




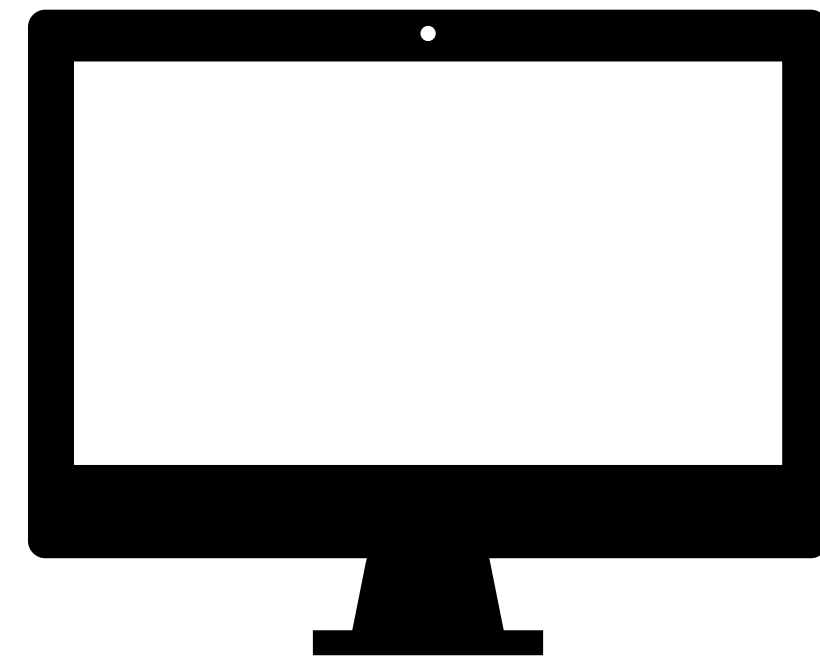
Building dashboards with flexdashboard

Mine Çetinkaya-Rundel



@minebocek 
mine-cetinkaya-rundel 
mine@rstudio.com 

gallery.shinyapps.io/un-women-dash



DEMO



Dashboards

- Built in layouts and UI elements
- Good venue for displaying automatically updating data
- May or may not be interactive



UI

- Static:
 - R code runs once and generates an HTML page
 - Generation of this HTML can be scheduled
- Dynamic:
 - Client web browser connects to an R session running on server
 - User input causes server to do things and send information back to client
 - Interactivity can be on client and server
 - Can update data in real time
- User potentially can do anything that R can do




Building a dashboard



1. Set up the YAML

```
---  
title: "UN Women Stats Explorer"  
output:  
  flexdashboard::flex_dashboard:  
    orientation: rows  
    social: menu  
    source_code: https://github.com/mine-cetinkaya-rundel/rladies-phl-shiny/blob/master/01-flexdash/un-women-dash.Rmd  
runtime: shiny  
---
```



UN Gender Stats Explorer

Dashboard

Data



Source Code



2. Pick a layout

```
1 ---
2 title: "Row Orientation"
3 output:
4   flexdashboard::flex_dashboard:
5     orientation: rows
6   ---
7
8   Row
9   -----
10
11  ### Chart 1
12
13  ```{r}
14
15  ```
16
17  Row
18  -----
19
20  ### Chart 2
21
22  ```{r}
23
24  ```
25
26  ### Chart 3
27
28  ```{r}
29
30  ```
31
```

Chart 1

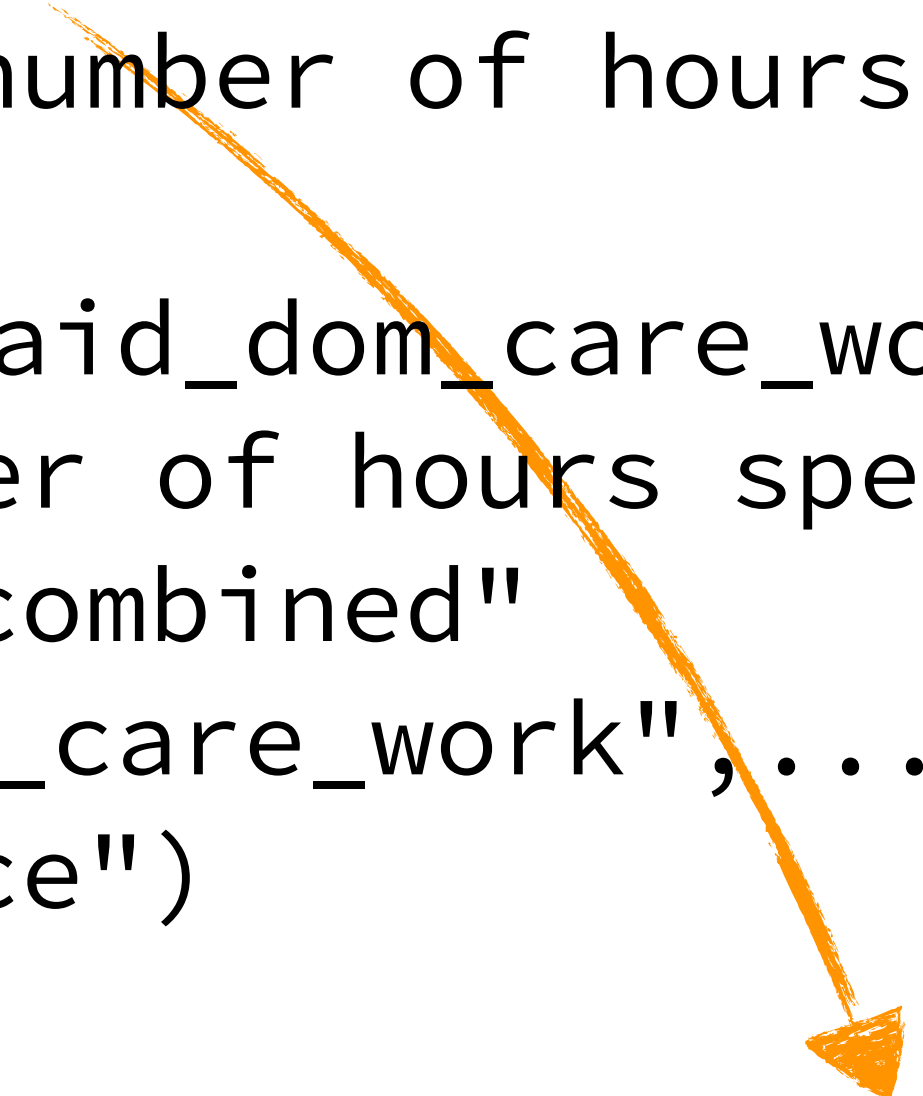
Chart 2

Chart 3



3. Use R Markdown and/or Shiny code to add components

```
selectInput(inputId = "x", label = "X-axis",  
  choices = c("Average number of hours spent on unpaid domestic  
and care work"  
    = "hrs_unpaid_dom_care_work",  
    "Average number of hours spent on paid and unpaid  
domestic and care work combined"  
    = "hrs_dom_care_work",...),  
  selected = "labor_force")
```

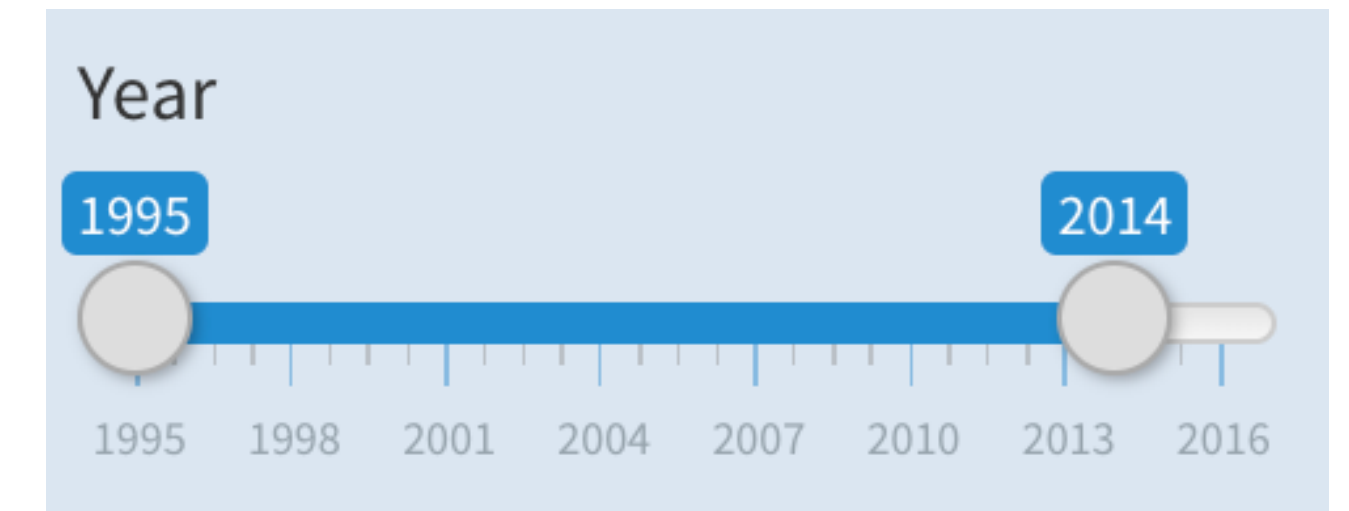


```
renderPlot({  
  ggplot(data = sel_data(),  
    mapping = aes_string(x = input$x, y = input$y, color = "region")  
  ) +  
  geom_point(size = 2, alpha = 0.8) +  
  theme_minimal() +  
  labs(x = xlab(), y = ylab(), color = "Region")  
})
```



Your turn

```
sliderInput(inputId = "year", label = "Year",  
            min = min_year, max = max_year,  
            value = c(2001, max_year), step = 1, sep = "")
```



- Open un-women-dash.Rmd
- Change the default selection of years to the min_year to 2014
- Run the app
- Select view mode in the drop down menu next to Run App to Preview in Viewer Pane
- Rerun the app



3_m 00_s

