SOC 4650/5650: Lecture 01 Functions

Christopher Prener, Ph.D.

Spring 2020

Packages

- `base`[1]
- `here`
- `leaflet`
- `magrittr`[2]
- `readr`[3]
- `sf`
- `utils`[4]

[1] Will already be installed.

[2] Installed automatically by `tidyverse`.

[3] Installed automatically by `tidyverse`.

[4] Will already be installed.

Working with Packages

Installing Packages from CRAN

```
utils::install.package("packageName")
```

Updating Packages

```
utils::update.packages()
```

Loading Packages

```
base::library("packageName")
```

Reading Data

Reading Tabular Data

```
readr::read_csv(filepath)
```

Reading Tabular Data

```
sf::st_read(filepath, stringsAsFactors = FALSE)
```

Assign Data to Object

```
dataFrame <- dataSource
```

Opening Spreadsheet View

```
utils::View(dataFrame)
```

View Structure of Object

```
utils::str(dataFrame)
```

Pipe Operator

```
%>%
```

leaflet

Create Map

```
leaflet::leaflet(data = dataFrame)
```
[5]

[5] The data argument is optional.

Add Open Street Map Base

```
leaflet::addTiles()
```

Add Other Basemap

```
leaflet::addProviderTiles(providers$basemapName)
```

Add Single Marker

```
leaflet::addMarkers(lng = longitudeValue, lat = latitudeValue,
  popup = "popup text")
```

Add Markers from Data

```
leaflet::addMarkers(lng = ~longitudeVar, lat = ~latitudeVar,
  popup = ~textVar)
```