

SOC 4650/5650: Exercise 01c - Your First Maps

Christopher Prener, Ph.D.

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Directions

We'll work through the following code together to introduce some concepts about how RStudio works and to make some simple interactive maps. The course website page for this lecture contains a walk through of these functions as well.

Installing Dependencies

1. Install devtools:

```
install.packages("devtools")
```

2. Load devtools:

```
library(devtools)
```

3. Install stlData:

```
install_github("chris-prener/stlData")
```

4. Load stlData:

```
library(stlData)
```

5. Install leaflet:

```
install.packages("leaflet")
```

6. Load leaflet:

```
library(leaflet)
```

Map 1a: Morrissey Hall

7. Create a simple map:

```
leaflet() %>%
  addTiles() %>%
  addMarkers(lng=-90.237104, lat=38.637547, popup="Morrissey Hall")
```

Map 1b: Morrissey Hall with Different Basemap

8. Explore alternative basemaps:

```
names(providers)
```

9. Create a second map:

```
leaflet() %>%
  addProviderTiles(providers$CartoDB.Positron) %>%
  addMarkers(lng=-90.237104, lat=38.637547, popup="Morrissey Hall")
```

Loading and Exploring Data

10. Load some sample data from the `sluData` package into a data frame:

```
sluData <- sluPlaces
```

11. Create a spreadsheet like view of the data frame:

```
View(sluData)
```

12. List the structure of the data frame:

```
str(sluData)
```

Map 2: SLU Campus Landmarks

13. Create a third map:

```
leaflet(data = sluData) %>%
  addProviderTiles(providers$CartoDB.Positron) %>%
  addMarkers(lng = ~lng, lat = ~lat, popup = ~name)
```