

This is the '**Heat Map**' of Divvy rides among casual riders and members. Numbers by itself do not provide much helpful and that's where a good visualization can unveil many insights. Casual riders are mostly visitors or anyone who are out of state to Chicago.

So, I have used the Divvy station master data from 2019 September - 2021 August. I created the heatmap using Plotly Python. We're seeing an average weekly rides (in miles) for both the casual and member Divvy riders. The color gradient dark to light mint indicating highest to lowest divvy rides (in miles).

And, what you see is clear patterns and connections between the available Divvy master data that Casual riders use more Divvy bikes at any particular day compared to Divvy Members, irrespective of any day/temperature or other factors.

Let me highlight some of the interesting findings:

For Casual riders, **Fridays** are the busiest of all the week, followed by **Wednesdays**. An average of 3773.835 miles and 3718.66 miles respectively per the data.

Whereas, for Members, **Saturdays** are the busiest and an average distance of 968.933 miles are reported followed by 919.974616 miles on **Sundays**.

This emphasizes that casual riders and members use Divvy bikes for different goals.

Also, we see that the rider distance for members are below 1000 miles and casual riders are above 3500 miles. Usage wise, casual members are bringing in more revenue to Divvy. It would be wonderful if we could convert these casual riders to members.

By exploring this heatmap, we have explored many facts, which would have been difficult to observe from the numerical data we had in different spreadsheets. We see that some days are busier compared to other days in the week for casual riders and members.