# DATA607 - Assignment Week 7

Working with XML and JSON in R

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10/10/2021

### Introduction

Pick three of your favorite books on one of your favorite subjects. At least one of the books should have more than one author. For each book, include the title, authors, and two or three other attributes that you find interesting.

Create file representations of the selected books in the formats: HTML, XML, and JSON.

Are the three data frames identical?

#### Load required R Libraries

```
library(tidyverse)
library(XML)
library(jsonlite)
```

### Read HTML Data

```
html_file <- 'https://raw.githubusercontent.com/dab31415/DATA607/main/Homework/Assignment_5/books.html'
(html_df <- XML::readHTMLTable(html_file, as.data.frame = TRUE))</pre>
```

## named list()

### Read XML Data

```
xml_file <- 'https://raw.githubusercontent.com/dab31415/DATA607/main/Homework/Assignment_5/books.xml'
xml_file <- 'C:/Users/dab31/OneDrive/Documents/GitHub/DATA607/Homework/Assignment_5/books.xml'
(xml_df <- xmlToDataFrame(xml_file))</pre>
```

```
## title authors year publisher
## 1 Treasure Clive Cussler 1988 Simon and Schuster
## 2 The Hunt for Red October Tom Clancey 1984 Naval Institute Press
```

## Read JSON Data

```
json_file <- 'https://raw.githubusercontent.com/dab31415/DATA607/main/Homework/Assignment_5/books.json'
(json_df <- fromJSON(json_file))</pre>
```

```
## $books
##
                       title
                                              authors year
                                                                       publisher
                    Treasure
                                         Clive Cussler 1988
                                                               Simon and Schuster
## 1
## 2 The Hunt for Red October
                                          Tom Clancey 1984 Naval Institute Press
           Command Authority Tom Clancey, Mark Greaney 2013
                                                              G.P. Putnam's Sons
                       ISBN
##
   pages
## 1
      539
                0-671-62132
## 2
      387
               0-870-212850
## 3
     736 978-0-39-916077-9
```