note the heatmaps on the Matrix Rooftop Diagram. The ones with the highest saturation are the ones preferred by competitive players.