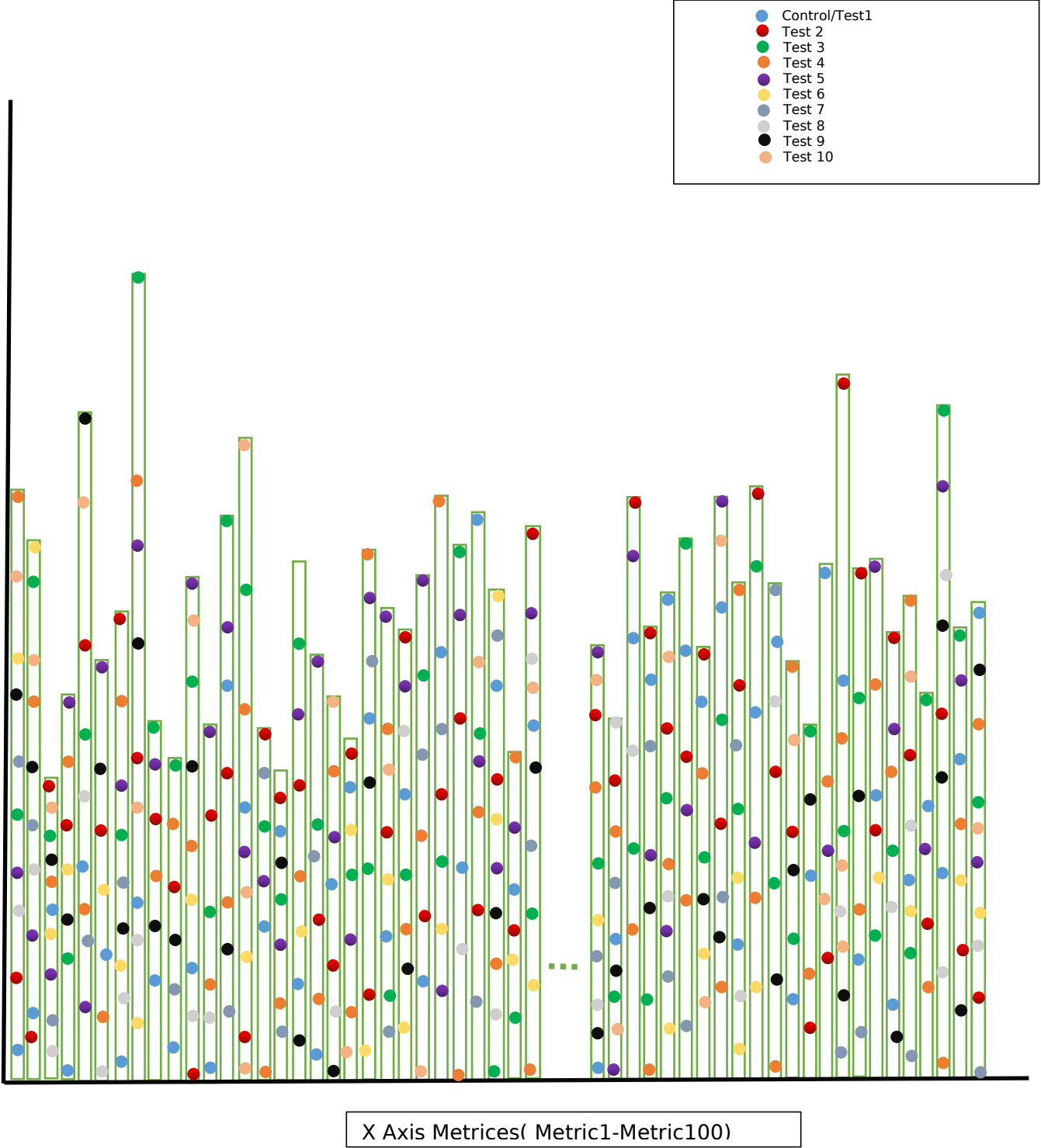


Homework 5

Provakar Mondal

The visualization solution I have thought of for the online sales company is a combination of a vertical bar chart and scatter plot. I have presented the metrics across the X-axis and the TestIds across the Y-axis. The values of the metrics are quantitative, so the position of the scatter plot across the y-axis.



Analysis :

1. Marks and Channels encodings used: As marks, I have used, point, line in this visualization. And as channels, I have used the height of the bar chart to represent quantitative value, color for different items.
2. Any existing visualization methods I have borrowed: Yes, I have borrowed methods from vertical bar charts and from scatter plots. Then I have tried to combine these both.
3. Any design principles I applied: I have tried to apply the following design principles
 - i) I have followed specific patterns
 - ii) I have tried to keep the design simple
 - iii) I have applied varieties in my visualization
 - iv) I have given priority to focus the key areas(100 metrics and 10 TestIds here)
4. The desired tasks were: compare each test system to Control and compare all test systems to each other, compare systems across all metrics, identify tradeoffs between different test systems.
My visualization can support the tasks in the following ways.
 - i) Control has a different color than each other test system. If a user hovers on comparison of a metric and then hovers on another test system of a metric the user can the value difference.
 - ii) Each test system is separated from others by color. So users can compare each test system in the same way by hovering.
 - iii) The 10 test systems have quantitative value for 100 metrics. If we want to give priority to these values of the systems. we can use different shapes to represent different values.
 - iv) It might happen that some test cases' value of some metrics can be 0. So if we want to make another bar chart to visualize the difference of the different test systems, these 0 values won't play an effect in that visualization.