CSDE 502 Winter 2021 Assignment 10 Introduction to Add Health Instructor: Phil Hurvitz **phurvitz@uw.edu**	My Name: My UWNetID:

Due Date: 2020-03-18 09:00

Instructions:
1. Fill out your name and UWNetID at the top of this page.
2. When you are completed with your work, create a PDF from thia Word document.
3. Push any specified code to your github account.
4. Upload any specified data or code files to Canvas.

Explanation:
This exercise will give you the opportunity to define and execute a brief research project. The intention is for you to use some of the data processing skills you have learned in this course to a novel data set. The second objective is for you to create a report in R Markdown to create html and PDF documents that include both your code and output. The third objective is for you to become minimally introduced to GitHub—at least to the point where you have created an account and uploaded your work.

1. Go to http://www.mortality.org.

2. Create a user name and password if necessary.

3. Click a link for a country.

4. Download one or more of the data files (for example, the 1 age x 1 year deaths data link is shown in Figure 1. You will be prompted for your username and password when you access the first file. To download the file, R-click the link and then *save as*.

c:\users\phurvitz\onedrive\uw\courses\csde502\csde502_winter_2021_course\assignments\csde502_2021_assignment10.docx

Figure 1: Web interface for mortality.org

Note: the raw tables contain metadata in the first row and the second row is blank. To read these into R as data frames, use

```
dat <- read.table(filename, skip = 2, header = TRUE)
```

5. Using R Markdown, write a brief paper (less than 5 pages) about the data from country that you have chosen, or make a comparison of two or more countries. Include in this paper:
   a) A brief introductory paragraph describing the country.
   b) Verbiage that describes the data and references the HMD data source.
   c) An analysis of the data to describe something interesting about the country.
   d) Include at least one of each of the following
      - text with imbedded R
      - hyperlink
      - table
      - plot

Follow the standard scientific paper format, with these sections:
   - Introduction
   - Methods
      o Data
      o Analysis
   - Results
   - Discussion
   - Conclusions
   - References (if any)

6. Push your R Markdown code to your github.com account and provide the link to the raw code (see Figure 2 and Figure 3.
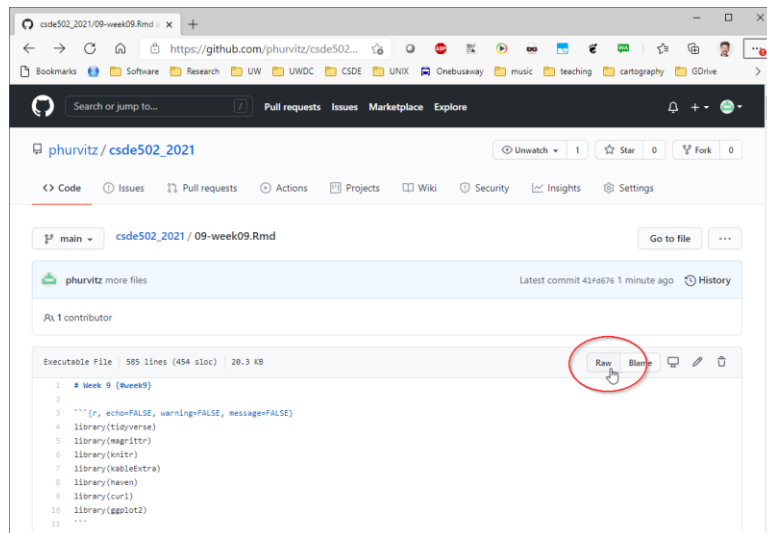

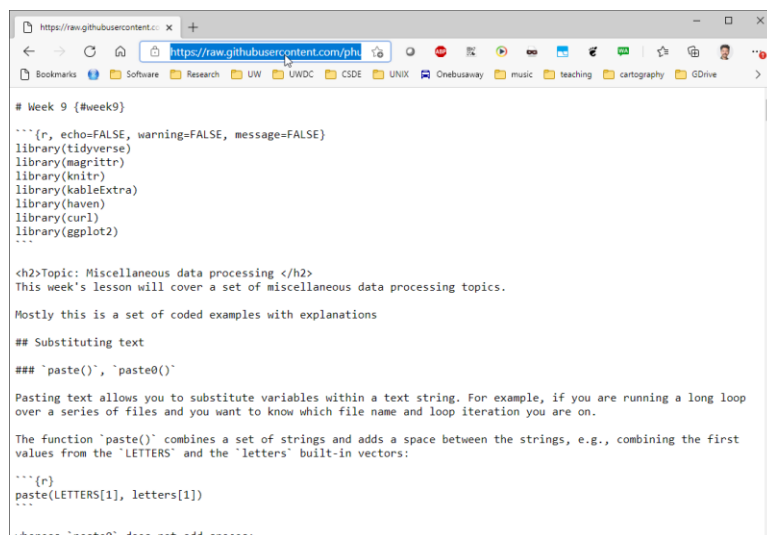Figure 2: Selecting raw mode on github.com

Figure 3: Raw mode on github.com

7. The URL to my raw R Markdown file is:

5. Create a PDF from this file and upload it to the Canvas site along with any of the mortality data sets you used in your analysis.