

# *SOC 4650/5650: Lecture 01 Functions*

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## *Packages*

- base<sup>1</sup>
  - devtools
  - leaflet
  - magrittr<sup>2</sup>
  - utils<sup>3</sup>
- <sup>1</sup> Will already be installed.
- <sup>2</sup> Installed automatically by leaflet.
- <sup>3</sup> Will already be installed.

## *Working with Packages*

### *Installing Packages from CRAN*

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

### *Installing Packages from GitHub*

```
devtools::install_github("username/repoName")
```

### *Updating Packages*

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

### *Loading Packages*

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

### *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)4
```

<sup>4</sup> 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)
```