

# Mini Project 01 - IMDB web scraping

```
library(tidyverse)
library(rvest) # scrape data from internet
```

```
url <- "https://www.imdb.com/search/title/?groups=top_100&sort=user_rating,desc"
```

```
print(url)
```

```
[1] "https://www.imdb.com/search/title/?groups=top_100&sort=user_rating,desc"
```

```
# read html
imbd <- read_html(url)
```

```
imbd
```

```
{html_document}
<html xmlns:og="http://ogp.me/ns#" xmlns:fb="http://www.facebook.com/2008/fb
[1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-
[2] <body id="styleguide-v2" class="fixed">\n                <img height="1" wid
```

```
# movie tittle
titles <- imbd %>%
  html_nodes("h3.lister-item-header") %>%
  html_text2()
```

```
titles[1:10]
```

```
'1. The Shawshank Redemption (1994)' · '2. The Godfather (1972)' · '3. The Dark Knight (2008)' ·  
'4. The Lord of the Rings: The Return of the King (2003)' · '5. Schindler\'s List (1993)' ·  
'6. The Godfather Part II (1974)' · '7. 12 Angry Men (1957)' · '8. Pulp Fiction (1994)' · '9. Inception (2010)' ·  
'10. The Lord of the Rings: The Two Towers (2002)'
```

```
# Rating  
ratings <- imbd %>%  
  html_nodes("div.ratings-imdb-rating") %>%  
  html_text2() %>%  
  as.numeric()
```

```
ratings[1:10]
```

```
9.3 · 9.2 · 9 · 9 · 9 · 9 · 9 · 8.9 · 8.8 · 8.8
```

```
# number of votes  
num_votes <- imbd %>%  
  html_nodes("p.sort-num_votes-visible") %>%  
  html_text2()
```

```
# build a dataset  
  
df <- data.frame(  
  title = titles,  
  rating = ratings,  
  num_vote = num_votes  
)  
  
head(df)
```

A data.frame: 6 × 3

	title	rating	num_vote
	<chr>	<dbl>	<chr>
1	1. The Shawshank Redemption (1994)	9.3	Votes: 2,667,456   Gross: \$28.34M   Top 250: #1
2	2. The Godfather (1972)	9.2	Votes: 1,848,533   Gross: \$134.97M   Top 250: #2
3	3. The Dark Knight (2008)	9.0	Votes: 2,640,370   Gross: \$534.86M   Top 250: #3
4	4. The Lord of the Rings: The Return of the King (2003)	9.0	Votes: 1,838,744   Gross: \$377.85M   Top 250: #7
5	5. Schindler's List (1993)	9.0	Votes: 1,350,584   Gross: \$96.90M   Top 250: #6
6	6. The Godfather Part II (1974)	9.0	Votes: 1,265,925   Gross: \$57.30M   Top 250: #4

## Mini Project 02 - SpecPhone Phone Database

```
library(tidyverse)
library(rvest) # scrape data from internet
```

```
Warning message in system("timedatectl", intern = TRUE):
"running command 'timedatectl' had status 1"
Warning message:
"Failed to locate timezone database"
```

```
— Attaching packages — tidyverse 1.3.2
```

```
✓ ggplot2 3.3.5    ✓ purrr  0.3.4
✓ tibble  3.1.5    ✓ dplyr  1.0.7
✓ tidyr   1.1.4    ✓ stringr 1.4.0
✓ readr   2.0.2    ✓ forcats 0.5.1
```

```
— Conflicts — tidyverse_conflicts()
```

```
✗ dplyr::filter() masks stats::filter()
✗ purrr::flatten() masks jsonlite::flatten()
✗ dplyr::lag()     masks stats::lag()
```

```
Attaching package: 'rvest'
```

```
url <- read_html("https://specphone.com/Samsung-Galaxy-A04.html")
```

```
att <- url %>%  
  html_nodes("div.topic") %>%  
  html_text2()  
  
detail <- url %>%  
  html_nodes("div.detail") %>%  
  html_text2()
```

```
data.frame(  
  Attribute = att,  
  Details = detail  
)
```

A data.frame: 31 × 2

Attribute	Details
<chr>	<chr>
วันเปิดตัว	ตุลาคม 2565
สีของตัวเครื่อง	สีฟ้าและสีเทา

```
## All Samsung Smartphone
samsung_url <- read_html("https://specphone.com/brand/Samsung")
```

```
links <- samsung_url %>%
  html_nodes("li.mobile-brand-item a") %>%
  html_attr("href")
```

```
full_links <- paste0("https://specphone.com", links)
```

```
result <- data.frame()

for (link in full_links[1:5]) {
  ss_topic <- link %>%
    read_html() %>%
    html_nodes("div.topic") %>%
    html_text2()

  ss_detail <- link %>%
    read_html() %>%
    html_nodes("div.detail") %>%
    html_text2()

  tmp <- data.frame(attribute = ss_topic, value = ss_detail)

  result <- bind_rows(result, tmp)

  print("Progress...")
}

# print(result)
```

```
[1] "Progress..."
[1] "Progress..."
[1] "Progress..."
[1] "Progress..."
```

```
[1] "Progress..."
```

```
print(head(result), 3)
```

	attribute	value
1	วันเปิดตัว	มิถุนายน 2565
2	วันวางจำหน่าย	ยังไม่วางจำหน่าย
3	ขนาด	165.40 x 76.90 x 8.40 มม.
4	น้ำหนัก	192 กรัม
5	วัสดุ	Glass front, plastic back, plastic frame
6	SIM	รองรับ 2 ซิมการ์ด (nano sim, nano sim)

```
# write csv file  
write_csv(result, "result_ss_phone.csv")
```