
# Dashboards

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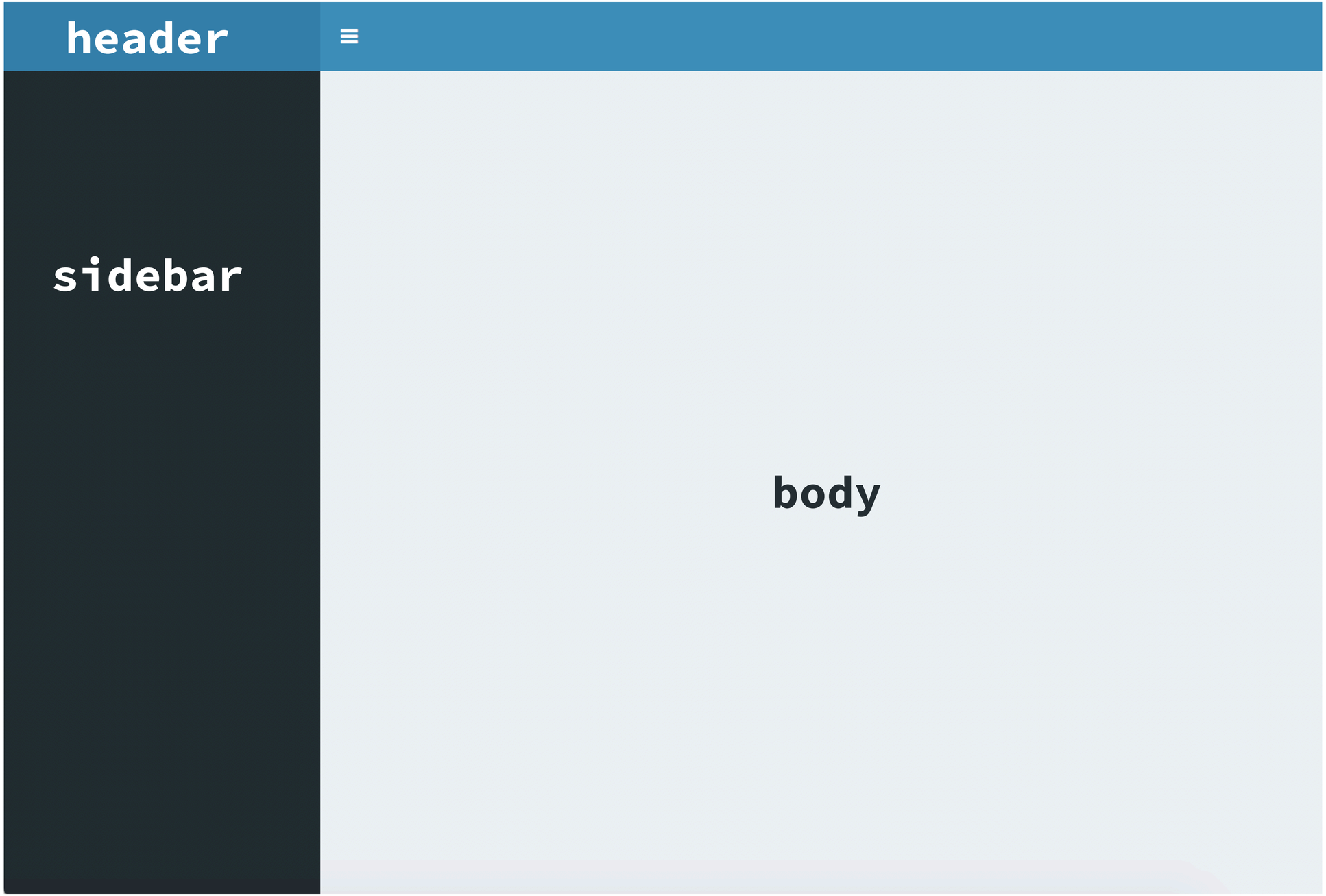
# flexdashboard vs. shinydashboard

| flexdashboard | shinydashboard |
|---|---|
| R Markdown | Shiny UI code |
| Super easy | Not quite as easy |
| Static or dynamic | Dynamic |
| CSS flexbox layout | Bootstrap grid layout |

# shinydashboard


header
sidebar
body

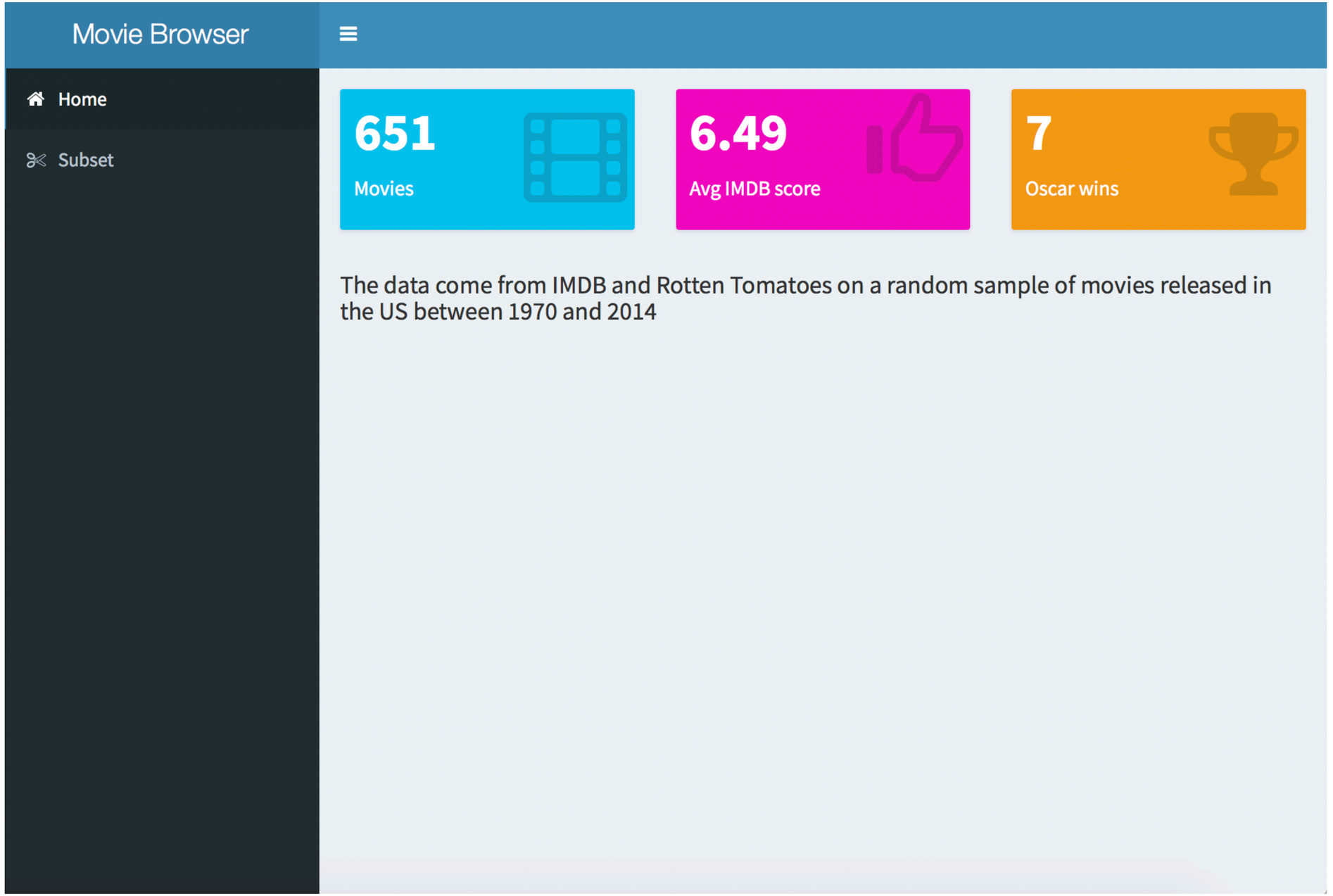
```
library(shiny)
library(shinydashboard)

ui <- dashboardPage(
  dashboardHeader(),
  dashboardSidebar(),
  dashboardBody()
)

server <- function(input, output) { }

shinyApp(ui, server)
```

**User interface**

controls the layout and appearance of dashboard

**Server function**

contains instructions needed to build dashboard


Movie Browser
Home
Subset
651
Movies
6.49
Avg IMDB score
7
Oscar wins
The data come from IMDB and Rotten Tomatoes on a random sample of movies released in the US between 1970 and 2014

Movie Browser

Home

Subset

## Select title type

Select a title type using the drop down menu below.

**Title type:**

Feature Film

**591**

Feature Film

**6.39**

Avg IMDB score

## Select variables to plot:

**Y-axis:**

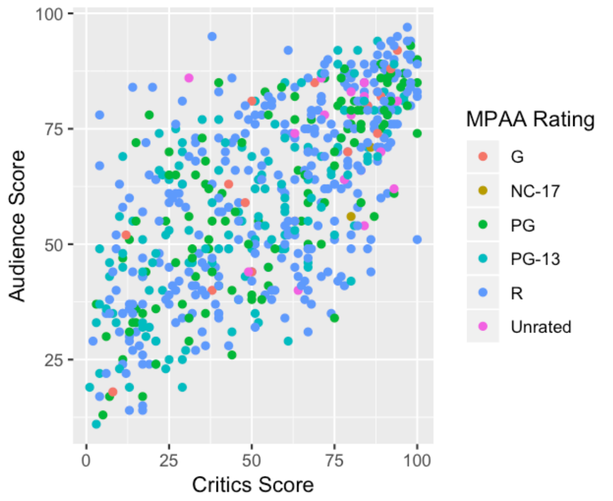
Audience Score

**X-axis:**

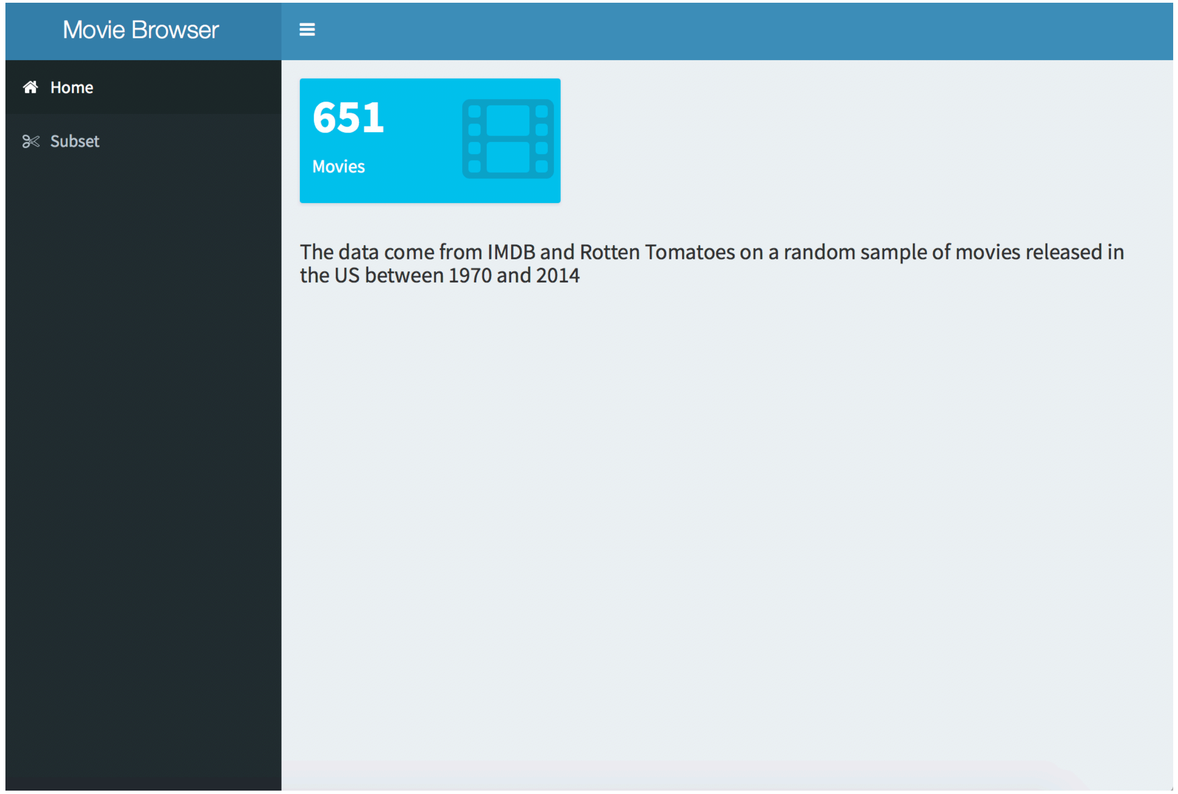
Critics Score

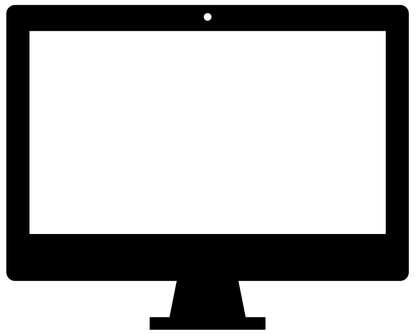
**Color by:**

MPAA Rating



# dashboards/moviedash-01.R

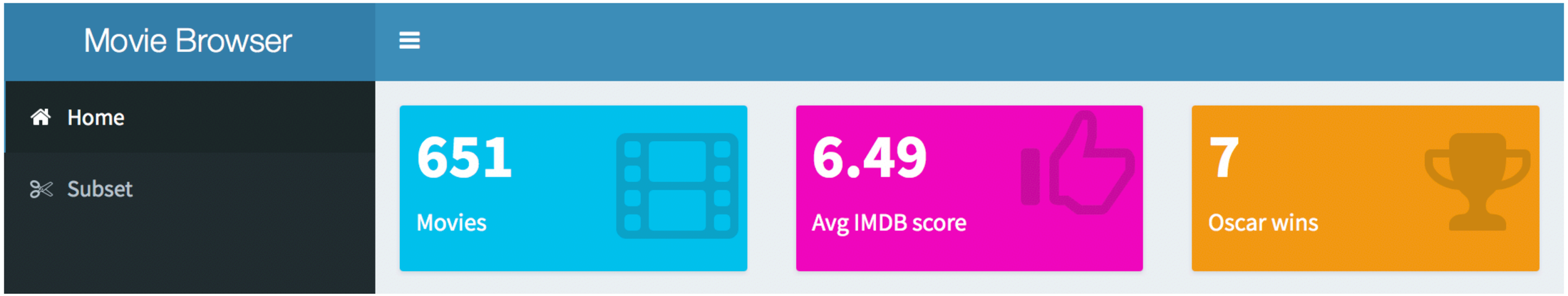


DEMO

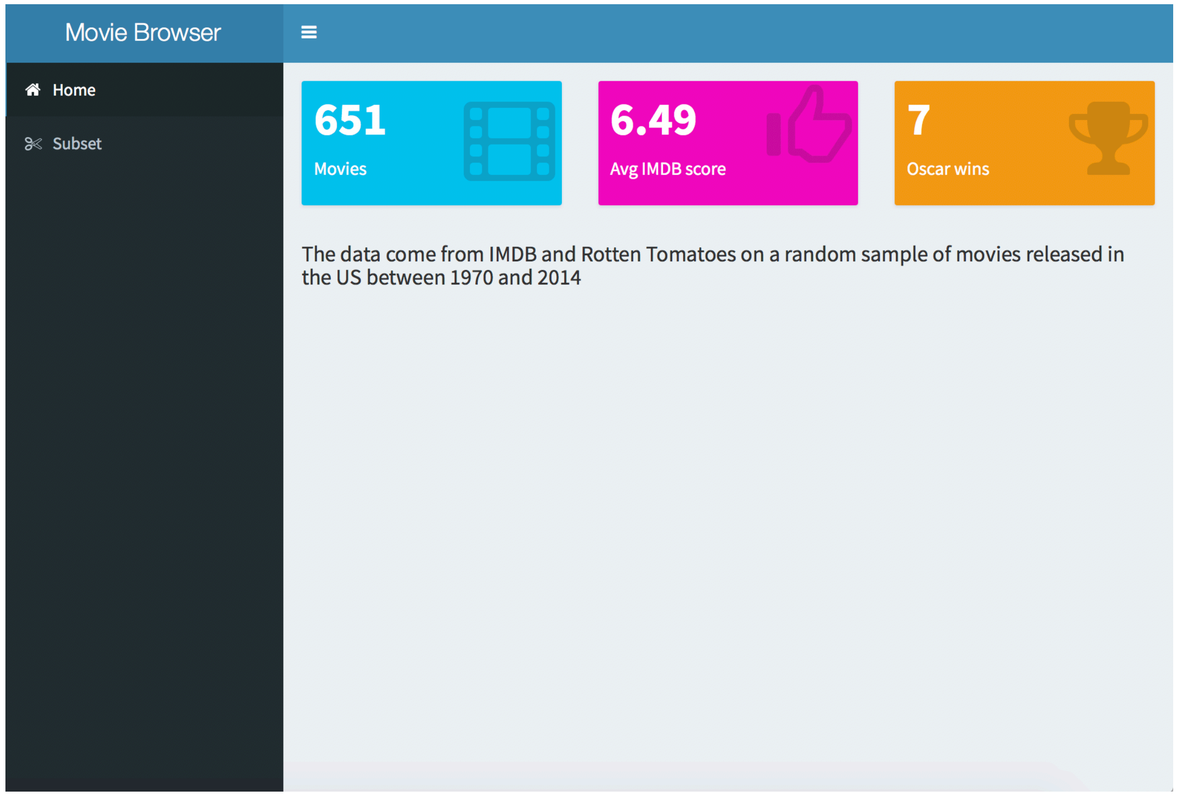
# Your turn

- Start with `dashboards/moviedash-01.R`
- Add two more value boxes: average IMDB rating and number of Oscar wins
- Try to match the colors and icons as well



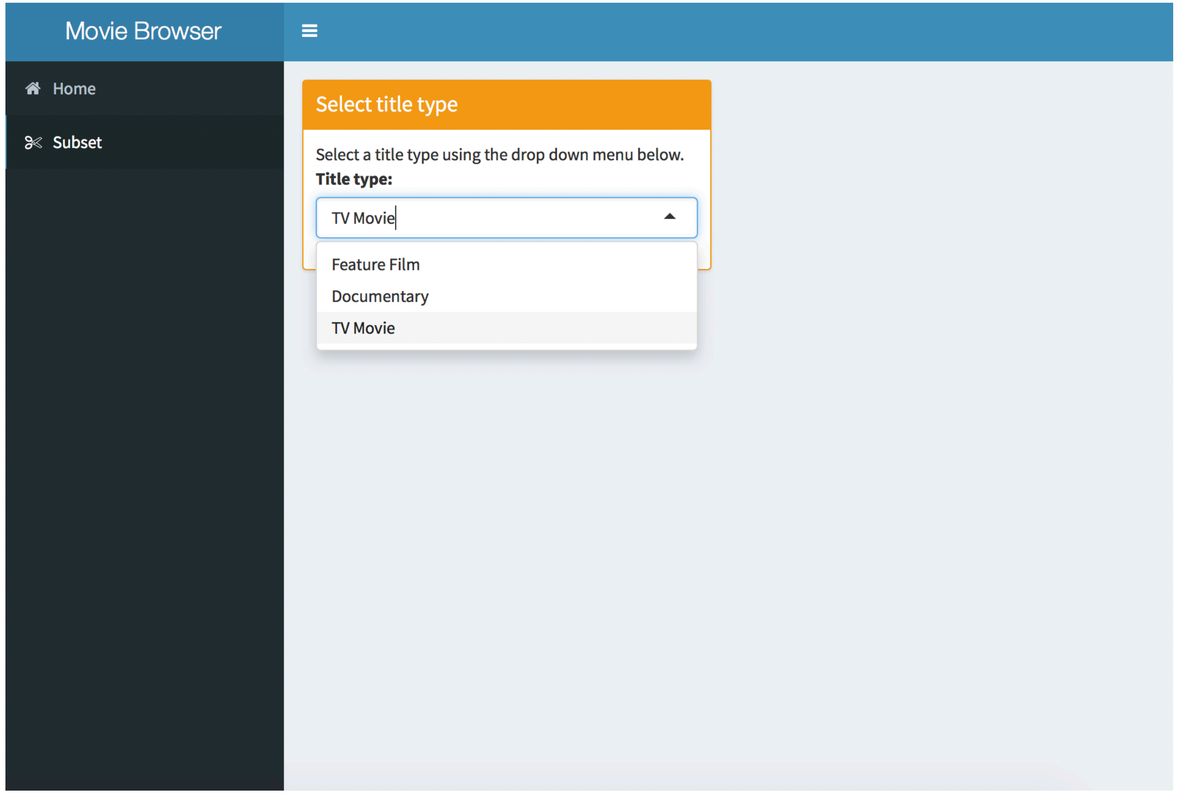

5m 00s

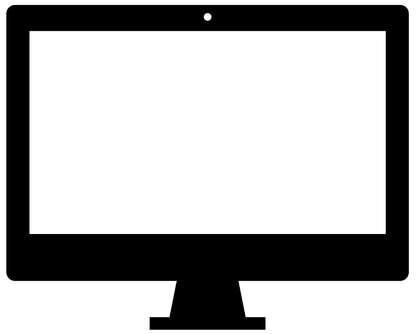
# dashboards/moviedash-02.R




**SOLUTION**

# dashboards/moviedash-03.R

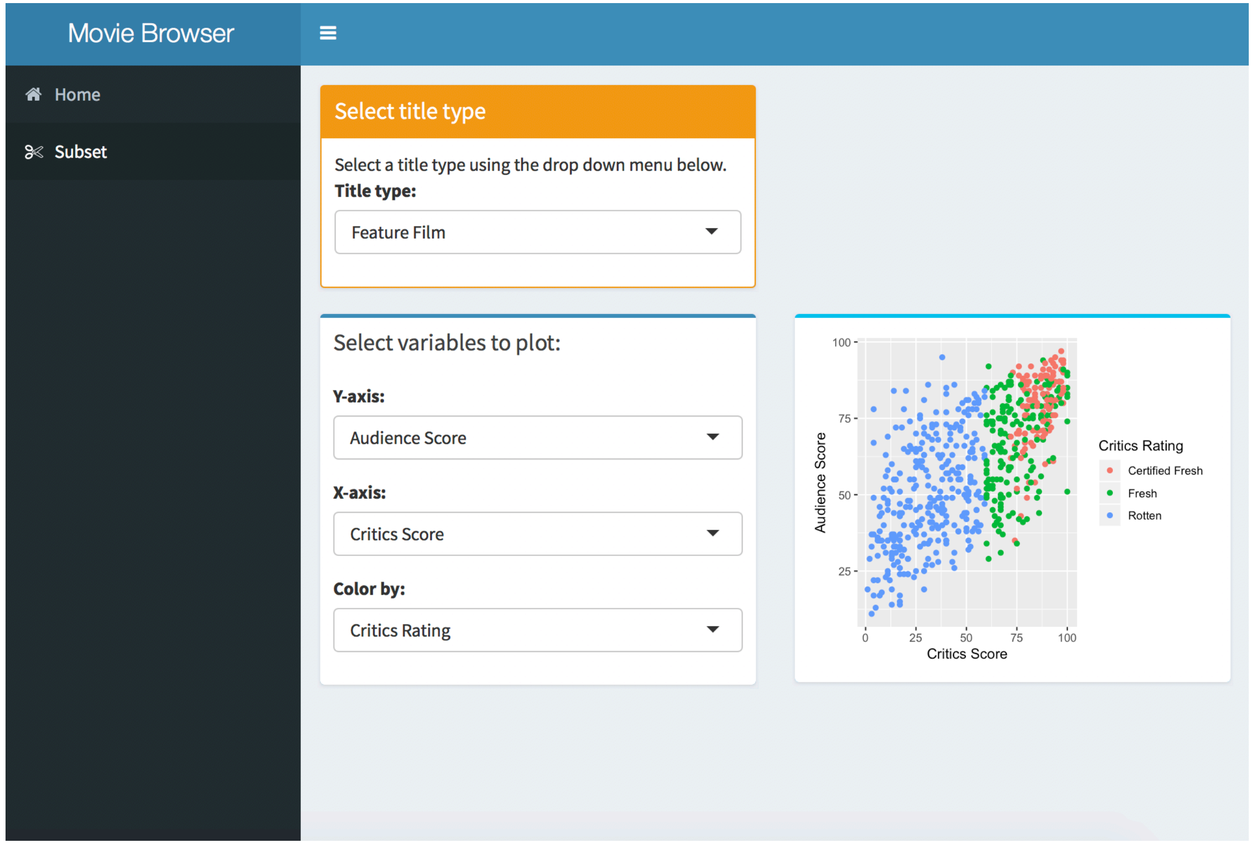


DEMO

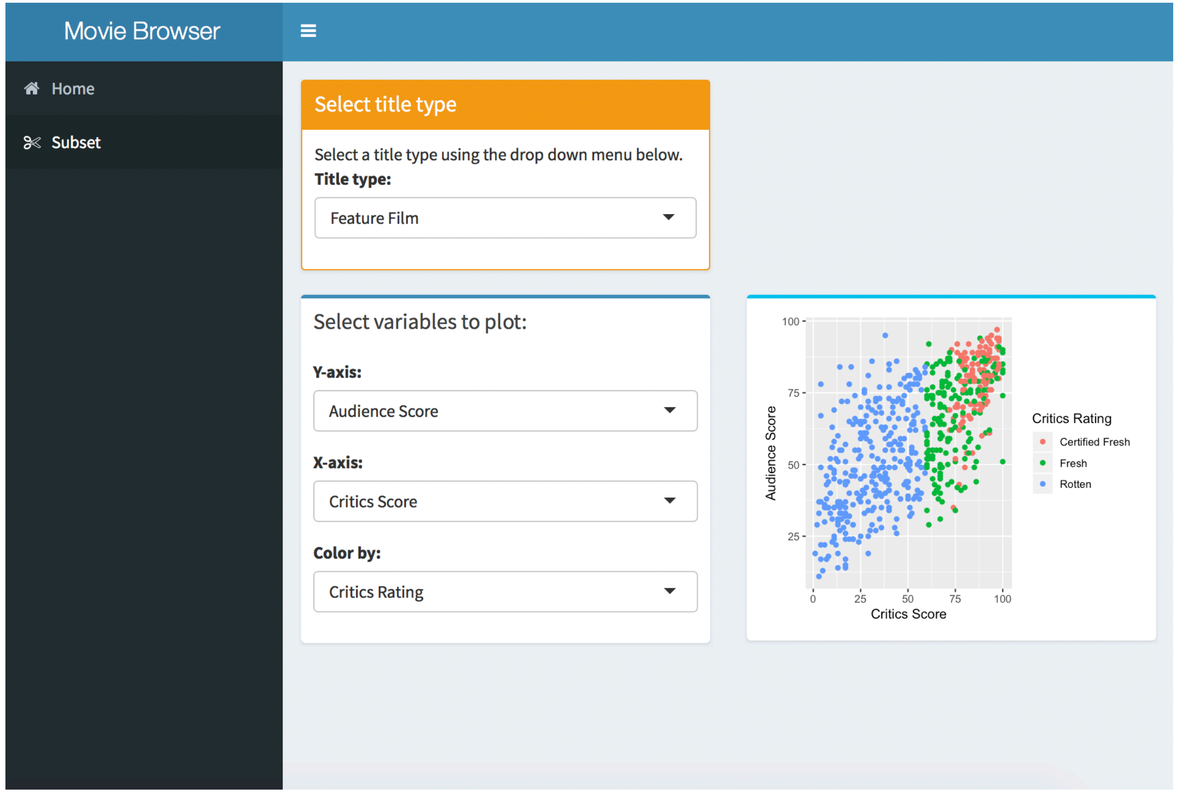
# Your turn

- Start with `dashboards/moviedash-04.R`
- Fill in the blanks to achieve the look / functionality on the right
- You can re-use code from earlier



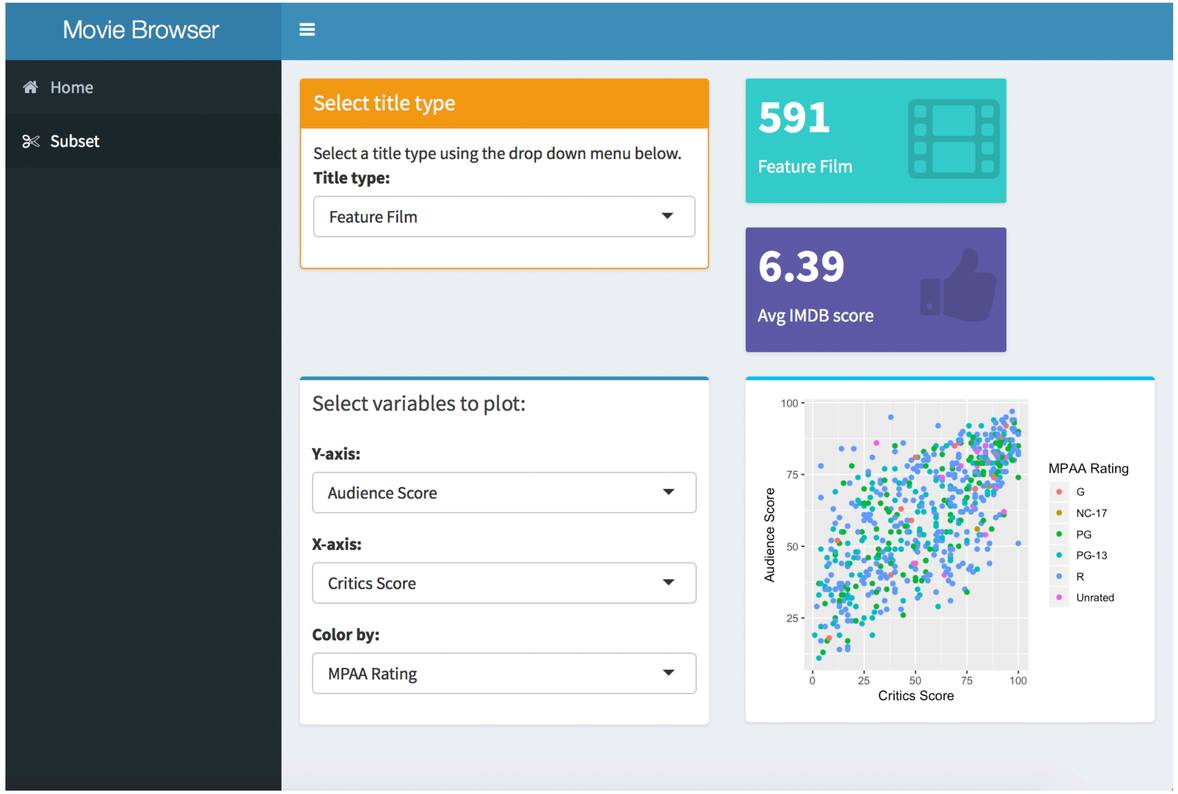

10m 00s

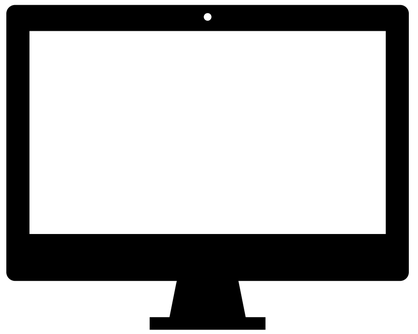
# dashboards/moviedash-05.R




**SOLUTION**

# dashboards/moviedash-06.R



DEMO

# flexdashboard

# Your turn

- `library(flexdashboard)`
- File → New file → R Markdown → From Template
- Create three plots that go in each of the panes using built-in R datasets or any data we have used in the workshop (or your own data)


# Your turn

- Open `flexdashboards/flexdash-01.Rmd`
- How is it different than Shiny apps and dashboards we have been building so far, how is it similar?
- Make a change to the layout of the dashboard, see http://rmarkdown.rstudio.com/flexdashboard/using.html#layout for help
- Change the theme of the dashboard, see http://rmarkdown.rstudio.com/flexdashboard/using.html#appearance for help

5m 00s

# Shiny documents

- Add `runtime: shiny` to header.
- Add `inputs` in code chunks.
- Add `renderXyz` functions in code chunks.
  - No need for `output$x <-` assignment, or for `xyzOutput` functions.

# Your turn

- Continue working on `flexdashboards/flexdash-01.Rmd`
- Add another UI widget, a radioButton, that allows the user to select whether the plot used to visualize the distribution of weight should be histogram or a violin plot


3m 00s

# Solution to the previous exercise

`flexdashboards/flexdash-02.Rmd`

**SOLUTION**

# Your turn

- Recreate the app `dashboards/moviedash-06` (or as much of it as you can) in the flexdashboard.