Assignment 3

Start Assignment

Due 4 May by 22:00   **Points** 10   **Submitting** a file upload
File types rmd and html   **Available** until 4 May at 22:00

Assignment 3

This assignment draws on lecture and lab content from Module 3: Creating new variables and data tables. The knowledge and skills assessed by the assignment will be covered in lectures/labs by the end of Module 3. Consequently, the order of the assignment instructions below does not necessarily reflect the order the material is covered in lectures/labs.

The data context for Assignment 3 is about books and board games. You will focus creating data tables and variables for books and board games that have the same word used in their names. You will source data from the Google Books API and boardgamegeek.com (via the supplied SQLite database).

You will need access to a computer that has **R** **(https://cran.r-project.org/)** installed and **RStudio** **(https://www.rstudio.com/products/rstudio/download/)** installed.

You will also need to install the R packages {tidyverse}, {jsonlite}, and {RSQLite}. If installing R, RStudio, or these packages onto your computer is a problem, you can use the free level of **RStudio Cloud** **(https://rstudio.cloud/)** .

- Within your *stats220* folder on your computer, create a new project using RStudio that is called "Assignment3".

- Download the ***boardgamegeek.sqlite*** **(https://stat.auckland.ac.nz/~fergusson/stats220 /data/boardgamegeek.sqlite)** database and save this within the root of your project. For MAC users, right click on the link to the database file and choose "Save link as".

- Download the ***index.Rmd*** **(https://canvas.auckland.ac.nz/courses/75888/files/8597662 /download?download_frd=1)** file for this assignment and save this within the root of your project.

- Follow the instructions within the *index.Rmd* file for this assignment.

- Make sure you delete the instructions before knitting your Rmd to HTML for submission.

- Knit your *index.Rmd* file to create a self-contained *index.html* file.

For this assignment, you will submit your index.html file and your index.Rmd file

Marking guide

The assignment will be marked out of 10.

- The report contains an *Introduction* section and a *Learning reflection* section that meets the stated requirements (1 mark)

- The report contains an *Book data* section that contains the required code and output for sourcing data from the Google Books API (1 mark)

- The report contains an *Book data* section that contains the required code and output for creating a new data frame (1 mark)

- The report contains an *Book data* section that contains the required code and output for mutating new variables (1 mark)

- The report contains an *Book data* section that contains the required code, output and comments for producing summaries (1 mark)

- The report contains an *Board game data* section that contains the required code and output for querying the `boardgamegeek.sqlite` database (3 marks)

- The report contains a *Your choice!* section where R code, data from the assignment, and knowledge from the course has been combined to create something (1 mark)

- Overall, the code used is readable and overall the instructions for the assignment have been followed e.g. appropriate use of indenting and "white space", use of UPPER CASE for SQL commands, deleting the instructions for the assignment from the Rmd file, etc. (1 mark)

Assignment 3

Criteria	Ratings		Pts
The report contains an Introduction section and a Learning reflection section that meets the stated requirements	**1 Pts Full marks**	**0 Pts No marks**	1 pts
The report contains an Book data section that contains the required code and output for sourcing data from the Google Books API	**1 Pts Full marks**	**0 Pts No marks**	1 pts
The report contains an Book data section that contains the required code and output for creating a new data frame	**1 Pts Full marks**	**0 Pts No marks**	1 pts
The report contains an Book data section that contains the required code and output for mutating new variables	**1 Pts Full marks**	**0 Pts No marks**	1 pts
The report contains an Book data section that contains the required code, output and comments for producing summaries	**1 Pts Full marks**	**0 Pts No marks**	1 pts
The report contains an Board game data section that contains the required code and output for querying the boardgamegeek.sqlite database	**3 Pts Full marks**	**0 Pts No marks**	3 pts
The report contains a Your choice! section where R code, data from the assignment, and knowledge from the course has been combined to create something	**1 Pts Full marks**	**0 Pts No marks**	1 pts
Overall, the code used is readable and overall the instructions for the assignment have been followed e.g. appropriate use of indenting and "white space", use of UPPER CASE for SQL commands, deleting the instructions for the assignment from the Rmd file, etc.	**1 Pts Full marks**	**0 Pts No marks**	1 pts
			Total points: 10