Volunteer participation in SGSF's Events

SUPERGirls SHINE Foundation

2023-04-23

Our goals of interest in this project would be to visualize the total number of hours of participation of SGSF volunteers by their names in SGSF's past events in order to know who is the number 1 volunteer whith the highest hours of participations.

```
library(tidyverse)
library(RColorBrewer)
library(plotly)
library(plyr)
library(gt)
library(stringr)
library(stringi)
library(mapquestr)
library(leaflet)
```

Here is a glimpse of what we will be working with:

```
data<- readr::read_csv("SGSF Volunteer Tracker.csv")
colnames(data)
```

```
##  [1] "Last Name"            "First Name"           "Company"
##  [4] "if applicable, School" "Position Title"       "Matching"
##  [7] "Email Address"        "Cell Number"          "Status Updates"
## [10] "3/20/2023"            "3/4/2023"             "2/11/2023"
## [13] "2/4/2023"             "12/19/2023"           "9/23/2023"
## [16] "...16"                "...17"
```

The dates refers to SGSF's events. For confidentiality, the dataset won't be shown.

Prior to counting total number of hours of participation of SGSF volunteers by their names, the data needs some preprocessing steps:

1. Volunteers' Last Name and Fist Name combination in one column.
2. Replacing the missing values with "not present".
3. Adding the "Presence_counting" variable which is the counting of total hours attended events for each volunteer.

```
data$Name<- paste(data$`Last Name`,",",data$`First Name`)
data<- data[c(10:15,18)]

data<-data %>% replace(is.na(.), 0) %>% mutate(Presence_counting = rowSums(.[1:6]))
```

Volunteer Participation in SGSF's Events Number of Total Participation Hours
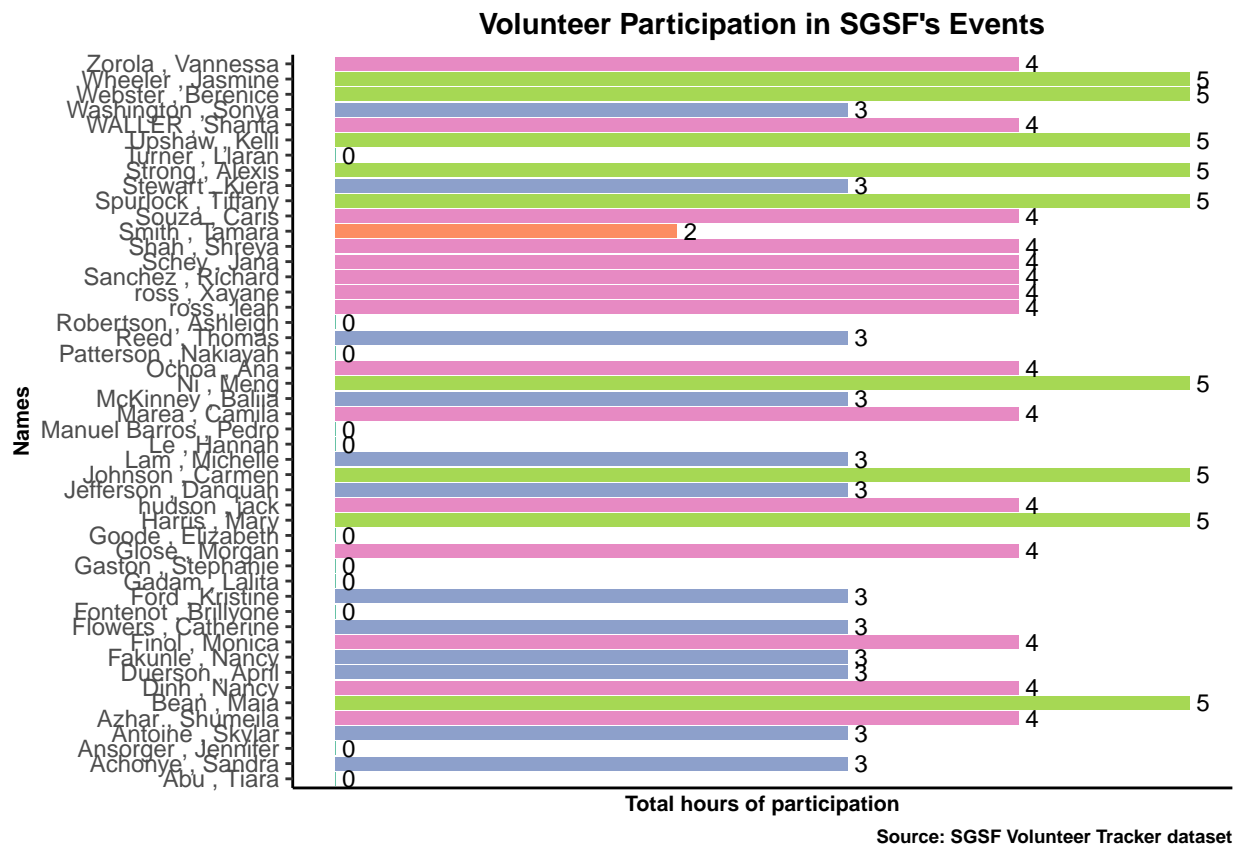
```
colourCount = length(unique(data$Presence_counting))
getPalette = colorRampPalette(brewer.pal(colourCount, "Set2"))

p1<-ggplot(data,  aes(x= Name,y= Presence_counting, fill= factor(data$Presence_counting)))+

  geom_bar(stat = 'identity')+
  ggtitle("Volunteer Participation in SGSF's Events") +
  theme_classic()+
  coord_flip()+
  geom_text(aes(label=Presence_counting),size = 3, hjust = -0.5,position = position_stack(vjust = 1),
    inherit.aes = TRUE)+
    labs(y="Total hours of participation",x="Names", caption = "Source: SGSF Volunteer Tracker dataset")
  scale_y_continuous(labels = NULL, breaks = NULL,limits = c(0,5))+

  theme(legend.position = "none",
      title = element_text(size = 9, face = "bold"),
       plot.title = element_text(hjust = 0.5),
       axis.title.x = element_text(size = 8, face = "bold"),
       axis.title.y = element_text(size = 8, face = "bold"),
       axis.ticks.x =  element_blank(),

       panel.grid.minor = element_blank())
p1 +scale_fill_manual(values =getPalette(colourCount))
```

Volunteer Participation in SGSF's Events

Source: SGSF Volunteer Tracker dataset

Volunteer Participation in SGSF's Events in Number of Total Participation Hours in Order
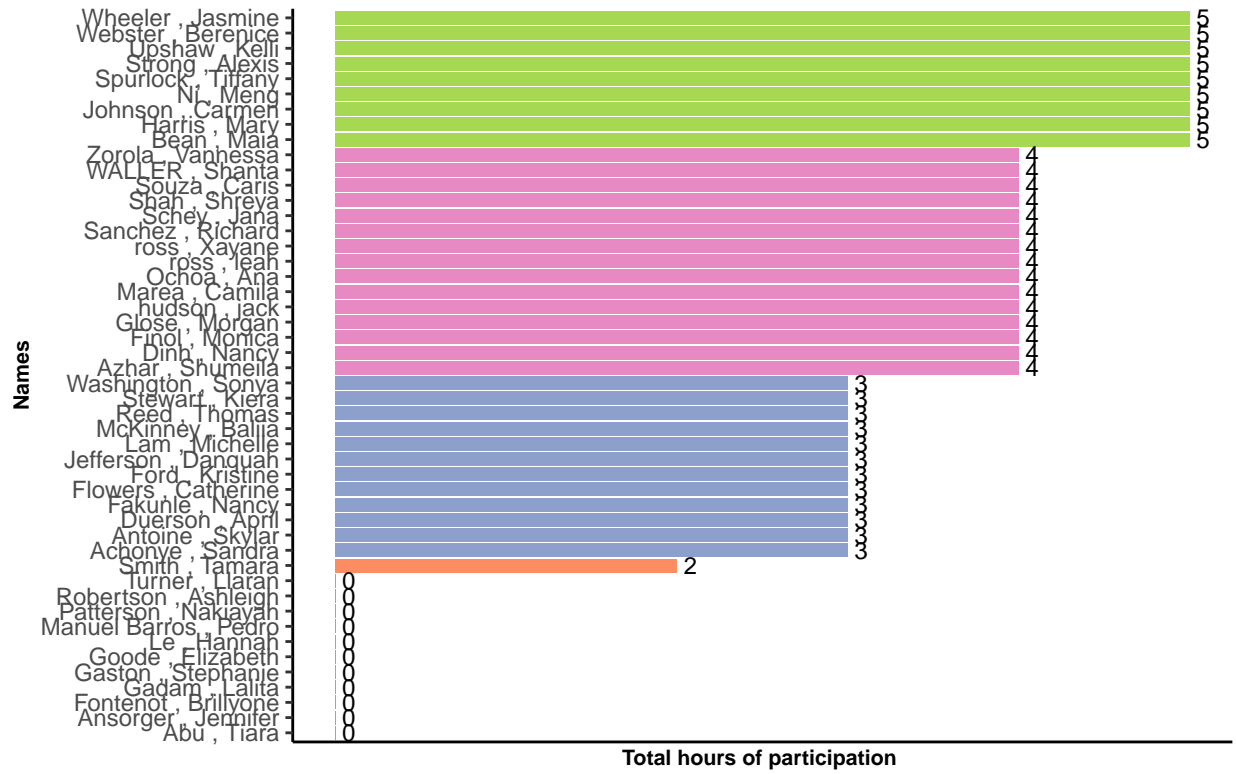
```r
p2<-ggplot(data,  aes(x= reorder(Name, + Presence_counting),y= Presence_counting, fill= factor(data$Pres

  geom_col(stat = 'identity')+
  ggtitle("Volunteer Participation in SGSF's Events") +
  theme_classic()+
  coord_flip()+
  geom_text(aes(label=Presence_counting),size = 3, hjust = -0.5,position = position_stack(vjust = 1),
    inherit.aes = TRUE)+
    labs(y="Total hours of participation ",x="Names", caption = "Source: SGSF Volunteer Tracker dataset
  scale_y_continuous(labels = NULL, breaks = NULL)+

  theme(legend.position = "none",
      title = element_text(size = 9, face = "bold"),
      plot.title = element_text(hjust = 0.5),
      axis.title.x = element_text(size = 8, face = "bold"),
      axis.title.y = element_text(size = 8, face = "bold"),
      axis.ticks.x =  element_blank(),

      panel.grid.minor = element_blank())
p2 +scale_fill_manual(values =getPalette(colourCount))
```

Volunteer Participation in SGSF's Events

Names

Total hours of participation

""