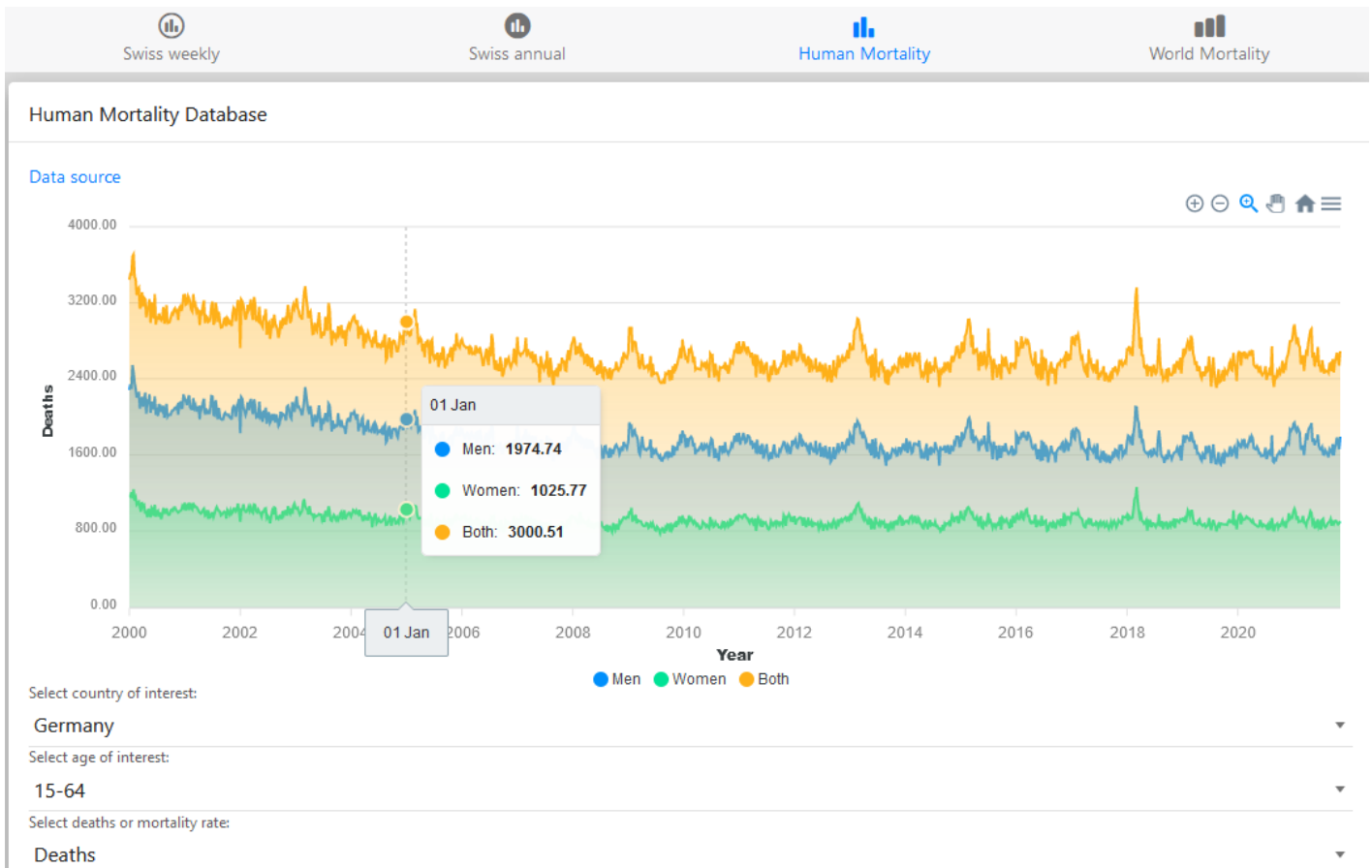


# Mortality shinyMobile app

## Source code of shinyMobile mortality app



```
library(shiny)
library(shinyMobile)
library(apexcharter)
library(dplyr)

w_path <- './'
deaths_y_swiss <- fst::read_fst(paste0(w_path, 'deaths_1803_2020.fst'))
deaths_w_swiss <- fst::read_fst(paste0(w_path, 'deaths_weekly.fst'))
w_mortality <- fst::read_fst(paste0(w_path, 'worldmortality.fst'))
mortality <- fst::read_fst(paste0(w_path, 'mortality.fst'))

ui <- f7Page(title = "Mortality over past years", options = list(theme="auto"),
             f7Tabs(animated = TRUE,
```

```

f7Tab(tabName = "Swiss weekly", icon = f7Icon("chart_bar_circle"), active =
TRUE,
      f7Shadow(intensity = 10, hover =
TRUE,
      f7Card(title = "Deaths per week in Switzerland separated
in 2 age groups",
      f7Link(label = "Data source", href =
"https://www.bfs.admin.ch/bfs/en/home/statistics/health/state-health/mortality-causes-
death.assetdetail.12607336.html"),
apexchartOutput("weekplot"),
      f7Link(label = "Source code of this app", href =
"https://blog.analysed.ch/books/analysedch-apps/page/mortality-shiny-mobile-
app"))
    )
  ),
  f7Tab(tabName = "Swiss annual", icon = f7Icon("chart_bar_circle_fill"),
active = FALSE,
      f7Shadow(intensity = 10, hover =
TRUE,
      f7Card(title = "Deaths since 1803 separated by
sex",
      f7Link(label = "Data source", href =
"https://www.bfs.admin.ch/bfs/en/home/statistics/catalogues-
databases/data.assetdetail.17664404.html"),
apexchartOutput("yearplot"),
      f7Select(inputId = "swiss_y", label = "Demographic
feature: ",
      choices = c('Under 20 years', '20-39
years', '40-64 years', '65-79 years', '80 years or more', 'Age unknown', 'Swiss', 'Foreigner',
'Nationality unknown', 'Single', 'Married', 'Widowed', 'Divorced', 'Unmarried', 'In a registered
partnership', 'Partnership dissolved', 'Marital status unknown', 'Deaths - total'), selected =
'20-39 years')
    )
  ),
  f7Tab(tabName = "H. mortality data", icon = f7Icon("chart_bar_alt_fill"),
active = FALSE,
      f7Shadow(intensity = 10, hover =
TRUE,

```

```

f7Card(title = "Human Mortality Database",
        f7Link(label = "Data source", href =
"https://www.mortality.org/"),
        apexchartOutput("worldplot"),
        f7Select(inputId = "world_country", label = "Select
country of interest:",
                  choices = c("Australia", "Austria",
"Belgium", "Bulgaria", "Canada", "Chile", "Croatia", "Czech Republic", "Denmark", "England
and Wales", "Estonia", "Finland", "France", "Germany", "Greece", "Hungary", "Iceland",
"Israel", "Italy", "Latvia", "Lithuania", "Luxembourg", "Netherlands", "New Zealand",
"Northern Ireland", "Norway", "Poland", "Portugal", "Russia", "S. Korea", "Scotland",
"Slovakia", "Slovenia", "Spain", "Sweden", "Switzerland", "Taiwan", "USA"), selected =
"Germany"),
        f7Select(inputId = "world_age", label = "Select age
of interest:",
                  choices = c('0-14', '15-64', '65-74', '75-
84', '85+', 'Total'), selected = '15-64'),
        f7Select(inputId = "world_rate", label = "Select
deaths or mortality rate:",
                  choices = c('Deaths', 'Rate'), selected =
'Deaths')
    )
  ),
  f7Tab(tabName = "W. mortality data", icon = f7Icon("chart_bar_fill"),
active = FALSE,
        f7Shadow(intensity = 10, hover =
TRUE,
        f7Card(title = "World Mortality
Dataset",
                f7Link(label = "Data source", href =
"https://github.com/akarlinsky/world_mortality"),
                apexchartOutput("world_mortality"),
                f7Select(inputId = "country_n", label = "Select
country:",
                        choices = c("Albania", "Andorra", "Antigua
and Barbuda", "Argentina", "Armenia", "Aruba", "Australia", "Austria", "Azerbaijan",
"Belarus", "Belgium", "Belize", "Bermuda", "Bolivia", "Bosnia", "Brazil", "Bulgaria",
"Canada", "Chile", "Colombia", "Costa Rica", "Croatia", "Cuba", "Cyprus", "Czechia", "Denmark",

```

```

"Dominican Republic", "Ecuador", "Egypt", "El Salvador", "Estonia", "Faroe
Islands", "Finland", "France", "French Guiana", "French
Polynesia", "Georgia", "Germany", "Gibraltar", "Greece", "Greenland", "Guadeloupe", "Guatemala", "Hong
Kong", "Hungary", "Iceland", "Iran", "Ireland", "Israel", "Italy", "Jamaica", "Japan", "Kazakhstan", "Kos
Caledonia", "New Zealand", "Nicaragua", "North
Macedonia", "Norway", "Oman", "Panama", "Paraguay", "Peru", "Philippines", "Poland", "Portugal", "Puerto
Rico", "Qatar", "Réunion", "Romania", "Russia", "San
Marino", "Serbia", "Seychelles", "Singapore", "Slovakia", "Slovenia", "South Africa", "South
Korea", "Spain", "Sweden", "Switzerland", "Taiwan", "Tajikistan", "Thailand", "Transnistria", "Tunisia",
Kingdom", "United States", "Uruguay", "Uzbekistan"), selected =
'Switzerland')
)
)
)
)
)

server = function(input, output, session) {

  output$weekplot <- renderApexchart({apex(data =
deaths_w_swiss,
                                type = "area", mapping = aes(x = Year, y = Deaths,
fill = Age)) %>%
  ax_yaxis(title = list(text = "Deaths")) %>%
  ax_xaxis(title = list(text = "Year"))})

  output$yearplot <- renderApexchart({apex(data = deaths_y_swiss %>% filter(demo_var ==
input$swiss_y),
                                type = "area", mapping = aes(x = year, y = deaths,
fill = sex)) %>%
  ax_yaxis(title = list(text = "Deaths")) %>%
  ax_xaxis(title = list(text = "Year"))})

  output$worldplot <- renderApexchart({
    apex(data = mortality %>% filter(CountryCode == input$world_country, Age==
input$world_age, Rate==input$world_rate),
        type = "area", mapping = aes(x = Year, y = Deaths, fill = Sex)) %>%
    ax_yaxis(title = list(text = "Deaths")) %>%
    ax_xaxis(title = list(text = "Year"))})

```

```
output$world_mortality <- renderApexchart({apex(data = w_mortality %>% filter(country_name
== input$country_n),

                                type = "area", mapping = aes(x = date, y =
deaths)) %>%
  ax_yaxis(title = list(text = "Deaths")) %>%
  ax_xaxis(title = list(text = "Year"))})

}

shinyApp(ui, server)
```

---

Revision #4

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