

# Lab Exercise 3

Ace Bagilidad

2024-02-22

## 10 MOVIES REVIEWS

```
# install.packages("polite")
# install.packages("httr")
# install.packages("rvest")
# install.packages("selectr")
library(polite)
```

```
## Warning: package 'polite' was built under R version 4.3.2
```

```
library(httr)
```

```
## Warning: package 'httr' was built under R version 4.3.2
```

```
library(rvest)
```

```
## Warning: package 'rvest' was built under R version 4.3.2
```

```
library(selectr)
```

```
## Warning: package 'selectr' was built under R version 4.3.2
```

```
#Scraping of Movies
```

```
scrapingNodes <- function(session, HTMLnodes) {
  session %>% scrape() %>% html_nodes(HTMLnodes) %>% html_text()
}
```

```
prodDetails <- function(link) {
  session <- bow(link, user_agent = "For Educational Purpose")
}
```

```
Title <- scrapingNodes(session, "a.subnav_heading")
movieReviewer <- scrapingNodes(session, "span.display-name-link")[1:10]
reviewText <- scrapingNodes(session, "div.text.show-more__control")[1:10]
RevDate <- scrapingNodes(session, "span.review-date")[1:10]
movieRating <- scrapingNodes(session, "span.rating-other-user-rating")[1:10]
```

```

titleReview <- scrapingNodes(session, "a.title")[1:10]

Imdb <- data.frame(      Movie_Title = Title,
                        Reviewer = movieReviewer,
                        Review_Date = RevDate,
                        Rating = movieRating,
                        Review = reviewText,
                        Review_Title = titleReview
                        )

return(Imdb)
}

link1 <- "https://www.imdb.com/title/tt0068646/reviews?ref_=tt_urv"
MovieReviewsData <- prodDetails(link1)
#View(MovieReviewsData)

```

Connection to Database

```

#@install.packages("RMySQL")

library(dplyr,dbplyr)

```

```
## Warning: package 'dplyr' was built under R version 4.3.2
```

```
##
```

```
## 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(RMySQL)
```

```
## Warning: package 'RMySQL' was built under R version 4.3.2
```

```
## Loading required package: DBI
```

```
## Warning: package 'DBI' was built under R version 4.3.2
```

```
#creating connections
```

```

connection <- dbConnect(RMySQL::MySQL(),
                        dsn="MariaDB-connection",
                        Server = "localhost",
                        dbname = "movie",
                        user = "root",
                        password = "")

```

Listing tables and fields

```
dbListTables(connection)
```

```
## [1] "reviews"
```

```
dbListFields(connection,"reviews")
```

```
## [1] "id"           "Movie_Title"  "Reviewer"     "Review_Date"  "Rating"
## [6] "Review"      "Review_Title"
```

Reading Data from the Database

```
review_data <- dbGetQuery(connection, "SELECT * FROM movie.reviews")
```

```
glimpse(review_data)
```

```
## Rows: 60
## Columns: 7
## $ id          <int> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17~
## $ Movie_Title <chr> "The Godfather", "The Godfather", "The Godfather", "The G~
## $ Reviewer    <chr> "CalRhys", "andrewburgereviews", "Sleepin_Dragon", "gogos~
## $ Review_Date <chr> "20 June 2014", "1 April 2019", "6 February 2021", "11 Fe~
## $ Rating      <chr> "\n          10/10\n          ", "\n          10/10~
## $ Review      <chr> "'The Godfather' is the pinnacle of flawless films! The f~
## $ Review_Title <chr> " The Pinnacle Of Flawless Films!\n", " An offer so good,~
```

Adding reviews to the database

```
for (i in 1:nrow(MovieReviewsData)) {
  query <- paste0("INSERT INTO reviews (Movie_Title, Reviewer, Review_Date, Rating, Review, Review_Title)
                  VALUES ('", MovieReviewsData$Movie_Title[i], "','", MovieReviewsData$Reviewer[i], "','",
                  gsub("'", "\"", MovieReviewsData$Review[i]), "','", gsub("'", "\"", MovieReviewsData$Review_Title[i]), "')")
  # this execute the query
  query_result <- dbSendQuery(connection, query)

  # clear result after executing query
  dbClearResult(query_result)
}
```

Reading Data from the Database

```
review_data <- dbGetQuery(connection, "SELECT * FROM movie.reviews")
#removing the id in the dataframe
review_data[,c(2:7)]
```

```
##      Movie_Title      Reviewer      Review_Date
## 1 The Godfather      CalRhys      20 June 2014
## 2 The Godfather andrewburgereviews 1 April 2019
```

|       |               |                    |                  |
|-------|---------------|--------------------|------------------|
| ## 3  | The Godfather | Sleepin_Dragon     | 6 February 2021  |
| ## 4  | The Godfather | gogoschka-1        | 11 February 2018 |
| ## 5  | The Godfather | Marshall-D-Teach   | 23 February 2020 |
| ## 6  | The Godfather | alexkolokotronis   | 21 June 2008     |
| ## 7  | The Godfather | b-a-h TNT-6        | 5 March 2002     |
| ## 8  | The Godfather | planktonrules      | 30 March 2013    |
| ## 9  | The Godfather | TheLittleSongbird  | 18 July 2010     |
| ## 10 | The Godfather | mattrochman        | 14 October 2006  |
| ## 11 | The Godfather | CalRhys            | 20 June 2014     |
| ## 12 | The Godfather | andrewburgereviews | 1 April 2019     |
| ## 13 | The Godfather | Sleepin_Dragon     | 6 February 2021  |
| ## 14 | The Godfather | gogoschka-1        | 11 February 2018 |
| ## 15 | The Godfather | Marshall-D-Teach   | 23 February 2020 |
| ## 16 | The Godfather | alexkolokotronis   | 21 June 2008     |
| ## 17 | The Godfather | b-a-h TNT-6        | 5 March 2002     |
| ## 18 | The Godfather | planktonrules      | 30 March 2013    |
| ## 19 | The Godfather | TheLittleSongbird  | 18 July 2010     |
| ## 20 | The Godfather | mattrochman        | 14 October 2006  |
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| ## 22 | The Godfather | andrewburgereviews | 1 April 2019     |
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| ## 39 | The Godfather | TheLittleSongbird  | 18 July 2010     |
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| ## 42 | The Godfather | andrewburgereviews | 1 April 2019     |
| ## 43 | The Godfather | Sleepin_Dragon     | 6 February 2021  |
| ## 44 | The Godfather | gogoschka-1        | 11 February 2018 |
| ## 45 | The Godfather | Marshall-D-Teach   | 23 February 2020 |
| ## 46 | The Godfather | alexkolokotronis   | 21 June 2008     |
| ## 47 | The Godfather | b-a-h TNT-6        | 5 March 2002     |
| ## 48 | The Godfather | planktonrules      | 30 March 2013    |
| ## 49 | The Godfather | TheLittleSongbird  | 18 July 2010     |
| ## 50 | The Godfather | mattrochman        | 14 October 2006  |
| ## 51 | The Godfather | CalRhys            | 20 June 2014     |
| ## 52 | The Godfather | andrewburgereviews | 1 April 2019     |
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| ## 56 | The Godfather | alexkolokotronis   | 21 June 2008     |

|       |               |                    |                  |
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| ## 64 | The Godfather | gogoschka-1        | 11 February 2018 |
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| ## 66 | The Godfather | alexkolokotronis   | 21 June 2008     |
| ## 67 | The Godfather | b-a-h TNT-6        | 5 March 2002     |
| ## 68 | The Godfather | planktonrules      | 30 March 2013    |
| ## 69 | The Godfather | TheLittleSongbird  | 18 July 2010     |
| ## 70 | The Godfather | mattrochman        | 14 October 2006  |
| ##    |               | Rating             |                  |
| ## 1  | \n            | 10/10\n            |                  |
| ## 2  | \n            | 10/10\n            |                  |
| ## 3  | \n            | 10/10\n            |                  |
| ## 4  | \n            | 10/10\n            |                  |
| ## 5  | \n            | 10/10\n            |                  |
| ## 6  | \n            | 10/10\n            |                  |
| ## 7  | \n            | 10/10\n            |                  |
| ## 8  | \n            | 10/10\n            |                  |
| ## 9  | \n            | 10/10\n            |                  |
| ## 10 | \n            | 10/10\n            |                  |
| ## 11 | \n            | 10/10\n            |                  |
| ## 12 | \n            | 10/10\n            |                  |
| ## 13 | \n            | 10/10\n            |                  |
| ## 14 | \n            | 10/10\n            |                  |
| ## 15 | \n            | 10/10\n            |                  |
| ## 16 | \n            | 10/10\n            |                  |
| ## 17 | \n            | 10/10\n            |                  |
| ## 18 | \n            | 10/10\n            |                  |
| ## 19 | \n            | 10/10\n            |                  |
| ## 20 | \n            | 10/10\n            |                  |
| ## 21 | \n            | 10/10\n            |                  |
| ## 22 | \n            | 10/10\n            |                  |
| ## 23 | \n            | 10/10\n            |                  |
| ## 24 | \n            | 10/10\n            |                  |
| ## 25 | \n            | 10/10\n            |                  |
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| ## 27 | \n            | 10/10\n            |                  |
| ## 28 | \n            | 10/10\n            |                  |
| ## 29 | \n            | 10/10\n            |                  |
| ## 30 | \n            | 10/10\n            |                  |
| ## 31 | \n            | 10/10\n            |                  |
| ## 32 | \n            | 10/10\n            |                  |
| ## 33 | \n            | 10/10\n            |                  |
| ## 34 | \n            | 10/10\n            |                  |
| ## 35 | \n            | 10/10\n            |                  |
| ## 36 | \n            | 10/10\n            |                  |
| ## 37 | \n            | 10/10\n            |                  |
| ## 38 | \n            | 10/10\n            |                  |
| ## 39 | \n            | 10/10\n            |                  |

```

## 40 \n          10/10\n
## 41 \n          10/10\n
## 42 \n          10/10\n
## 43 \n          10/10\n
## 44 \n          10/10\n
## 45 \n          10/10\n
## 46 \n          10/10\n
## 47 \n          10/10\n
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## 65 \n          10/10\n
## 66 \n          10/10\n
## 67 \n          10/10\n
## 68 \n          10/10\n
## 69 \n          10/10\n
## 70 \n          10/10\n

```

```
##
```

```

## 1  'The Godfather' is the pinnacle of flawless films! The first time I viewed 'The Godfather' I was :
## 2  It is now past 1 PM and I just finished watching Francis Ford Coppola's "The Godfather". I should
## 3  A masterclass in film making, is The Godfather a contender for the best film of all time? I'd argu
## 4                                     This isn't just a b
## 5
## 6  Tell me a movie that is more famous than this. Tell me a movie that has had more parodies spinned
## 7  The Godfather is one of the few films in which I personally did not find any significant weakness
## 8  Up until today, I haven't bothered to review "The Godfather". After all, everyone pretty much know
## 9  There is very little that I can add to the reviews on here, that have explained what is so wonder
## 10 This is a masterpiece. A timeless masterpiece. Initially, I didn't like this film all that much -
## 11 'The Godfather' is the pinnacle of flawless films! The first time I viewed 'The Godfather' I was :
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```

## 23 A masterclass in film making, is The Godfather a contender for the best film of all time? I'd argue  
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 ## 70 This is a masterpiece. A timeless masterpiece. Initially, I didn't like this film all that much -  
 ## Review\_Ti  
 ## 1 The Pinnacle Of Flawless Films  
 ## 2 An offer so good, I couldn't refuse  
 ## 3 One of the best of all time  
 ## 4 For Me, This Is The Definitive Film  
 ## 5 The greatest movie of all time

```

## 6                                     An Iconic Film
## 7                                     Another kind of "family movie
## 8 #2 on IMDb's Top 100, a multi-Oscar-winner and over 1500 reviews...what more can I say about the
## 9                                     I'm finding it hard to describe how amazing this movie was
## 10                                    Initially, I wasn't a fan... but then I realised
## 11                                    The Pinnacle Of Flawless Films
## 12                                    An offer so good, I couldn't refuse
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## 59                                     I'm finding it hard to describe how amazing this movie was

```



```

## 60             Initially, I wasn't a fan... but then I realised
## 61             The Pinnacle Of Flawless Films
## 62             An offer so good, I couldn't refuse
## 63             One of the best of all time
## 64             For Me, This Is The Definitive Film
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## 66             An Iconic Film
## 67             Another kind of "family movie"
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## 69             I'm finding it hard to describe how amazing this movie was
## 70             Initially, I wasn't a fan... but then I realised

```

```

#exporting to csv
#write.csv(review_data[,c(2:7)], "IMDBmovies.csv")

```