

Cyclistic

- Anar Seyf (anar.seyf@gmail.com)
- October 2021
- Capstone project | Google Data Analytics course #8 | Coursera

1. Members ride more often, casual users ride for longer.

month_start	is_member	count	duration
2020-10-01	false	31	24.43123
2020-10-01	true	31	13.25616
2020-11-01	false	30	24.46033
2020-11-01	true	30	12.82754
2020-12-01	false	31	22.21802
2020-12-01	true	31	12.20958
2021-1-01	false	31	21.21272
2021-1-01	true	31	12.66565
2021-2-01	false	28	32.87435
2021-2-01	true	28	17.85411
2021-3-01	false	31	27.38463
2021-3-01	true	31	13.18571
2021-4-01	false	30	27.74138
2021-4-01	true	30	14.00357
2021-5-01	false	31	28.54489
2021-5-01	true	31	14.02661
2021-6-01	false	30	28.49060
2021-6-01	true	30	14.13181
2021-7-01	false	31	26.64278
2021-7-01	true	31	13.85915
2021-8-01	false	31	25.47086
2021-8-01	true	31	13.60916
2021-9-01	false	30	23.81494
2021-9-01	true	30	13.30084

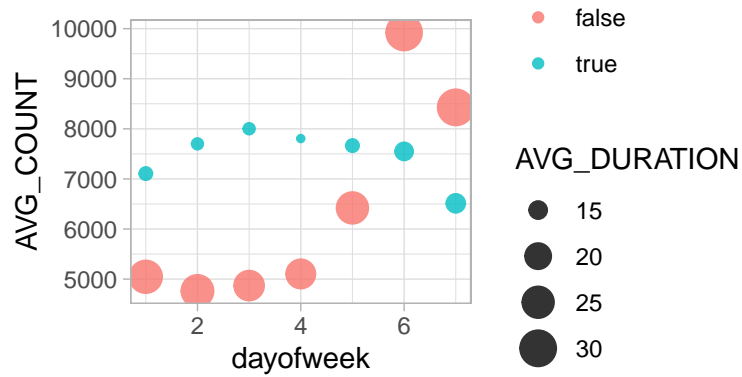
The Graphs

Aggregate by day of week

Monthly by weekday

Overall by weekday

```
## # A tibble: 2 x 4
## # Groups:   dayofweek [1]
##   dayofweek IS_MEMBER AVG_COUNT AVG_DURATION
##     <int> <chr>         <dbl>         <dbl>
## 1         1 false         5047.          26.0
## 2         1 true          7107.          13.4
```



Hourly

Weekly Counts and Average Duration Full year, weekly.

Note: **not weighted average** for the graph above.

Monthly by bike type

The Weather

Weekly TODO — either use a weather-only dataset or show trips alongside weather.

TODO: Recompute on new daily aggregates.

Temperature In degrees C.

Rain Rain (mm) vs ride count

Wind Wind (m/s) vs ride count.

Second graph is scaled to 100% to show member vs casual share.

The Geography

Stations 1288 stations. Following: **casual vs members**, **8am vs 4pm**, **Monday-Friday**.

Each dot is a bike docking station. Stations highlighted **yellow-red** have more arrivals than departures for the given hour, suggesting an influx of bike traffic at that location.

Friday, 4pm, casual vs members

8am, Monday-Sunday, casual vs members

4pm, Monday-Sunday, casual vs members