

```
library(tidyverse)
library(rvest)

## Mini Project 01 Web Scraping
url <- "https://www.imdb.com/search/title/?groups=top_100&sort=user_rating,desc"
print(url)

#read url
imdb <- read_html(url)
```

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

```
#data for title movie from IMDb
imdb %>%
  html_node("h3.lister-item-header") %>% #html_node = 1 observe
  html_text2()
```

```
'1. The Shawshank Redemption (1994)'
```

```
#data for title movie from IMDb
movie <- imdb %>%
  html_nodes("h3.lister-item-header") %>% #html_nodes = all observe
  html_text2()
```

```
movie
```

```
'1. The Shawshank Redemption (1994)' · '2. The Godfather (1972)' · '3. The Dark Knight (2008)' ·
'4. Schindler's List (1993)' · '5. The Godfather Part II (1974)' · '6. 12 Angry Men (1957)' ·
'7. The Lord of the Rings: The Return of the King (2003)' · '8. Pulp Fiction (1994)' ·
'9. Inception (2010)' · '10. Fight Club (1999)' ·
'11. The Lord of the Rings: The Fellowship of the Ring (2001)' · '12. Forrest Gump (1994)' ·
'13. Il buono, il brutto, il cattivo (1966)' · '14. The Lord of the Rings: The Two Towers (2002)' ·
'15. GoodFellas (1990)' · '16. The Matrix (1999)' · '17. One Flew Over the Cuckoo's Nest (1975)' ·
'18. The Empire Strikes Back (1980)' · '19. Interstellar (2014)' · '20. Se7en (1995)' ·
'21. The Silence of the Lambs (1991)' · '22. Saving Private Ryan (1998)' ·
'23. The Green Mile (1999)' · '24. Star Wars (1977)' · '25. La vita è bella (1997)' ·
'26. Terminator 2: Judgment Day (1991)' · '27. Sen to Chihiro no kamikakushi (2001)' ·
'28. Cidade de Deus (2002)' · '29. It's a Wonderful Life (1946)' · '30. Shichinin no samurai (1954)' ·
'31. Seppuku (1962)' · '32. Whiplash (2014)' · '33. Gisaengchung (2019)' · '34. Gladiator (2000)' ·
'35. The Departed (2006)' · '36. Léon (1994)' · '37. The Prestige (2006)' ·
'38. Apocalypse Now (1979)' · '39. Back to the Future (1985)' · '40. Alien (1979)' ·
'41. The Lion King (1994)' · '42. The Usual Suspects (1995)' · '43. American History X (1998)' ·
'44. The Pianist (2002)' · '45. Casablanca (1942)' · '46. The Intouchables (2011)' ·
'47. Psycho (1960)' · '48. Once Upon a Time in the West (1968)' · '49. Hotaru no haka (1988)' ·
'50. Rear Window (1954)'
```

```
#rating from IMDb
ratings <- imdb %>%
  html_nodes("div.ratings-imdb-rating") %>%
  html_text2() %>%
  as.numeric() #change to numeric
```

```
ratings
```

```
9.3 · 9.2 · 9 · 9 · 9 · 9 · 9 · 8.9 · 8.8 · 8.8 · 8.8 · 8.8 · 8.8 · 8.8 · 8.7 · 8.7 · 8.7 · 8.7 · 8.6 · 8.6 · 8.6 · 8.6 ·
8.6 · 8.6 · 8.6 · 8.6 · 8.6 · 8.6 · 8.6 · 8.6 · 8.6 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 ·
8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5 · 8.5
```

```
#number Vote from IMDb
number_vote <- imdb %>%
  html_nodes("p.sort-num_votes-visible") %>%
  html_text2()

number_vote
```

```
'Votes: 2,698,765 | Gross: $28.34M | Top 250: #1' ·
'Votes: 1,873,009 | Gross: $134.97M | Top 250: #2' ·
'Votes: 2,672,521 | Gross: $534.86M | Top 250: #3' ·
'Votes: 1,364,357 | Gross: $96.90M | Top 250: #6' ·
'Votes: 1,280,041 | Gross: $57.30M | Top 250: #4' · 'Votes: 797,007 | Gross: $4.36M | Top 250: #5' ·
'Votes: 1,858,531 | Gross: $377.85M | Top 250: #7' ·
'Votes: 2,071,523 | Gross: $107.93M | Top 250: #8' ·
'Votes: 2,370,868 | Gross: $292.58M | Top 250: #14' ·
'Votes: 2,143,660 | Gross: $37.03M | Top 250: #12' ·
'Votes: 1,887,884 | Gross: $315.54M | Top 250: #9' ·
'Votes: 2,096,057 | Gross: $330.25M | Top 250: #11' ·
'Votes: 766,730 | Gross: $6.10M | Top 250: #10' ·
'Votes: 1,678,156 | Gross: $342.55M | Top 250: #13' ·
'Votes: 1,170,604 | Gross: $46.84M | Top 250: #17' ·
'Votes: 1,925,965 | Gross: $171.48M | Top 250: #16' ·
'Votes: 1,013,774 | Gross: $112.00M | Top 250: #18' ·
'Votes: 1,300,962 | Gross: $290.48M | Top 250: #15' ·
'Votes: 1,855,544 | Gross: $188.02M | Top 250: #25' ·
'Votes: 1,666,009 | Gross: $100.13M | Top 250: #19' ·
'Votes: 1,442,975 | Gross: $130.74M | Top 250: #22' ·
'Votes: 1,401,203 | Gross: $216.54M | Top 250: #24' ·
'Votes: 1,311,790 | Gross: $136.80M | Top 250: #27' ·
'Votes: 1,373,374 | Gross: $322.74M | Top 250: #28' ·
'Votes: 700,588 | Gross: $57.60M | Top 250: #26' ·
'Votes: 1,106,858 | Gross: $204.84M | Top 250: #29' ·
'Votes: 771,677 | Gross: $10.06M | Top 250: #31' · 'Votes: 761,439 | Gross: $7.56M | Top 250: #23' ·
'Votes: 466,186 | Top 250: #21' · 'Votes: 348,378 | Gross: $0.27M | Top 250: #20' ·
'Votes: 58,793 | Top 250: #44' · 'Votes: 875,906 | Gross: $13.09M | Top 250: #42' ·
'Votes: 819,707 | Gross: $53.37M | Top 250: #34' ·
'Votes: 1,511,237 | Gross: $187.71M | Top 250: #37' ·
'Votes: 1,334,503 | Gross: $132.38M | Top 250: #39' ·
'Votes: 1,170,351 | Gross: $19.50M | Top 250: #35' ·
'Votes: 1,343,028 | Gross: $53.09M | Top 250: #41' ·
'Votes: 672,749 | Gross: $83.47M | Top 250: #53' ·
'Votes: 1,215,772 | Gross: $210.61M | Top 250: #30' ·
'Votes: 889,629 | Gross: $78.90M | Top 250: #51' ·
'Votes: 1,066,744 | Gross: $422.78M | Top 250: #36' ·
'Votes: 1,091,733 | Gross: $23.34M | Top 250: #40' ·
'Votes: 1,129,397 | Gross: $6.72M | Top 250: #38' ·
'Votes: 839,656 | Gross: $32.57M | Top 250: #32' · 'Votes: 575,720 | Gross: $1.02M | Top 250: #43' ·
'Votes: 866,236 | Gross: $13.18M | Top 250: #46' ·
'Votes: 676,901 | Gross: $32.00M | Top 250: #33' · 'Votes: 332,650 | Gross: $5.32M | Top 250: #48' ·
'Votes: 280,908 | Top 250: #45' · 'Votes: 495,426 | Gross: $36.76M | Top 250: #49'
```

```
##Build data
df <- data.frame(
  title = movie,
  rating = ratings,
  num_vote = number_vote
)
head(df)

tibble(df)
```

A data.frame: 6 × 3

	title	rating	num_vote
	<chr>	<dbl>	<chr>
1	1. The Shawshank Redemption (1994)	9.3	Votes: 2,698,765 Gross: \$28.34M Top 250: #1
2	2. The Godfather (1972)	9.2	Votes: 1,873,009 Gross: \$134.97M Top 250: #2
3	3. The Dark Knight (2008)	9.0	Votes: 2,672,521 Gross: \$534.86M Top 250: #3
4	4. Schindler's List (1993)	9.0	Votes: 1,364,357 Gross: \$96.90M Top 250: #6
5	5. The Godfather Part II (1974)	9.0	Votes: 1,280,041 Gross: \$57.30M Top 250: #4
6	6. 12 Angry Men (1957)	9.0	Votes: 797,007 Gross: \$4.36M Top 250: #5

A tibble: 50 × 3

title	rating	num_vote
<chr>	<dbl>	<chr>
1. The Shawshank Redemption (1994)	9.3	Votes: 2,698,765 Gross: \$28.34M Top 250: #1
2. The Godfather (1972)	9.2	Votes: 1,873,009 Gross: \$134.97M Top 250: #2
3. The Dark Knight (2008)	9.0	Votes: 2,672,521 Gross: \$534.86M Top 250: #3
4. Schindler's List (1993)	9.0	Votes: 1,364,357 Gross: \$96.90M Top 250: #6
5. The Godfather Part II (1974)	9.0	Votes: 1,280,041 Gross: \$57.30M Top 250: #4
6. 12 Angry Men (1957)	9.0	Votes: 797,007 Gross: \$4.36M Top 250: #5
7. The Lord of the Rings: The Return of the King (2003)	9.0	Votes: 1,858,531 Gross: \$377.85M Top 250: #7
8. Pulp Fiction (1994)	8.9	Votes: 2,071,523 Gross: \$107.93M Top 250: #8
9. Inception (2010)	8.8	Votes: 2,370,868 Gross: \$292.58M Top 250: #14

10. Fight Club (1999)	8.8	Votes: 2,143,660 Gross: \$37.03M Top 250: #12
11. The Lord of the Rings: The Fellowship of the Ring (2001)	8.8	Votes: 1,887,884 Gross: \$315.54M Top 250: #9
12. Forrest Gump (1994)	8.8	Votes: 2,096,057 Gross: \$330.25M Top 250: #11
13. Il buono, il brutto, il cattivo (1966)	8.8	Votes: 766,730 Gross: \$6.10M Top 250: #10
14. The Lord of the Rings: The Two Towers (2002)	8.8	Votes: 1,678,156 Gross: \$342.55M Top 250: #13
15. GoodFellas (1990)	8.7	Votes: 1,170,604 Gross: \$46.84M Top 250: #17
16. The Matrix (1999)	8.7	Votes: 1,925,965 Gross: \$171.48M Top 250: #16
17. One Flew Over the Cuckoo's Nest (1975)	8.7	Votes: 1,013,774 Gross: \$112.00M Top 250: #18
18. The Empire Strikes Back (1980)	8.7	Votes: 1,300,962 Gross: \$290.48M Top 250: #15
19. Interstellar (2014)	8.6	Votes: 1,855,544 Gross: \$188.02M Top 250: #25
20. Se7en (1995)	8.6	Votes: 1,666,009 Gross: \$100.13M Top 250: #19
21. The Silence of the Lambs (1991)	8.6	Votes: 1,442,975 Gross: \$130.74M Top 250: #22
22. Saving Private Ryan (1998)	8.6	Votes: 1,401,203 Gross: \$216.54M Top 250: #24
23. The Green Mile (1999)	8.6	Votes: 1,311,790 Gross: \$136.80M Top 250: #27
24. Star Wars (1977)	8.6	Votes: 1,373,374 Gross: \$322.74M Top 250: #28
25. La vita è bella (1997)	8.6	Votes: 700,588 Gross: \$57.60M Top 250: #26
26. Terminator 2: Judgment Day (1991)	8.6	Votes: 1,106,858 Gross: \$204.84M Top 250: #29
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29. It's a Wonderful Life (1946)	8.6	Votes: 466,186 Top 250: #21
30. Shichinin no samurai (1954)	8.6	Votes: 348,378 Gross: \$0.27M Top 250: #20
31. Seppuku (1962)	8.6	Votes: 58,793 Top 250: #44
32. Whiplash (2014)	8.5	Votes: 875,906 Gross: \$13.09M Top 250: #42
33. Gisaengchung (2019)	8.5	Votes: 819,707 Gross: \$53.37M Top 250: #34
		Votes: 1,511,237 Gross: \$187.71M Top

34. Gladiator (2000)	8.5	Votes: 1,011,207 Gross: \$187.7M Top 250: #37
35. The Departed (2006)	8.5	Votes: 1,334,503 Gross: \$132.38M Top 250: #39
36. Léon (1994)	8.5	Votes: 1,170,351 Gross: \$19.50M Top 250: #35
37. The Prestige (2006)	8.5	Votes: 1,343,028 Gross: \$53.09M Top 250: #41
38. Apocalypse Now (1979)	8.5	Votes: 672,749 Gross: \$83.47M Top 250: #53
39. Back to the Future (1985)	8.5	Votes: 1,215,772 Gross: \$210.61M Top 250: #30
40. Alien (1979)	8.5	Votes: 889,629 Gross: \$78.90M Top 250: #51
41. The Lion King (1994)	8.5	Votes: 1,066,744 Gross: \$422.78M Top 250: #36
42. The Usual Suspects (1995)	8.5	Votes: 1,091,733 Gross: \$23.34M Top 250: #40
43. American History X (1998)	8.5	Votes: 1,129,397 Gross: \$6.72M Top 250: #38
44. The Pianist (2002)	8.5	Votes: 839,656 Gross: \$32.57M Top 250: #32
45. Casablanca (1942)	8.5	Votes: 575,720 Gross: \$1.02M Top 250: #43
46. The Intouchables (2011)	8.5	Votes: 866,236 Gross: \$13.18M Top 250: #46
47. Psycho (1960)	8.5	Votes: 676,901 Gross: \$32.00M Top 250: #33
48. Once Upon a Time in the West (1968)	8.5	Votes: 332,650 Gross: \$5.32M Top 250: #48
49. Hotaru no haka (1988)	8.5	Votes: 280,908 Top 250: #45
50. Rear Window (1954)	8.5	Votes: 495,426 Gross: \$36.76M Top 250: #49

```
##Project Specphone
library(tidyverse)
library(rvest)
```

Warning message in system("timedatectl", intern = TRUE):

"running command 'timedatectl' had status 1"

Warning message:

"Failed to locate timezone database"

— Attaching packages — tidyverse 1

```
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_conflic

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

Attaching package: 'rvest'

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

```
specphone <- read_html(url)
```

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

'วันเปิดตัว' · 'วันวางจำหน่าย' · 'ขนาด' · 'น้ำหนัก' · 'วัสดุ' · 'SIM' · 'Technology' · '2G' · '3G' · '4G' · '5G' ·
'ความเร็ว' · 'ประเภท' · 'ขนาดหน้าจอ' · 'ความละเอียด' · 'ระบบปฏิบัติการ' · 'ชิปประมวลผล' · 'ชิปกราฟิก' ·
'หน่วยความจำ' · 'ความจุ' · 'Memory Card' · 'กล้องหลัก' · 'ความละเอียดวิดีโอ' · 'กล้องหน้า' · 'Bluetooth' ·
'Wi-Fi' · 'USB' · 'GPS' · 'NFC' · 'ความจุ' · 'ประเภท'

```

detail <- specphone %>%
  html_nodes("div.detail") %>%
  html_text2()
detail

```

'ตุลาคม 2565' · 'ยังไม่วางจำหน่าย' · '164.40 x 76.30 x 9.10 มม.' · '192 กรัม' ·
 'Glass front, plastic back, plastic frame' · 'รองรับ 2 ซิมการ์ด (nano sim, nano sim)' ·
 'HSPA 42.2/5.76 Mbps, LTE-A' · '850/900/1800/1900' · '850/900/1900/2100' ·
 '850/900/1900/2100/2600' · '-' · 'HSPA 42.2/5.76 Mbps, LTE-A' · 'PLS LCD' · '6.50 นิ้ว' ·
 '720 x 1600 pixels' · 'Android 12' · 'Spreadtrum Unisoc SC9863A 1.6 GHz' · 'PowerVR GE8322' ·
 '3 GB' · '32 GB' · 'microSD (1)' · 'ตัวที่ 1: 50 MP, f/1.8, (wide), AF\nตัวที่ 2: 2 MP, f/2.4, (depth)' ·
 '1080p@30fps' · 'ตัวที่ 1: 5 MP, f/2.2' · '5.0, A2DP, LE' · '802.11 a/b/g/n/ac, dual-b' · 'Type-C' ·
 'GLONASS, GALILEO, BDS' · 'ไม่รองรับ' · '5,000 mAh' · 'Non-removable Li-Po Batt'

```

phone <- data.frame(
  att = att,
  detail = detail
)

```

```
tibble(phone)
```

A tibble: 31 × 2

att	detail
<chr>	<chr>
วันเปิดตัว	ตุลาคม 2565
วันวางจำหน่าย	ยังไม่วางจำหน่าย
ขนาด	164.40 x 76.30 x 9.10 มม.
น้ำหนัก	192 กรัม
วัสดุ	Glass front, plastic back, plastic frame
SIM	รองรับ 2 ซิมการ์ด (nano sim, nano sim)
Technology	HSPA 42.2/5.76 Mbps, LTE-A
2G	850/900/1800/1900
3G	850/900/1900/2100
4G	850/900/1900/2100/2600
5G	-
ความเร็ว	HSPA 42.2/5.76 Mbps, LTE-A
ประเภท	PLS LCD
ขนาดหน้าจอ	6.50 นิ้ว
ความละเอียด	720 x 1600 pixels
ระบบปฏิบัติการ	Android 12
ชิปประมวลผล	Spreadtrum Unisoc SC9863A 1.6 GHz

ชิปกราฟิก	PowerVR GE8322
หน่วยความจำ	3 GB
ความจุ	32 GB
Memory Card	microSD (1)
กล้องหลัก	ตัวที่ 1: 50 MP, f/1.8, (wide), AF ตัวที่ 2: 2 MP, f/2.4, (depth)
ความละเอียดวิดีโอ	1080p@30fps
กล้องหน้า	ตัวที่ 1: 5 MP, f/2.2
Bluetooth	5.0, A2DP, LE
Wi-Fi	802.11 a/b/g/n/ac, dual-b
USB	Type-C
GPS	GLONASS, GALILEO, BDS
NFC	ไม่รองรับ
ความจุ	5,000 mAh
ประเภท	Non-removable Li-Po Batt

```
##Project 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")
links
```

```
'/Samsung-Galaxy-M13.html' · '/Samsung-Galaxy-A23.html' · '/Samsung-Galaxy-A13.html' ·
'/Samsung-Galaxy-M32-5G.html' · '/Samsung-Galaxy-A12-Nacho.html' ·
'/Samsung-Galaxy-Pocket-Neo.html' · '/Samsung-Galaxy-Young.html' ·
'/Samsung-Galaxy-J1-Mini.html' · '/Samsung-Galaxy-A01-Core-1-16GB.html' ·
'/Samsung-Galaxy-V-PLUS.html' · '/Samsung-Galaxy-Young-2.html' · '/Samsung-Galaxy-M02.html' ·
'/Samsung-Galaxy-A11.html' · '/Samsung-Galaxy-J2-Pro-2018.html' ·
'/Samsung-Galaxy-A12-2021.html' · '/Samsung-Galaxy-A21s-3-32GB.html' ·
'/Samsung-Galaxy-J5.html' · '/Samsung-Galaxy-J4.html' · '/Samsung-Galaxy-Core-2-Duos.html' ·
'/Samsung-Galaxy-Ace-Plus.html' · '/Samsung-Galaxy-A20.html' · '/Samsung-Galaxy-Chat.html' ·
'/Samsung-Galaxy-Gio.html' · '/Samsung-Galaxy-Tab-A7-Lite-LTE.html' ·
'/Samsung-Galaxy-Tab-A-10.5WIFI.html' · '/Samsung-Galaxy-Alpha.html' ·
'/Samsung-Galaxy-S3-Slim.html' · '/Samsung-Galaxy-S4-zoom.html' ·
'/Samsung-Galaxy-Xcover-2.html' · '/Samsung-Galaxy-Tab-8.9-3G-16GB.html' ·
'/Samsung-Galaxy-Tab-A8-LTE-2021.html' · '/Samsung-Galaxy-A8-2018.html' ·
'/Samsung-Galaxy-Tab4-8.0-wifi.html' · '/Samsung-Galaxy-M33-5G.html' ·
'/Samsung-Galaxy-A50.html' · '/Samsung-Galaxy-E7.html' · '/Samsung-Galaxy-S6.html' ·
'/Samsung-Galaxy-S20-FE.html' · '/Samsung-Galaxy-Tab-S4-WIFI.html' ·
'/Samsung-Galaxy-S7.html' · '/Samsung-Galaxy-Note-5-Exynos.html' ·
'/Samsung-Galaxy-TabPRO-12.2-LTE.html' · '/Samsung-Galaxy-S4-Active.html' ·
'/Samsung-Galaxy-Tab-Active-3.html' · '/Samsung-Galaxy-Tab-S3-9.7.html' ·
'/Samsung-Galaxy-S6-edge.html' · '/Samsung-Galaxy-Note-4-Exynos.html' ·
'/Samsung-Galaxy-Round.html' · '/Samsung-Galaxy-Note-20-Ultra-5G.html' ·
'/Samsung-ATIV-Q.html' · '/Samsung-ATIV-Smart-PC-PRO.html' ·
'/Samsung-Galaxy-S23-Ultra-5G8-256GB.html' · '/Samsung-Galaxy-S22-Ultra12-128GB.html' ·
'/Samsung-Galaxy-Z-Flip-5G.html' · '/Samsung-Galaxy-Z-Flip.html' ·
'/Samsung-Galaxy-Tab-S8-Ultra-5G.html' · '/Samsung-Galaxy-S21-Ultra-16-512GB.html' ·
'/Samsung-Galaxy-S23-Ultra-5G.html' · '/Samsung-Galaxy-S10-Plus-Ram-12GB.html' ·
'/Samsung-Galaxy-Z-Fold-3.html'
```

```
#add "https://specphone.com" for use to loop
paste0("https://specphone.com",links[1:5])
full_link <- paste0("https://specphone.com",links)
full_link
```

```
'https://specphone.com/Samsung-Galaxy-M13.html' ·
'https://specphone.com/Samsung-Galaxy-A23.html' ·
'https://specphone.com/Samsung-Galaxy-A13.html' ·
'https://specphone.com/Samsung-Galaxy-M32-5G.html' ·
'https://specphone.com/Samsung-Galaxy-A12-Nacho.html'
'https://specphone.com/Samsung-Galaxy-M13.html' ·
'https://specphone.com/Samsung-Galaxy-A23.html' ·
'https://specphone.com/Samsung-Galaxy-A13.html' ·
'https://specphone.com/Samsung-Galaxy-M32-5G.html' ·
'https://specphone.com/Samsung-Galaxy-A12-Nacho.html' ·
'https://specphone.com/Samsung-Galaxy-Pocket-Neo.html' ·
```

'https://specphone.com/Samsung-Galaxy-Young.html' ·
'https://specphone.com/Samsung-Galaxy-J1-Mini.html' ·
'https://specphone.com/Samsung-Galaxy-A01-Core-1-16GB.html' ·
'https://specphone.com/Samsung-Galaxy-V-PLUS.html' ·
'https://specphone.com/Samsung-Galaxy-Young-2.html' ·
'https://specphone.com/Samsung-Galaxy-M02.html' ·
'https://specphone.com/Samsung-Galaxy-A11.html' ·
'https://specphone.com/Samsung-Galaxy-J2-Pro-2018.html' ·
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```
result <- data.frame()

for (link in full_link) {
  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....")
}
```

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

```
tibble(result)
```