

# Cyclistic

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- Capstone project | Google Data Analytics course #8 | Coursera

## Data

Basic stats, etc.

## Analysis

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

#### Average ride duration (minutes)

Status	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Casual	24	24	22	21	33	27	28	29	28	27	25	24
Member	13	13	12	13	18	13	14	14	14	14	14	13

#### Average daily rides (count)

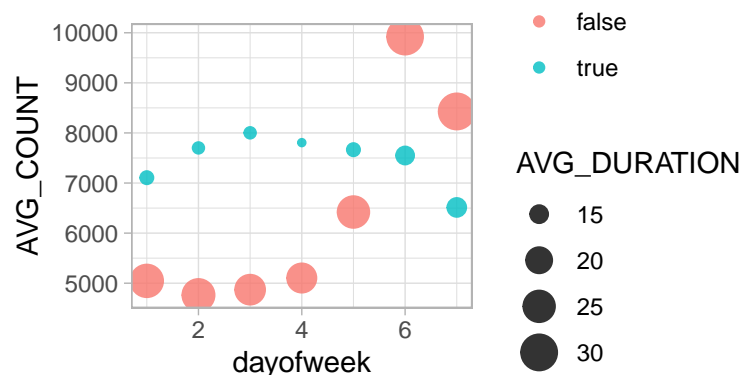
Status	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Casual	4,573	2,888	956	575	354	2,677	4,490	8,159	12,147	14,044	13,131	11,962
Member	7,676	5,614	3,220	2,502	1,380	4,592	6,582	8,705	11,754	12,058	12,431	12,863

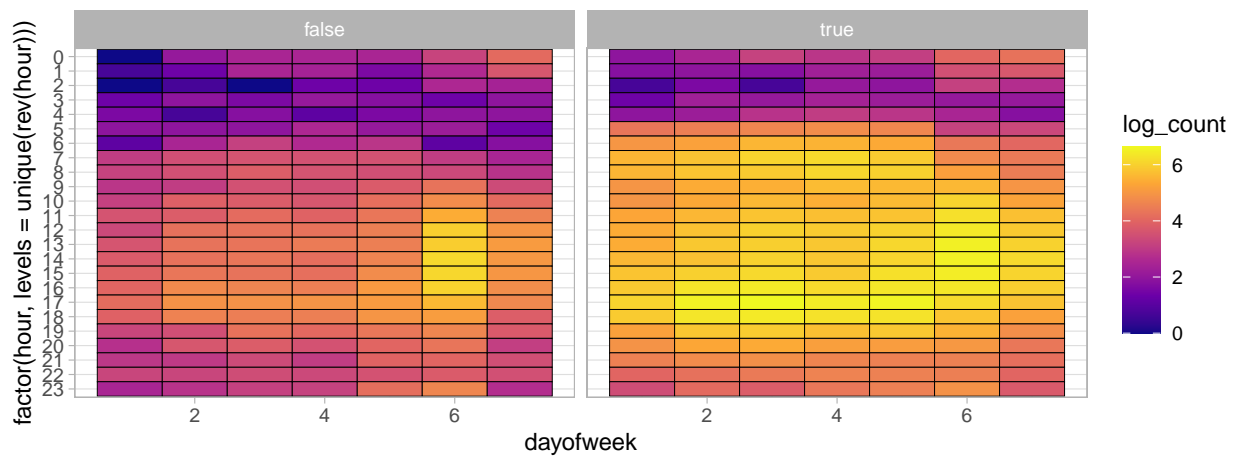
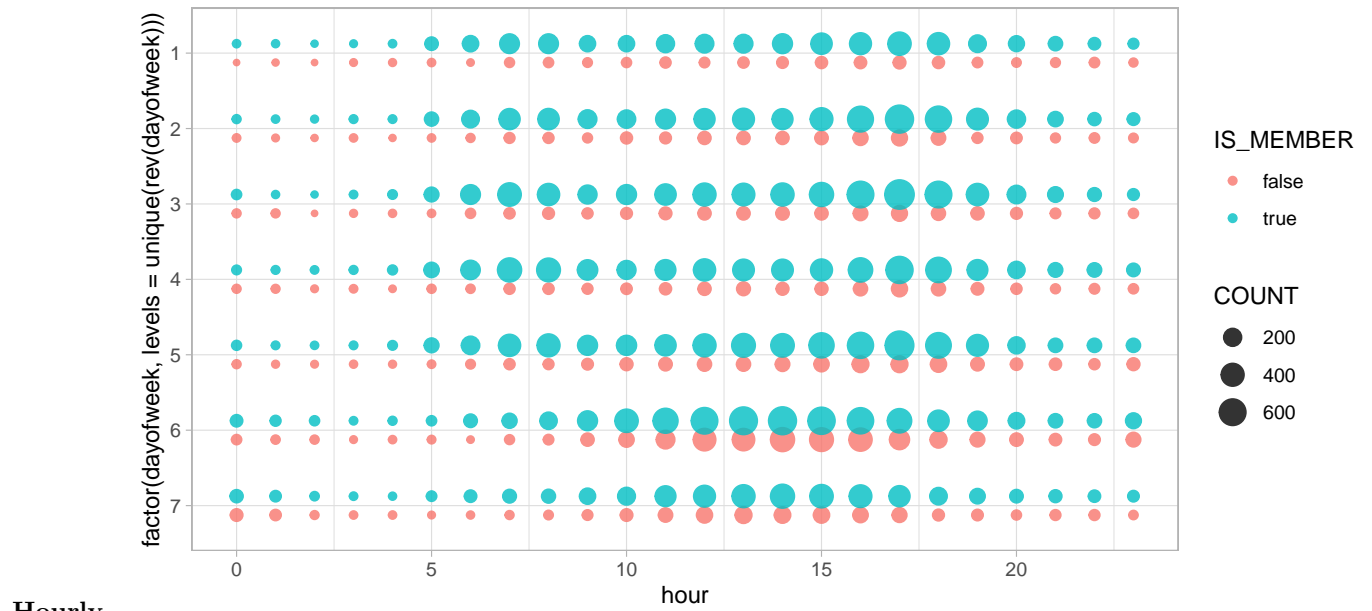
### 2. Members ride all week, casual riders prefer weekends.

Members' usage remains nearly flat, falling on Sunday. Casual users do most riding starting on Friday and through the weekend, peaking on Saturday.

#### 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
```





## The Graphs

Aggregate by day of week

Monthly by weekday

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**