

Graded Assignment

Data Visualization 2024-2025

Your student number

Task 1. Data explorations (45%)

Task 1a)

```
# Import data:
vanEmissions <- read_csv2("Data/VanEmissionsLong.csv")

## i Using "','" as decimal and "'.'" as grouping mark. Use `read_delim()` for more control.
## Rows: 24 Columns: 3
## -- Column specification -----
## Delimiter: ";"
## chr (1): EmissionClass
## dbl (2): Year, Percentage
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.

# Convert doubles to factors
vanEmissions$Year <- factor(vanEmissions$Year)
vanEmissions$EmissionClass <- factor(vanEmissions$EmissionClass)

# Add your code here
```

Task 1b)

```
# Import data:
speedTickets2023 <- read_csv2("Data/speedTickets_perMonthPerProvince.csv")

## i Using "','" as decimal and "'.'" as grouping mark. Use `read_delim()` for more control.
## Rows: 144 Columns: 4
## -- Column specification -----
## Delimiter: ";"
## chr (2): Province, geometry
## dbl (2): Month, Count
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.

# Add your code here
```

Task 1c)

```
# Load data as a data frame, set variables to numeric
marvel <- read.csv2("Data/Marvel.csv")
marvel$AudienceScore <- as.numeric(marvel$AudienceScore)
marvel$CriticsScore <- as.numeric(marvel$CriticsScore)
marvel$WorldGross <- as.numeric(marvel$WorldGross)
```

```
# Add your code here
```

Task 2. Remake the plot (50%)

```
# Import data:
potentialsolarenergyUSA <- st_read("Data/potentialsolarenergyUSA_shp/potentialsolarenergyUSA.shp")

## Reading layer `potentialsolarenergyUSA' from data source
##   `/Users/SanneWillems/Library/CloudStorage/OneDrive-UniversiteitLeiden/Onderwijs/DataVisualisation/'
##   using driver `ESRI Shapefile'
## Simple feature collection with 51 features and 2 fields
## Geometry type: MULTIPOLYGON
## Dimension:      XY
## Bounding box:   xmin: -179.1435 ymin: 18.90612 xmax: 179.7809 ymax: 71.4125
## Geodetic CRS:   WGS 84
```

```
# Add your code here
```