Vision Zero - Testing

Packages:

```r
library(sf)
```

```
Linking to GEOS 3.11.2, GDAL 3.8.2, PROJ 9.3.1; sf_use_s2() is TRUE
```

```r
library(ggplot2)
library(dplyr)
```

```
Attache Paket: 'dplyr'

Die folgenden Objekte sind maskiert von 'package:stats':

    filter, lag

Die folgenden Objekte sind maskiert von 'package:base':

    intersect, setdiff, setequal, union
```

```r
library(jsonlite)
```

Loading and Cleaning Data

Loading dataframes (GeoJSON Format)

```
Reading layer `strassen_wege' from data source
  `C:\Users\micha\OneDrive\Dokumente\GitHub\Kerstin_Michael\Test_M\strassen_wege.geojson'
  using driver `GeoJSON'
Simple feature collection with 7688 features and 8 fields
Geometry type: LINESTRING
Dimension:     XY
Bounding box:  xmin: 7.555919 ymin: 47.51977 xmax: 7.693801 ymax: 47.60093
Geodetic CRS:  WGS 84


Reading layer `velorouten' from data source
  `C:\Users\micha\OneDrive\Dokumente\GitHub\Kerstin_Michael\Test_M\velorouten.geojson'
  using driver `GeoJSON'
Simple feature collection with 21 features and 9 fields
Geometry type: LINESTRING
Dimension:     XY
Bounding box:  xmin: 7.55692 ymin: 47.53042 xmax: 7.657115 ymax: 47.59597
Geodetic CRS:  WGS 84


Reading layer `unfaelle' from data source
  `C:\Users\micha\OneDrive\Dokumente\GitHub\Kerstin_Michael\Test_M\unfaelle.geojson'
  using driver `GeoJSON'
Simple feature collection with 10848 features and 12 fields
Geometry type: POINT
Dimension:     XY
Bounding box:  xmin: 7.556191 ymin: 47.52373 xmax: 7.692592 ymax: 47.60021
Geodetic CRS:  WGS 84
```

Specific dataframes:

```r
strassen_wege_hvs <- strassen_wege %>% filter(snh == "HVS")

unfaelle_velo_23 <- unfaelle %>% filter(fahrrd_bet == "true"
                                        & jahr == "2023"
                                        & typ != "Fussgängerunfall"
                                        & typ != "Parkierunfall")
# 122 Unfälle
```

Plotting Data

```
p <- ggplot() +
  geom_sf(data = strassen_wege, color = "grey", size = 1, alpha = 0.5) +
  geom_sf(data = strassen_wege_hvs, color = "purple", size = 10, alpha = 0.3) +
  geom_sf(data = velorouten, color = "darkgreen", size = 10, alpha = 0.3) +
  geom_sf(data = unfaelle_velo_23, color = "red", size = 0.1) +
  theme_void() +
  labs(title = "Comparison of Veloroutes and Mainstreet (Accidents 2023)") +
  theme(legend.position = "none")

print(p)
```

Comparison of Veloroutes and Mainstreet (Accidents 2023)