

R Scripts Bicycle

Representation of Users

```
# Pie Chart with Percentages

slices <- c(33905, 150269)
lbls <- c("Casual", "Member")
pct <- round(slices/sum(slices)*100)
lbls <- paste(lbls, pct) # add percents to labels
lbls <- paste(lbls,"%",sep="") # ad % to labels
pie(slices,labels = lbls, col=rainbow(length(lbls)),
    main="Representation of Users")
```

Rides per Day Members

```
library(ggplot2)
library(ggthemes)
library(forcats)
library(dplyr)

# Create the data for the chart
rides_per_day<- c(22641,29375,24742,22640,20104,14779,15988)
days_of_week<- c("Mon","Tues","Wed","Thur","Fri", "Sat", "Sun")

data <- data.frame(rides_per_day,days_of_week)
data$days_of_week <- factor(data$days_of_week, levels = c( "Mon",
"Mon", "Tues", "Tues", "Wed", "Wed", "Thur", "Thur", "Fri", "Fri", "Sat", "Sat", "Sun" ))
data

|

ggplot(data, aes(days_of_week,rides_per_day))+
  geom_bar( stat="identity" , fill="salmon")+
  geom_text(aes(label = data$rides_per_day), vjust = 1.5, colour = "white") +
  ggtitle("Rides per Day Members")+
  labs(x = "Days of the week" , y="Number of rides per day")+
  theme_gdocs()
```

Rides per different times Casuals

```
library(ggplot2)
library(ggthemes)
library(forcats)
library(dplyr)
# Create the data for the chart
rides_per_time_period<- c(12218,12144,9930,3286)
time_of_day<- c("Before noon","Between 12-4","Between 4-8","After 8pm")

data <- data.frame(rides_per_time_period, time_of_day)
data$time_of_day <- factor(data$time_of_day,
| | | | | | | | levels =c("Before noon","Between 12-4","Between 4-8","After 8pm"))
data

ggplot(data, aes(time_of_day,rides_per_time_period))+
  geom_bar( stat="identity" , fill='gold')+
  geom_text(aes(label = data$rides_per_time_period), vjust = 1.5, colour = "black", size=6) +
  ggtitle("Rides per different times Casual")+
  labs(x= "Time blocks" , y="Number of rides per time period")+
  theme_classic()
```

Ride Types Based On User

```
# library
library(ggplot2)
library(ggthemes)
library(forcats)
library(dplyr)

# create a dataset
user <- c("casual","casual","casual","member", "member", "member")
bike_type <- c("electric" , "docked" , "classic")
number_of_rides <- c(24361,1682,13862,73908,0,76361)
data <- data.frame(user,bike_type,number_of_rides)

# Stacked
ggplot(data, aes(fill=bike_type, y=number_of_rides, x=user)) +
  geom_bar(position="stack", stat="identity")+
  geom_text(aes(label = number_of_rides) ,position= position_stack(vjust = .5), colour = "black" ,size =4) +
  ggtitle("Ride Types Based On User")+
  theme_stata()

data
x<-rep(c(1,2,3,4),times=5)
```