

# Data 607\_Assignment7\_Rajan

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```
library(httr)
library(ggplot2)
library(knitr)
library(rjson)
library(jsonlite)
```

```
##
## Attaching package: 'jsonlite'

## The following objects are masked from 'package:rjson':
##
##   fromJSON, toJSON
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```
library(curl)
```

```
## Warning: package 'curl' was built under R version 3.4.4

##
## Attaching package: 'curl'

## The following object is masked from 'package:httr':
##
##   handle_reset
```

```
library(stringr)
nytimes_movie_get <- GET("https://api.nytimes.com/svc/movies/v2/reviews/all.json",
  query = list(api_key = "5ca6581c5c0c4d22a89d258eae17846", order = "By-Critic",
    offset = 20))
```

```
nytimes_movie_get
```

```
## Response [https://api.nytimes.com/svc/movies/v2/reviews/all.json?api_key=5ca6581c5c0c4d22a89d258eae17846]
##   Date: 2018-03-30 16:26
##   Status: 200
##   Content-Type: application/json; charset=UTF-8
##   Size: 16.2 kB
```

```
nytimes_movie_df <- fromJSON("https://api.nytimes.com/svc/movies/v2/reviews/all.json?api_key=5ca6581c5c0c4d22a89d258eae17846",
  data.frame())
```

```
head(nytimes_movie_df, 1)
```

```
##      status
## 1      OK
##
##                                     copyright
## 1 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
##      has_more num_results results.display_title results.mpaa_rating
## 1      TRUE      20      Wilde Salomé      R
##      results.critics_pick results.byline
## 1      1      GLENN KENNY
##
##                                     results.headline
## 1 Review: Al Pacino's Journey With Wilde's 'Salomé'
##
##                                     results.summary_short
## 1 A story of obsession plays out in "Wilde Salomé" and "Salomé," as Mr. Pacino veers into Camp.
##      results.publication_date results.opening_date results.date_updated
## 1      2018-03-29      2017-04-01 2018-03-29 12:04:04
##      results.link.type
## 1      article
##
##                                     results.link.url
## 1 http://www.nytimes.com/2018/03/29/movies/wilde-salome-review-al-pacino.html
##
##      results.link.suggested_link_text results.multimedia.type
## 1 Read the New York Times Review of Wilde Salomé      mediumThreeByTwo210
##
## 1 https://static01.nyt.com/images/2018/03/30/arts/30salome/merlin_135871281_410319e8-8975-408a-a55f-
##      results.multimedia.width results.multimedia.height
## 1      210      140
```

```
nytimes_movie_df
```

```
##      status
## 1      OK
## 2      OK
## 3      OK
## 4      OK
## 5      OK
## 6      OK
## 7      OK
## 8      OK
## 9      OK
## 10     OK
## 11     OK
## 12     OK
## 13     OK
## 14     OK
## 15     OK
## 16     OK
## 17     OK
## 18     OK
## 19     OK
## 20     OK
##
##                                     copyright
## 1 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 2 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
```

```

## 3 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 4 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 5 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 6 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 7 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 8 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 9 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
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## 13 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 14 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 15 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 16 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 17 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 18 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 19 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
## 20 Copyright (c) 2018 The New York Times Company. All Rights Reserved.
##      has_more num_results results.display_title results.mpa_rating
## 1      TRUE          20      Wilde Salomé                      R
## 2      TRUE          20      Salomé                          R
## 3      TRUE          20      Personal Problems
## 4      TRUE          20      Love After Love
## 5      TRUE          20      Outside In
## 6      TRUE          20      Gemini                      R
## 7      TRUE          20      The Gardener
## 8      TRUE          20      After Louie
## 9      TRUE          20      All I Wish
## 10     TRUE          20      The Last Movie Star          R
## 11     TRUE          20      The China Hustle            R
## 12     TRUE          20      Finding Your Feet          PG-13
## 13     TRUE          20      Ready Player One           PG-13
## 14     TRUE          20      The Great Silence          Not Rated
## 15     TRUE          20      Midnight Sun               PG-13
## 16     TRUE          20      Ismael's Ghosts            R
## 17     TRUE          20      Beauty and the Dogs
## 18     TRUE          20      The Workshop
## 19     TRUE          20      I Kill Giants              Not Rated
## 20     TRUE          20      Isle of Dogs                PG-13
##      results.critics_pick      results.byline
## 1              1      GLENN KENNY
## 2              1      GLENN KENNY
## 3              1      GLENN KENNY
## 4              1 JEANNETTE CATSOULIS
## 5              1 JEANNETTE CATSOULIS
## 6              0      MANOHLA DARGIS
## 7              0      HELEN T. VERONGOS
## 8              0      KEN JAWOROWSKI
## 9              0      TEO BUGBEE
## 10             0      BEN KENIGSBURG
## 11             0      BEN KENIGSBURG
## 12             0 JEANNETTE CATSOULIS
## 13             0      A. O. SCOTT
## 14             0      A. O. SCOTT

```

```

## 15          0          TEO BUGBEE
## 16          1          GLENN KENNY
## 17          1 JEANNETTE CATSOULIS
## 18          1          JENNIFER SZALAI
## 19          1 JEANNETTE CATSOULIS
## 20          1          MANOHLA DARGIS
##
##                                     results.headline
## 1          Review: Al Pacino's Journey With Wilde's 'Salomé'
## 2          Review: Al Pacino's Journey With Wilde's 'Salomé'
## 3 Review: 'Personal Problems,' a Look at African-American Life in 1980 New York
## 4          Review: In 'Love After Love,' an Unflinching Look at Extended Grief
## 5          Review: On Parole and in Love in 'Outside In'
## 6          Review: 'Gemini' Finds Murder in a Movie-Soaked Los Angeles
## 7          Review: 'The Gardener' Cultivates the Wealth of Nature
## 8          Review: 'After Louie' Looks at an Activist Once the Fighting Ends
## 9          Review: Sharon Stone Stars in 'All I Wish,' a Lukewarm Romantic Comedy
## 10         Review: Burt Reynolds Confronts His Past in 'The Last Movie Star'
## 11         Review: 'The China Hustle' Warns of Dickey Investments
## 12         Review: Two-Stepping to Happiness in 'Finding Your Feet'
## 13         Review: In 'Ready Player One,' Spielberg Plays the Nostalgia Game
## 14         Review: 'The Great Silence,' a 1968 Spaghetti Western Unchained
## 15         Review: In 'Midnight Sun,' the Dawn of Romance Can Be Fatal
## 16         Review: Wife Returns in 'Ismael's Ghosts.' Confusion Ensues.
## 17         Review: Seeking Justice After a Rape in 'Beauty and the Dogs'
## 18         Review: 'The Workshop' Plunges Into a Class Divided
## 19         Review: Slaying Monsters (and Avoiding Grief) in 'I Kill Giants'
## 20         Review: Wes Anderson's Bleakly Beautiful 'Isle of Dogs'
##
##                                     A story of obsession plays
## 2          A story of obsession plays
## 3          The brainchild of the writer Ishmael Reed and the director Bill Gunn, th
## 4          Russ Harbaugh's debut feature delivers something rarely seen
## 5          Edie Falco and Jay Duplass connect romantically in this life-after-p
## 6          The director Aaron Katz plays with film
## 7          Frank Cabot's garden in Quebec is
## 8          The film, starring Alan Cumming, centers on a 50-som
## 9
## 10         The film effectively all
## 11         A documentary may be the wrong delivery mechanism f
## 12         Led by a charming pairing of Imelda Staunton and Celia Imr
## 13 The movie, based on Ernest Cline's best-selling novel, is set in a dystopian future where a virtuo
## 14         Klaus Kinski and Jean-Louis Trintignant face off in the snows of Utah in a bloo
## 15         Bella Thorne stars as a teenager with a rare disease who must avoid ultraviolo
## 16         In Arnaud Desplechin's remarkable sprawl of a film, a wife comes back after a
## 17         In this film inspired by a true story, the director Kaouther Ben Hania leans hard
## 18         This new film from the French director Laurent Cantet follows a diverse group of studen
## 19         This magical movie marries adult themes and
## 20         Set in a fantasy Japan, Mr. Anderson's new movie tells a heroic story of
##
## results.publication_date results.opening_date results.date_updated
## 1          2018-03-29          2017-04-01  2018-03-29 12:04:04
## 2          2018-03-29          <NA>  2018-03-29 12:04:03
## 3          2018-03-29          <NA>  2018-03-29 22:21:39
## 4          2018-03-29          2018-03-30  2018-03-30 02:44:27
## 5          2018-03-29          2018-04-03  2018-03-29 11:04:04

```

## 6	2018-03-29	2018-03-30	2018-03-30 02:44:30
## 7	2018-03-29	2018-03-30	2018-03-30 02:44:02
## 8	2018-03-29	2018-03-30	2018-03-30 02:44:02
## 9	2018-03-29	2018-03-30	2018-03-29 11:04:04
## 10	2018-03-29	2018-03-30	2018-03-30 02:44:02
## 11	2018-03-29	2018-03-23	2018-03-29 11:04:08
## 12	2018-03-29	<NA>	2018-03-30 02:44:25
## 13	2018-03-28	2018-03-29	2018-03-30 02:44:25
## 14	2018-03-28	1969-00-00	2018-03-28 17:38:03
## 15	2018-03-23	2018-03-23	2018-03-30 02:44:23
## 16	2018-03-22	2018-03-23	2018-03-30 02:44:21
## 17	2018-03-22	<NA>	2018-03-30 02:44:21
## 18	2018-03-22	<NA>	2018-03-30 02:44:20
## 19	2018-03-22	2018-03-23	2018-03-30 02:44:19
## 20	2018-03-22	2018-03-23	2018-03-30 02:44:17
##	results.link.type		
## 1	article		
## 2	article		
## 3	article		
## 4	article		
## 5	article		
## 6	article		
## 7	article		
## 8	article		
## 9	article		
## 10	article		
## 11	article		
## 12	article		
## 13	article		
## 14	article		
## 15	article		
## 16	article		
## 17	article		
## 18	article		
## 19	article		
## 20	article		
##			results.link.url
## 1			<a href="http://www.nytimes.com/2018/03/29/movies/wilde-salome-review-al-pacino.html">http://www.nytimes.com/2018/03/29/movies/wilde-salome-review-al-pacino.html</a>
## 2			<a href="http://www.nytimes.com/2018/03/29/movies/wilde-salome-review-al-pacino.html">http://www.nytimes.com/2018/03/29/movies/wilde-salome-review-al-pacino.html</a>
## 3			<a href="http://www.nytimes.com/2018/03/29/movies/personal-problems-review.html">http://www.nytimes.com/2018/03/29/movies/personal-problems-review.html</a>
## 4			<a href="http://www.nytimes.com/2018/03/29/movies/love-after-love-review.html">http://www.nytimes.com/2018/03/29/movies/love-after-love-review.html</a>
## 5			<a href="http://www.nytimes.com/2018/03/29/movies/outside-in-review-jay-duplass-edie-falco.html">http://www.nytimes.com/2018/03/29/movies/outside-in-review-jay-duplass-edie-falco.html</a>
## 6			<a href="http://www.nytimes.com/2018/03/29/movies/gemini-review-lola-kirke-zoe-kravitz.html">http://www.nytimes.com/2018/03/29/movies/gemini-review-lola-kirke-zoe-kravitz.html</a>
## 7			<a href="http://www.nytimes.com/2018/03/29/movies/the-gardener-review.html">http://www.nytimes.com/2018/03/29/movies/the-gardener-review.html</a>
## 8			<a href="http://www.nytimes.com/2018/03/29/movies/after-louie-review-alan-cumming.html">http://www.nytimes.com/2018/03/29/movies/after-louie-review-alan-cumming.html</a>
## 9			<a href="http://www.nytimes.com/2018/03/29/movies/all-i-wish-review-sharon-stone.html">http://www.nytimes.com/2018/03/29/movies/all-i-wish-review-sharon-stone.html</a>
## 10			<a href="http://www.nytimes.com/2018/03/29/movies/the-last-movie-star-review-burt-reynolds.html">http://www.nytimes.com/2018/03/29/movies/the-last-movie-star-review-burt-reynolds.html</a>
## 11			<a href="http://www.nytimes.com/2018/03/29/movies/the-china-hustle-review.html">http://www.nytimes.com/2018/03/29/movies/the-china-hustle-review.html</a>
## 12			<a href="http://www.nytimes.com/2018/03/29/movies/finding-your-feet-review.html">http://www.nytimes.com/2018/03/29/movies/finding-your-feet-review.html</a>
## 13			<a href="http://www.nytimes.com/2018/03/28/movies/ready-player-one-review-steven-spielberg.html">http://www.nytimes.com/2018/03/28/movies/ready-player-one-review-steven-spielberg.html</a>
## 14			<a href="http://www.nytimes.com/2018/03/28/movies/the-great-silence-review-sergio-corbucci.html">http://www.nytimes.com/2018/03/28/movies/the-great-silence-review-sergio-corbucci.html</a>
## 15			<a href="http://www.nytimes.com/2018/03/23/movies/midnight-sun-review.html">http://www.nytimes.com/2018/03/23/movies/midnight-sun-review.html</a>
## 16			<a href="http://www.nytimes.com/2018/03/22/movies/review-ismaels-ghosts-arnaud-desplechin.html">http://www.nytimes.com/2018/03/22/movies/review-ismaels-ghosts-arnaud-desplechin.html</a>
## 17			<a href="http://www.nytimes.com/2018/03/22/movies/beauty-and-the-dogs-review.html">http://www.nytimes.com/2018/03/22/movies/beauty-and-the-dogs-review.html</a>

```

## 18      http://www.nytimes.com/2018/03/22/movies/the-workshop-review-laurent-cantet.html
## 19      http://www.nytimes.com/2018/03/22/movies/i-kill-giants-review.html
## 20      http://www.nytimes.com/2018/03/22/movies/isle-of-dogs-review-wes-anderson.html
##          results.link.suggested_link_text
## 1      Read the New York Times Review of Wilde Salomé
## 2      Read the New York Times Review of Salomé
## 3      Read the New York Times Review of Personal Problems
## 4      Read the New York Times Review of Love After Love
## 5      Read the New York Times Review of Outside In
## 6      Read the New York Times Review of Gemini
## 7      Read the New York Times Review of The Gardener
## 8      Read the New York Times Review of After Louie
## 9      Read the New York Times Review of All I Wish
## 10     Read the New York Times Review of The Last Movie Star
## 11     Read the New York Times Review of The China Hustle
## 12     Read the New York Times Review of Finding Your Feet
## 13     Read the New York Times Review of Ready Player One
## 14     Read the New York Times Review of The Great Silence
## 15     Read the New York Times Review of Midnight Sun
## 16     Read the New York Times Review of Ismael's Ghosts
## 17     Read the New York Times Review of Beauty and the Dogs
## 18     Read the New York Times Review of The Workshop
## 19     Read the New York Times Review of I Kill Giants
## 20     Read the New York Times Review of Isle of Dogs
##          results.multimedia.type
## 1      mediumThreeByTwo210
## 2      mediumThreeByTwo210
## 3      mediumThreeByTwo210
## 4      mediumThreeByTwo210
## 5      mediumThreeByTwo210
## 6      mediumThreeByTwo210
## 7      mediumThreeByTwo210
## 8      mediumThreeByTwo210
## 9      mediumThreeByTwo210
## 10     mediumThreeByTwo210
## 11     mediumThreeByTwo210
## 12     mediumThreeByTwo210
## 13     mediumThreeByTwo210
## 14     mediumThreeByTwo210
## 15     mediumThreeByTwo210
## 16     mediumThreeByTwo210
## 17     mediumThreeByTwo210
## 18     mediumThreeByTwo210
## 19     mediumThreeByTwo210
## 20     mediumThreeByTwo210
##
## 1      https://static01.nyt.com/images/2018/03/30/arts/30salome/merlin_135871281_410319e8-8975-4
## 2      https://static01.nyt.com/images/2018/03/30/arts/30salome/merlin_135871281_410319e8-8975-4
## 3      https://static01.nyt.com/images/2018/03/27/ar
## 4      https://static01.nyt.com/images/2018/03/30/arts/30love1/merlin_135773490_42734cf4-6ad9-4
## 5      https://static01.nyt.com/images/2018/03/28/ar
## 6      https://static01.nyt.com/images/2018/03/30/movies/30gemini1/merlin_136059837_09065c3b-ffc7-4
## 7      https://static01.nyt.com/images/2018/03/30/arts/30gardenerpix/merlin_135863856_9cec7c08-c1f3-4
## 8      https://static01.nyt.com/images/2018/03/26/arts

```

```

## 9 https://static01.nyt.com/images/2018/03/28/ar
## 10 https://static01.nyt.com/images/2018/03/30/arts/3
## 11 https://static01.nyt.com/images/2018/03/30/arts/30chi
## 12 https://static01.nyt.com/images/2018/03/28/arts/findingyourfeet1/merlin_135740556_112895ce-4379-a
## 13 https://static01.nyt.com/images/2018/03/29/arts/29readyplayerone1/merlin_135740451_5ef70299-0297-a
## 14 https://static01.nyt.com/images/2018/03/30/movies/30greatsi
## 15 https://static01.nyt.com/images/2018/03/24/arts/24mid
## 16 https://static01.nyt.com/images/2018/03/23/arts/23ismaelsghost/merlin_135652056_545215ce-7d65-a
## 17 https://static01.nyt.com/images/2018/03/23/arts/23beautyandthedogspix/23
## 18 https://static01.nyt.com/images/2018/03/23/arts/23thev
## 19 https://static01.nyt.com/images/2018/03/23/arts/23killgiants1/merlin_135651834_da35096f-806d-a
## 20 https://static01.nyt.com/images/2018/03/23/arts/23isl
## results.multimedia.width results.multimedia.height
## 1 210 140
## 2 210 140
## 3 210 140
## 4 210 140
## 5 210 140
## 6 210 140
## 7 210 140
## 8 210 140
## 9 210 140
## 10 210 140
## 11 210 140
## 12 210 140
## 13 210 140
## 14 210 140
## 15 210 140
## 16 210 140
## 17 210 140
## 18 210 140
## 19 210 140
## 20 210 140

```