#### ISA 401: Business Intelligence & Data Visualization

06: Scraping Multiple Webpages

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### **Quick Refresher from Last Class**

- Understand when can we scrape data (i.e., robots.txt)
- Scrape a webpage using <a> Q</a>

06:00

# Non-Graded Assessment of Your Understanding

Scrape the Names and Positions of the current cabinet members from <a href="https://www.whitehouse.gov/administration/cabinet/">https://www.whitehouse.gov/administration/cabinet/</a> and save the results into a data frame that contains two columns: (a) name, and (b) position.

## Learning Objectives for Today's Class

- Scrape multiple webpages using •
- Use loops and/or tidymodeling approaches to scrape data from multiple webpages.

## Web Scraping Demos (Cont.)

## Demo 1: Scraping all Plane Crashes 2020-2024

- We will build on the previous example and we will scrape all the plane crashes that were recorded in the plane crash database between 2020-2024.
- Then, we will create a single **data frame** for all crashes. It will contain the fields in the individual tables as well as the year of crash.
- Then, we will **export the results to a CSV** so that we can analyze that in a separate program if we wanted to.

#### **Practice Outside of Class**

The most popular listings on Netflix are rated and reviews on ImDb are available at <a href="https://www.imdb.com/search/title/?companies=co0144901">https://www.imdb.com/search/title/?companies=co0144901</a>. Write an script that will produce a tibble that contains the **following information for the first 300 entries**:

- title, which you will save in a column titled title
- year/years of show, which you will save in a column titled year
- 1-2 sentence summary of show, which you save in a column titled summary

# Recap

## **Summary of Main Points**

By now, you should be able to do the following:

- Scrape multiple webpages using •
- Use loops and/or tidy modeling approaches to scrape data from multiple webpages.

## Kahoot Competition # 1

To assess your understanding and retention of the topics covered last week, you will **compete** in a Kahoot competition (consisting of 16 questions):

- Go to https://kahoot.it/
- Enter the game pin, which will be shown during class
- Provide your first (preferred) and last name
- Answer each question within the allocated 20-second window (fast and correct answers provide more points)

Winning the competition involves having as many correct answers as possible AND taking the shortest duration to answer these questions. The winner  $\P$  of the competition from each section will receive: \$10 Starbucks gift card. Good luck!!!

## Things to Do to Prepare for Next Class

• Go over your notes, read through the supplementary material (below), and complete Assignment 05 on Canvas.



- PDF of Published Paper
- ePub of Published Paper



Practical Web Scraping in R