BUILDING WEB APPLICATIONS IN R WITH SHINY

Welcome to the course!

Movie browser

Y-axis:

Audience Score

X-axis:

Critics Score

Color by:

MPAA Rating

Alpha:

0 0.5 1

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

Size:

0 2 5

0 1 2 3 4 5

☑ Show data table

Plot title

Audience Score vs. IMDB Rating

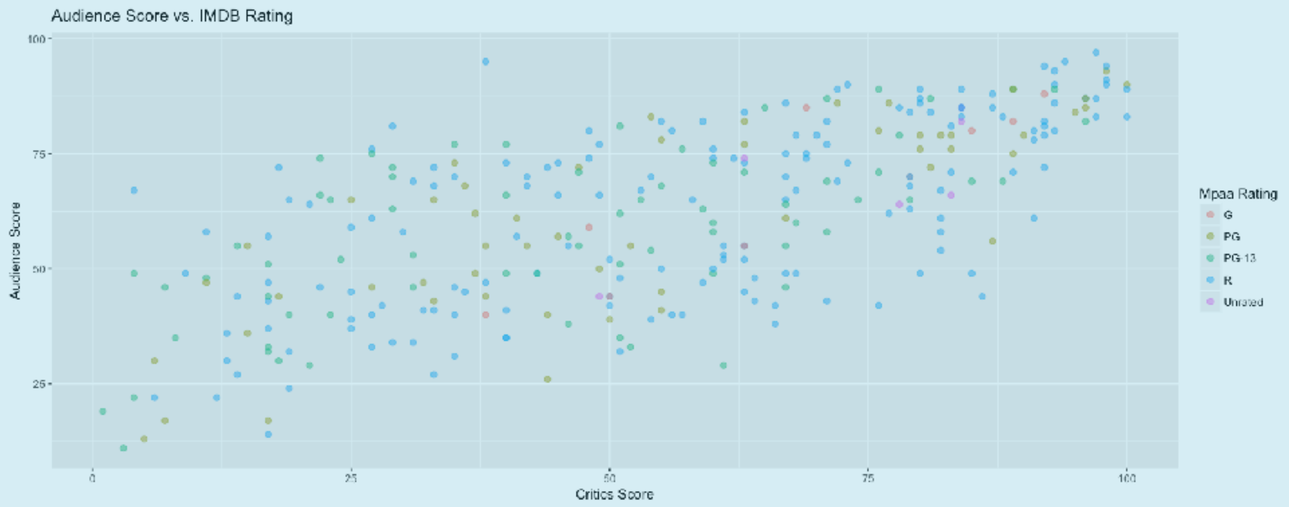
Select movie type(s):

- ☐ Documentary
- ☑ Feature Film
- ☐ TV Movie

Sample size:

300

Write CSV



There are 300 Feature Film movies in this dataset.

Show 10 entries

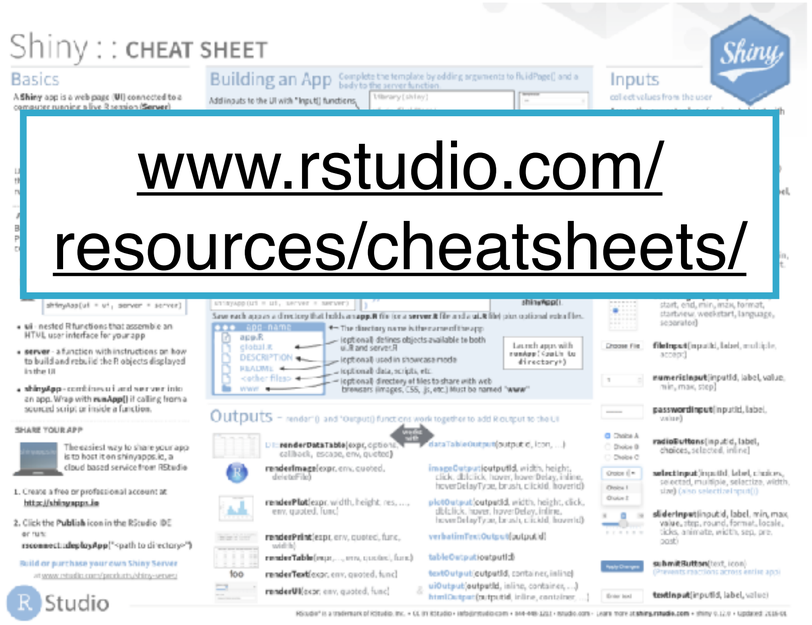
Search:

title	title_type	genre	runtime	mpaa_rating	studio	thtr_rel_date
The Godfather, Part II	Feature Film	Mystery & Suspense	202	R	Paramount Pictures	1974-12-20T05:00:00Z
Titanic	Feature Film	Drama	194	PG-13	Paramount Pictures	1997-12-19T05:00:00Z
Meet Joe Black	Feature Film	Drama	178	PG-13	Universal Pictures	1998-11-13T05:00:00Z
The Postman	Feature Film	Action & Adventure	177	R	Warner Home Video	1997-12-25T05:00:00Z
The English Patient	Feature Film	Drama	162	R	Miramax Films	1996-11-15T05:00:00Z
Harry Potter and the Chamber of Secrets	Feature Film	Science Fiction & Fantasy	161	PG	Warner Bros. Pictures	2002-11-15T05:00:00Z

Background

- You are familiar with R as a programming language.
- You are familiar with the Tidyverse, specifically **ggplot2** and **dplyr.**

Help



www.rstudio.com/resources/cheatsheets/

shiny.rstudio.com/

Tips

- Always run the entire script, not just up to the point where you're developing code.
- Sometimes the best way to see what's wrong is to run the app and review the error.
- Watch out for commas!

Anatomy of a Shiny app

```
library(shiny)

ui <- fluidPage()

server <- function(input, output) {}

shinyApp(ui = ui, server = server)
```

User interface
controls the layout and appearance of app

Server function
contains instructions needed to build app

shinyApp()
Creates the Shiny app object

Data

Let's build a simple movie browser app!

`movies.Rdata`

Data from IMDB and Rotten Tomatoes on random sample of 651 movies released in the US between 1970 and 2014

Revisit

```
library(shiny)
library("movies.Rdata")
ui <- fluidPage()



server <- function(input, output) {}



shinyApp(ui = ui, server = server)
```

Data used for this app

BUILDING WEB APPLICATIONS IN R WITH SHINY

Let’s practice!