FOAR705 - Learning Journal Week 3

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Week 3: 12/8/19 - 18/8/19

14/8/19 - 1:54pm

I have continued with the Data Carpentry exercises, resuming with Data Organization in Spreadsheets for Social Scientists. Some general points that stood out to me that I had never considered before were:

- Use underscores (_) instead of spaces when entering data or naming things.
- Don't start naming things with numbers.
- Differentiate between a null value and true zero values.
- Don't put multiple tables on the same tab.
- Ask yourself if adding a new column to a table will achieve the same result as creating a new tab.

14/8/19 - 2:14pm

I have revisited the Learn LaTeX in 30 minutes guide and am now going to start with the Scoping Exercise.

Overall Objective: Complete Scoping Exercise using Overleaf and committing the .pdf and .tex file to Cloudstor and the .pdf to iLearn.

Objective: Create new project in Overleaf.

Action:

- Select New Project in Overleaf website.

- Name new project 'Scoping Exercise'

Error: None.

Result: New .tex project titled Scoping Exercise in Overleaf.

14/8/19 - 2:20pm

Objective: Add title, author name and date to .tex file.

Action:

- Changed

```
\title{Scoping Exercise} to \title{FOAR705 - Scoping Exercise}
```

- Changed

```
\author{Jan Jugueta - 44828020}
```

- Clicked on Recompile to view updated changes.

Error: None.

Result: Success. Renamed the default title and author to what I wanted.

14/8/19 - 2:20pm

I also note that there is an introduction that is part of the default new project. This is an example of a section in LaTeX. I think I'll use the sections command to separate the different parts of this assignment.

Objective: Create sections for, Research Area, Jobs, Pains, Pain Relievers, Gains, Gain Creators.

Action:

- Changed

```
\section{Introduction} to \section{Research Area}
```

- Added

```
\section{Jobs}
```

- Added

```
\section{Pains}
```

- Added

```
\section{Pain Relievers}
```

- Added

```
\section{Gains}
```

- Added

```
\section{Gain Creators}
```

- Clicked on Recompile to view updated changes.

Error: None.

Result: Success. Created all the new sections.

14/8/19 - 2:40pm

Objective: See what happens when I start typing text between

```
\section{Research Area}
```

and

```
\section{Jobs}
```

Action:

- Typed a paragraph of information.

- Clicked on Recompile to view updated changes.

Error: None.

Result: The information I had typed between

```
\section{Research Area}
```

and

```
\section{Jobs}
```

appeared as paragraph text in the Research Area section.

14/8/19 - 2:56pm

For the Jobs section, I want to experiment with the unordered lists and see how that works with LaTeX.

Objective: Create a list in LaTeX.

Action:

- Using the guide I copied and amended the script provided, and entered this:

```
\begin{itemize}
  \item
  \item
  \item
  \item
  \item
  \item
  \item
\end{itemize}
```

- Typed information after every

```
            \item
```

- Clicked on Recompile to view updated changes.

Error: None.

Result: Dot points have appeared with the text that I have typed in after the

```
    \item
```

command.

14/8/19 - 3:08pm

For the next section, I want to see how paragraphs work.

Objective: Use paragraphs in the 'Pains' section.

Action:

- Typed one paragraph underneath the

```
        \section{Pains}
```

  line.
- Created a blank line after that typed paragraph.
- Typed a new paragraph after the blank line.
- Clicked on Recompile to view updated changes.

Error: None.

Result: Separate paragraphs created in the Pains section.

14/8/19 - 3:41pm

I have finished filling out the content for my scoping exercise. I will now recompile it, save it and upload both the .tex and .pdf for submission.

Objective: Recompile .tex file and upload files for submission.

Action:

- Clicked on recompile.
- Reviewed the PDF preview to ensure quality control.
- Clicked on Download PDF.
- Renamed main.tex to jugueta_scopingexercise.tex.
- Went back to the Project page in Overleaf.
- Downloaded jugueta_scopingexercise.tex.
- Opened the Scoping Exercise submission folder in Cloudstor.
- Created Jan Jugueta Scoping Exercise in Scoping Exercise submission folder.
- Uploaded jugueta_scopingexercise.tex and Jan_Jugueta_Scoping_Exercise.pdf to Jan Jugueta Scoping Exercise folder.
- Uploaded Jan_Jugueta_Scoping_Exercise.pdf to iLearn.

Error: None.

Result: Success. Scoping exercise submitted and uploaded to Cloudstor and iLearn.

14/8/19 - 4:00pm

As part of this weeks homework, we were asked to consider problem data produced by our discipline. As I will be mainly work with historical documents, I find that records on sporting tables and match fixtures in East Germany to be wildly inconsistent. I had read the book *The People's Game* which is a comprehensive historical account of football in East Germany. However, I had noticed that match records, and how they were display were generally inconsistent for varying seasons. The 'cells' in the columns and rows would often contain multiple data sets. Furthermore, they often used special characters to denote more information about a certain data set.

I'm not entirely sure if this example fits the problem data produced by our discipline, but very often, the Stasi (East German Secret Police) would leave lines of information blank when it came to citizens that displayed worrisome anti-socialist behaviours. I would equate this to a null value, which makes me question what information could have been recorded there?

14/8/19 - 4:10pm

Objective: Download current version of Learning Journal and commit to GitHub.

Action:

- Select File in Cloudstor.
- Selected Download As ¿ Docx (Word file).
- Downloaded 'Jan Jugueta - Learning Journal.docx' to Download Folder on my machine.
- Enter Jugueta-Exercises repository in GitHub.
- Selected Upload files.
- Dragged and dropped 'Jan Jugueta - Learning Journal.docx' to upload window in GitHub.
- Added the description 'Learning Journal'.
- Added '20190814 16:109' in the extended description to indicate when the Learning Journal was from.
- Clicked on Commit changes.

Error: None.

Result: Success. Committed Learning Journal to GitHub.

14/8/19 - 4:11pm

Objective: Commit Scoping Exercise to GitHub.

Action:

- Uploaded Jan_Jugueta_Scoping_Exercise.pdf and jugueta_scopingexercise.tex to GitHub.
- Added 'Scoping Exercise' to description.
- Added '.pdf and .tex' to extended description.

Error: None.

Result: Successfully committed Scoping Exercise to GitHub.

18/8/19 - 11:41am

Since I have completed the Scoping Exercise on Overleaf, I have decided to migrate my Learning Journal to Tex as well. So my next step is to transfer my Week 2 Learning Journal to Overleaf.

Objective: Transfer Learning Journal Week 2 to Overleaf.

Action:

- Opened new Overleaf Project.
- Titled the project Learning Journal Week 2
- Copied and pasted the information from Learning Journal Week 2 from the Cloudstor .docx file into the new Overleaf project.
- Used the itemise code to create bullet points where needed.
- Click on Recompile.

Error: Jan_JuguetaCV.pdf appeared as $Jan_{juguetaCV.pdf}$.

Result: Copied most of the text successfully, but still need to figure out how to make the underscore '_' character as an underscore.

18/8/19 - 12:10pm

Using the Overleaf guide, I managed to find out the solution to the underscore problem. For underscore to be displayed in normal text, it needs to be preceded by the slash character.

Objective: Fix the underscore problem in Learning Journal Week 2 in Overleaf.

Action:

- Found every instance of where the underscore character appeared and entered the slash character in front of them.
- Clicked on recompile.

Error: None.

Result: Successfully fixed the underscore problem. They are now displayed as normal text.

18/8/19 - 12:18pm

After fixing the underscore problem, I want to figure out how to create a blank vertical space anytime a new paragraph is created. Asking Billy from class, she was able to help me out with the codes:

- Entered

    ```
    \setlength{\parindent}{0pt}
    ```

    in the preamble.
- Entered

    ```
    \setlength{\parskip}{1em}
    ```

    in the preamble.

Error: None.

Result: Successfully reformatted the .tex file.

18/8/19 - 12:30pm

Now that I am happy with the layout of the Learning Journal in Overleaf, I now needed to upload the .tex version of my Learning Journal to Cloudstor and commit a version to GitHub.

Objective: Create a new folder in Cloudstor to store the new .tex Learning Journals. Once done, upload and commit Learning Journals to Cloudstor and GitHub.

Action:

- Create new folder in the Learning Journal folder called JuguetaLearningJournal.
- Cut and pasted the Jan Jugueta - Learning Journal.docx file into JuguetaLearningJournal Folder.
- Downloaded the Learning Journal Week 2 PDF and .tex file from Overleaf.

- Created Week2 Folder in JuguetaLearningJournal in Cloudstor.

- Uploaded Learning Journal Week 2 .pdf and .tex files into Week2 folder.

- Committed the Learning Journal Week 2 .pdf and .tex files into GitHub.

Error: None.

Result: Successfully uploaded and committed PDF and Tex files to both Cloudstor and GitHub.

18/8/19 - 9:20pm

Started to read the Dates as Data lesson in Data Carpentry. Some important notes here:

- Storing dates in a single column is not best practice.

- Mac and PC have different dates from when they count their dates.

- Excel stores dates as integers.

- Regional variances could confuse data.

- It is best to record the date as three different data sets ie. Day, Month and Year.

18/8/19 - 9:28pm

Have downloaded the SAFI_dates.xlsx file from the Data Carpentry site. To comply with the advice given in earlier Data Carpentry lessons, I will duplicate the sheets to ensure the original data is not modified.

Objective: Create a copy of the DD_MM_YEAR tab.

Action:

- Right clicked on the DD_MM_YEAR tab and selected 'Move or Copy'.

- Selected to create a copy of the DD_MM_YEAR tab.

- Renamed copied tab DD_MM_YEAR_copy.

Error: None.

Result: Success. New copy created.

18/8/19 - 9:53pm

Now to create new columns to extract the date data.

Objective: Create columns for the Day, Month and Year.

Action:

- Created three new columns.
- Entered the text 'day', 'month' and 'year' in the 1st cell of the new columns.

Error: None.

Result: Success. Created new columns for day, month and year.

18/8/19 - 9:57pm

Now to extract the individual day components from the 'interview_date' column.

Objective: Extract day component from the 'interview_date' column.

Action:

- Entered the function =DAY( ) into cell B2.
- Recoded the function in cell B2 to =DAY(A2) to reference the 'interview_date' column.
- Clicked and dragged the bottom right corner of cell B2 to cell B15 to re-appropriate the =DAY( ) function for their own specific cells.

Error: None.

Result: Success. 'day' column has extracted the day data from the 'interview_date' column.

18/8/19 - 10:05pm

Objective: Extract month component from the 'interview_date' column.

Action:

- Entered the function =MONTH( ) into cell C2.

- Recoded the function in cell C2 to =MONTH(A2) to reference the 'interview_date' column.

- Clicked and dragged the bottom right corner of cell C2 to cell C15 to re-appropriate the =MONTH( ) function for their own specific cells.

Error: None.

Result: Success. 'month' column has extracted the month data from the 'interview_date' column.

18/8/19 - 10:11pm

Objective: Extract year component from the 'interview_date' column.

Action:

- Entered the function =YEAR( ) into cell D2.

- Recoded the function in cell D2 to =YEAR(A2) to reference the 'interview_date' column.

- Clicked and dragged the bottom right corner of cell D2 to cell D15 to re-appropriate the =YEAR( ) function for their own specific cells.

Error: None.

Result: Success. 'year' column has extracted the year data from the 'interview_date' column.

18/8/19 - 10:13pm

Below is a screenshot of the updated SAFI_dates.xlsx file.

	A	B	C	D
1	interview_date	day	month	year
2	17/11/2016	17	11	2016
3	17/11/2016	17	11	2016
4	16/11/2016	16	11	2016
5	16/12/2016	16	12	2016
6	21/11/2016	21	11	2016
7	21/11/2016	21	11	2016
8	21/11/2016	21	11	2016
9	17/11/2016	17	11	2016
10	17/11/2016	17	11	2016
11	17/11/2016	17	11	2016
12	16/11/2016	16	11	2016
13	16/11/2016	16	11	2016
14	16/11/2016	16	11	2016
15	16/11/2016	16	11	2016
16				
17				
18				
19				
20				
21				
22				

◀ ▶　　DD_MM_YEAR　　MM_DD_YEAR　　**DD_MM_YEAR_copy**　　+

18/8/19 - 10:16pm

Following on to the next section of the exercise. I will now test adding 17/11 to the 'interview_date' column.

Objective: Add 17/11 to interview_date column.

Action: Entered 17/11 in cell A16.

Error: None.

Result: Cell B16 is displaying 17, cell C16 is displaying 11 and cell D16 is displaying 2019. Thus confirming that if no year data is entered, it will assume that the user implies the current year.

16	17/11/2019	17	11	2019

18/8/19 - 10:53pm

Because I want to include screen shots as part of this Learning Journal, I need to learn how to include images in LaTeX.

Objective: Add screenshots to Overleaf and use them in the Journal.

Action:

- Uploaded the screenshots to Overleaf.
- Renamed the two screenshots to 'figa.png' and figb.png'.
- Entered

```
\usepackage{graphicx}
```

  to the preamble.
- Entered the code

```
\includegraphics{figa.png}.
```

- Clicked on recompile to view updated changes.

Error: None, but display issues are present.

Result: The image loads, but it is poorly formatted for display.

18/8/19 - 11:03pm

I need to resize and position the image so that it fits the page better.

Objective: Resize and position the image for better display.

Action:

- Replaced

    \includegraphics{figa.png}

  with

    \includegraphics[width=\textwidth]{figa.png}

- Clicked on recompile to view updated changes.

Error: None.

Result: Success. Image displayed correctly.