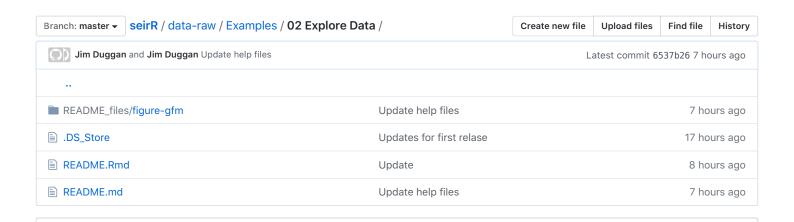
## ↑ JimDuggan / seirR Private



## © Exploring available data

## Welcome to package seirR v0.0.0.1

The package downloads up-to-date COVID-19 numbers from the https://covid.ourworldindata.org/data/ecdc/full\_data.csv.

This data is stored in the date\_env environment, and can be accessed. The following is the process for doing this

• First, load in the libraries, and include ggplot2 for visualisation, and dplyr and tidyr for data manipulation.

library(seirR)

EREADME.md

```
## Checking https://covid.ourworldindata.org/data/ecdc/full_data.csv for data update...
## Loading https://covid.ourworldindata.org/data/ecdc/full_data.csv to global environment data_env
library(ggplot2)
library(dplyr)

##
## Attaching package: 'dplyr'

## filter, lag

## The following objects are masked from 'package:stats':
##
## intersect, setdiff, setequal, union
```

• Explore the data contained in the R environment data\_env

data\_env\$covid\_data

library(tidyr)

```
## # A tibble: 8,195 x 6
                 Country ReportedNewCases ReportedNewDeat... ReportedTotalCa...
      <date>
                                     <dbl>
                                                       <dbl>
                                                                         <dbl>
                 <chr>
## 1 2019-12-31 Afghan...
                                         0
                                                           0
                                                                              0
## 2 2020-01-01 Afghan...
                                          0
                                                            0
                                                                              0
## 3 2020-01-02 Afghan...
                                         0
                                                            0
                                                                              0
## 4 2020-01-03 Afghan...
                                         0
                                                            0
                                                                              0
## 5 2020-01-04 Afghan...
                                         0
                                                            a
                                                                              a
## 6 2020-01-05 Afghan...
                                         a
                                                                              0
                                                            a
                                          0
                                                            0
                                                                              0
## 7 2020-01-06 Afghan...
## 8 2020-01-07 Afghan...
                                          0
                                                            0
                                                                              0
                                          0
                                                            0
                                                                              0
## 9 2020-01-08 Afghan...
                                          0
                                                            0
## 10 2020-01-09 Afghan...
                                                                              0
## # ... with 8,185 more rows, and 1 more variable: ReportedTotalDeaths <dbl>
```

Filter out a country of interest, and reshape to tidy data format

Explore the re-shaped dataset

ds\_piv

```
## # A tibble: 186 x 4
##
     Date
                Country
                             Measure
                                               Number
##
      <date>
                 <chr>
                             <chr>
                                                <dbl>
## 1 2019-12-31 South Korea ReportedNewCases
                                                    0
## 2 2019-12-31 South Korea ReportedNewDeaths
                                                    0
## 3 2020-01-01 South Korea ReportedNewCases
                                                    0
## 4 2020-01-01 South Korea ReportedNewDeaths
                                                    a
## 5 2020-01-02 South Korea ReportedNewCases
                                                    0
## 6 2020-01-02 South Korea ReportedNewDeaths
                                                    0
## 7 2020-01-03 South Korea ReportedNewCases
## 8 2020-01-03 South Korea ReportedNewDeaths
                                                    0
## 9 2020-01-04 South Korea ReportedNewCases
## 10 2020-01-04 South Korea ReportedNewDeaths
## # ... with 176 more rows
```

• Visualise some of the results

```
ggplot(ds_piv,aes(x=Date,y=Number,colour=Measure))+
geom_point()+geom_line()
```

