

# User Evaluation: Running Data Dashboard

Our group had the unique opportunity to speak with the individual who generated the running data and let them explore their own dataset using our generation. This document summarizes their experience and the discussion about their compliments and criticism.

## Observations:

The user was very excited to test our dashboard and greatly enjoyed exploring her data using our visualization. She said it was her “dream” to dive into her data and extract new and meaningful knowledge from it.

At first, the user did not realize that she could change the primary variable. This indicates that the placement of the primary variable selection menu may not be the most intuitive.

While observing the user interacting with the dashboard, we noticed that she heavily favored manipulating the variables in the lower right visualization. She never changed the top left visualization (the default of which is the trend/bar chart). However, she did read all of the visualizations and learn some information from them.

She appreciated the organization of the variables in the selection menu because she was able to easily locate the ones she was interested in.

## Questionnaire:

What are you able to learn from the visualization?

*The user explored several combinations of variables and observed some expected and some surprising correlations. For example, she noticed she logged far more miles on Sundays than on other days, which aligns with her typical schedule. She also enjoyed following the trends and correlations with respect to shoes, although she explained that the relationships are influenced by other factors like how old she was when she used the shoes. She had fun exploring none-running related correlations such as Town vs. Temperature.*

How did your expectations align with the delivered dashboard?

*The user said she had more fun exploring the dashboard and playing with the variables than she expected. She was also pleasantly surprised by many of the discoveries she made. Many of the visualizations were not as “predictable” as she anticipated.*

What about this visualization is confusing or unclear?

*There were a few data attributes where an outlier would drastically distort the configuration of the graph. In these cases it became difficult to identify*

*relationships between the variables. For example, she participated in one race with 4,000 other runners, which is an enormous difference compared to every other run. This squished the rest of the data into a small area that is impossible to learn from.*

*Categorical variables with many types are also difficult to learn from. The example the user gave was the variable Towns.*

What questions do you have looking at this dashboard?

*This data is from January, so it is not the user's most up-to-date log. She said she was curious how the visualizations would change if the next three months were added to the dataset.*

What additional visualizations would you like to see?

*We eliminated some of the attributes from the user's original dataset due to design challenges and practical importance. However, the user wished she could explore some of those distributions on the dashboard. For example, she was curious about distributions and correlations relating to variables like Podcast Guest and Running Buddy. She also would have liked a way to keep track of Clothing and Weather combinations in order to dress better for future runs.*

What type of visualizations here would you use the most?

*The user said she enjoyed using the Box-and-Whisker plots the most. She said she was surprised by this fact because she usually doesn't like Box-and-Whisker plots in other contexts. She also said she enjoyed the inclusion of tool-tips to get a closer look at values inside the Box-and-Whisker Plots.*

What variable combinations are the most appealing, interesting, or useful to you?

*She said it was "coolest" to explore the relationships between time-of-day and feelings (physical & mental), and she would love to explore these even more. She also said she would enjoy looking further into VO2 Max trends as a metric for overall physical fitness.*

Would this visualization help you in keeping track of your running progress?

*Yes, she said the more data she can explore the better. She is excited to add updated data for recent months. She finds the dashboard both informative and entertaining. She requested permanent access and the ability to update the data freely.*