

Artwork/Project Title
Cyclitic Bike Google Professional Certification
Year Accomplished
2023

Role/Position
Data Scientist

Publication Link

<https://github.com/belindamutiara/Portofolio>

Artwork/Project Description

In chapter 8 of the Google Data Analytics Professional Certification, I was asked to analyze bicycle company data. Using the R language, I found that casual riders tend to use their bicycles on holidays while annual members tend to use them on weekdays. One solution that could be proposed is to host fun biking competitions with prizes at intervals for members on the weekends. Since there are lots of casual riders on weekends, this will also attract them to get a membership.

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```
```{r}
Read the trip data from 2005 - 2010 (12 months)
tripdata_2005_05 <- read.csv("input/2005-divvy-tripdata/2005-divvy-tripdata.csv")
tripdata_2005_06 <- read.csv("input/2006-divvy-tripdata/2006-divvy-tripdata.csv")
tripdata_2005_07 <- read.csv("input/2007-divvy-tripdata/2007-divvy-tripdata.csv")
tripdata_2005_08 <- read.csv("input/2008-divvy-tripdata/2008-divvy-tripdata.csv")
tripdata_2005_09 <- read.csv("input/2009-divvy-tripdata/2009-divvy-tripdata.csv")
tripdata_2005_10 <- read.csv("input/2010-divvy-tripdata/2010-divvy-tripdata.csv")
tripdata_2005_11 <- read.csv("input/2011-divvy-tripdata/2011-divvy-tripdata.csv")
tripdata_2005_12 <- read.csv("input/2012-divvy-tripdata/2012-divvy-tripdata.csv")
tripdata_2006_01 <- read.csv("input/2013-divvy-tripdata/2013-divvy-tripdata.csv")
tripdata_2006_02 <- read.csv("input/2014-divvy-tripdata/2014-divvy-tripdata.csv")
tripdata_2006_03 <- read.csv("input/2015-divvy-tripdata/2015-divvy-tripdata.csv")
tripdata_2006_04 <- read.csv("input/2016-divvy-tripdata/2016-divvy-tripdata.csv")
```

```

Figure 1 Read Data

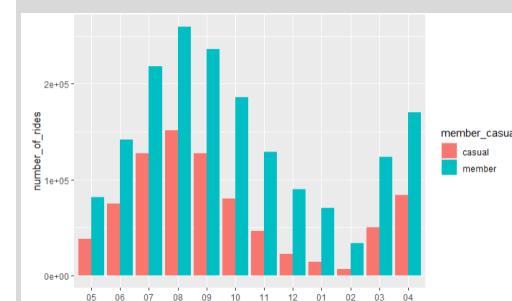


Figure 4 Monthly number of rides casual and annual member

```
```{r}
#Drop all NAs
all_trips_v2 <- drop_na(all_trips_v2)
dim(all_trips_v2)
summary(all_trips_v2)
Confirmed all the NA is gone.
```

```

Figure 2 Data Cleaning

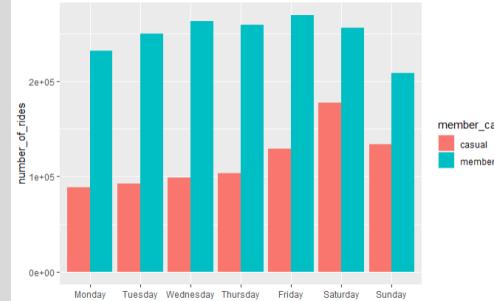


Figure 5 Daily number of rides casual and annual member

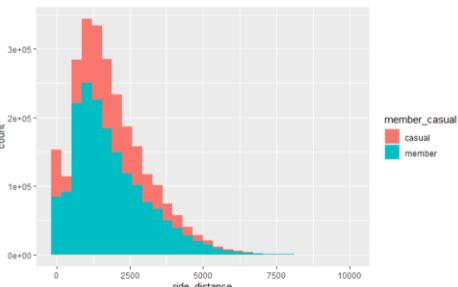


Figure 3 Total casual and annual members



Figure 6 Monthly number of rides length casual and annual

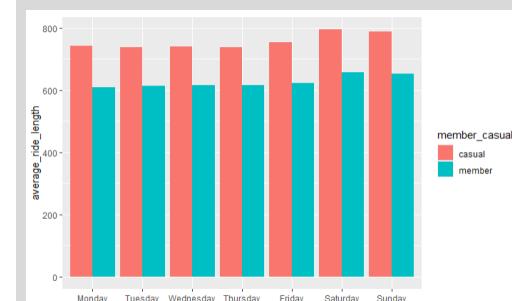


Figure 7 Daily number of rides length casual and annual

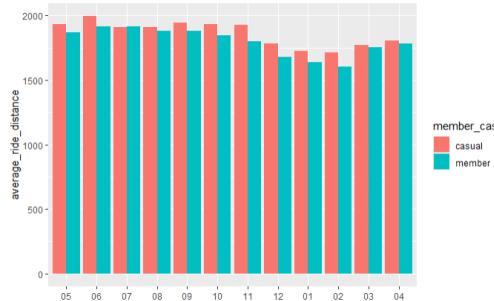


Figure 8 Monthly number of rides distance casual and annual

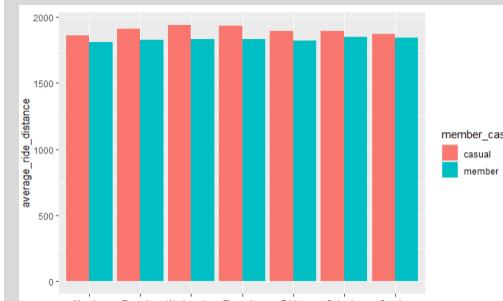


Figure 9 Daily number of rides distance casual and annual