

# Digital Methods: Learning Journal Template

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## **1 Today's Date**

### **1.1 Thoughts / Intentions**

### **1.2 Action**

### **1.3 Results**

### **1.4 Final Thoughts**

## 2 06/11/2019

### 2.1 Thoughts / Intentions

**08:44am:** So I just read the homework for tomorrows lesson. I feel a bit lost already, but I'll try to make it work. **09:37am:** I will try to clean those messy dates I already created a Github user account and the Overleaf account

### 2.2 Action

- I already created a Github user account.
- I already created a Overleaf account too.

Creating a repository on Github:

- Click on profile icon in top right corner and click 'your repositories'
- Click 'new' and entering details - named repository 'learning-journal'
- Selected initialize this repository with a README and created repository
- Uploading overleaf weekly template sample
- Committed file with description

Overleaf:

- Used sample template in Overleaf and edited title/abstract
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- Attempt to recompile presents **ERROR** - still recompiles to the weekly journal template.
- Deleted template and recompile section dissapeared with **ERROR** - "Unknown main document. Please choose the main file for this project in the project menu"

Data Carpentry Exercises:

*Messy Spreadsheet*

- Opened data sets from previously downloaded excel spreadsheets
- Found 'tabs' in excel in bottom left corner
- Discussing messy data
- Color used for indication
- Multiple variables in column and row

- Multiple values in single cells
- Inconsistencies in null, 0 and false in each tab
- Inconsistencies and use of asterisk
- Blank cells are not adequate indicators
- Multiple tabs in one spreadsheet

## 2.3 Results

- Github -
- Overleaf - .

## 2.4 Final Thoughts

**2:03pm:** Im still a bit confused about it all. But I think I will get it at some point. I feel a lot more confident with overleaf. I will continue with the exercise tomorrow morning.

# 3 20/11/2019

## 3.1 Thoughts/Intentions

- **08:50am:** So today I found my final project on "Our World in Data"

## 3.2 Action

"Our World in Data" website

- I went to the website
- Had a little look around
- Clicked on the category "Global Health"
- Looked at some of the subsections
- I founded the category "Maternal mortality"
- Then I downloaded the csv-file and had a little look on the data.
- And decided that this would be my project for the exam

### 3.3 Final Thoughts

09:20am

- So with the data from "Global Health" I think it could be interesting to look into involvement of maternal mortality in different countries over time but also compare different European or African countries with each other
- The data is quite clean so I don't need to clean it before I use it, which is very nice.
- This is just my first thoughts around my final project. I think I need to think a bit more about have to work with the data and which angle I can have on the data

## 4 21/11/2019

### 4.1 Thoughts/Intentions

**Around 9:30 am:** So I told my idea on my final project first to Petra and later Adela. While talking to Petra my original idea developed a bit, so now I'm making a comparison between Sweden, Denmark and Norway around maternal mortality and also child mortality. I choose these countries because healthcare wise the three countries are roughly alike, but is there still a different between have many children and mothers, who dies through time.

- Adela approved my idea, but told my that perhaps I needed all European countries instead of just the Nordic countries.

### 4.2 Action

- Like yesterday I went to the "Our World in Data" website to find my new data on child mortality.
- I went to the website.
- Clicked on the category "Global Health"
- Found the subsection called "Child mortality" and downloaded the csv-file.

### 4.3 Final Thoughts

**13.30 pm** Like yesterday I had a little look on the data on child mortality and once again the data is quite clean, which is nice.

- But I can see in the different files that there is quite a different time frame on how long the three countries have written their data down. Will this be a problem?

**09:20am**

- So with the data from "Global Health" I think it could be interesting to look into involvement of maternal mortality in different countries over time but also compare different European or African countries with each other
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- This is just my first thoughts around my final project. I think I need to think a bit more about have to work with the data and which angle I can have on the data

## 5 26/11/2019

### 5.1 Thoughts/Intentions

- **15:32 pm:** I have quite a bit of homework for Thursdays lesson and I need to do the following things:
- Review the lessons 1, 2 and 3 in R for Social Scientist
- Do all the Exercises in lessons 2-3 and document them in your journal
- Install tidyverse in R
- Download and put the SAFI clean.csv somewhere on my computer where I can easily present it to R.
- Look at lesson 4 and 5 in advance

### 5.2 Action

#### Tidyverse

- The first thing I'll do is to install Tidyverse. I need to run the `install.packages("tidyverse")` and command.
- But it seems like I can find my R-files from last week. Can I just install the program in R - I will try.
- I just typed the `install.packages("tidyverse")` in R and it began to work, so I think I did it right!

### **SAFI-clean.csv**

- The next thing I will do is to download the SAFI file
- So I will find the lesson plan and clicked on Week 4 to go to the "R for Social Scientists" guide
- At first I could not find the file, but then i reread Adela's post on Blackboard and I found the file on followed link: <https://datacarpentry.org/r-socialsci/guide/>
- Then I downloaded the file on to my computer and put it on my desktop, so I easily can find it for Thursdays lesson

### **R for Social Scientist**

- The next step I will do is to review the lessons 1, 2 and 3 for R in "R for Social Scientist"
- After I reviewed the lessons 1, 2 and 3 I need to do all the exercises for lesson 2 and 3
- The last thing I need to do for tomorrows lesson is to look a lesson 4 and 5 in advance

## **5.3 Final Thoughts**

**Around 11:35 on 27/11-2019** I have done almost all the homework for this tomorrows lesson now.

- I was a bit difficult to find the SAFI file but I found it at lasted
- I also had a bit of problems with the exercises. I could not quite finder out how to put it in to R and I got a lot of faults
- I was quite confused while I read the lesson 4 and 5. I think it will make more sense, when Adela talks about it on tomorrows lesson.
- I think the things from lesson 5 will be very relevant for my final project. It shows how to make graphs and different figure son data, which is what I'm exactly going for.

## 6 28/11/2019

### 6.1 Thoughts/Intentions

**11:15 am:** So this morning I book a help time with Petra for Thursday next week at 11:30 am

- In all honesty I booked the time, so I can start on the project already now although my other exam is taking all my time at the moment, but I think it will help me in the long run.
- Another thing I need to do today is the git exercise, where I need to make my journal in Overleaf public

### 6.2 Action

#### Git exercise

- The first thing I need to do is to read about Git and the common commands in Week 3 slides and after that I need to open git bash and register with my username and email.
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## 7 02/11/2019

### 7.1 Thoughts/Intentions

**09:15 am:** My plan for this morning is to begin on my final project in R.

- I think the things from last week lesson will made sense in my final project because of the plots and graphs you can made in R.

### 7.2 Action

- The first thing I will do is to made a new script in R called my final project. I am still insecure about the final title for the project.
- At the same time I will open the R file, which I made for the lesson on Thursday, so I can get some inspiration and general a idea on how to begin my final project.
- I also need to open the "R for Social Scientists".
- Back in my new R script the first thing I will do is to run the package "Tidyverse". I already installed the package last week, so the only thing I need to go is to run the command "library", which reinstall the package.
- Afterwards I will upload my data sets to the script. The first one I will upload is the Maternal Mortality and secondly the data on child mortality.

- With the data for child mortality I could not upload the file maybe because it is call "Interview" like Maternal mortality, so the next thing I will try is to call it "Interviews1", but it is still not working, so I decide to just work on the Maternal Mortality at first.
- The next thing I will do is to put pipes on my data for maternal mortality because I only want to focus on Denmark, Norway and Sweden. The first country I will try on is Denmark.
- I have some problems with which values I need to put in "filter" and "select". The things I would like to how in my final plot is country, year and maternal mortality ratio, but at the moment I can't figure out where to put the different values. I have tried all of them on different places.

### 7.3 Final Thoughts

**Around 13:15 pm** So I have tried to begin on my final project today, but at the moment I have a lot of things, which doesn't work

- For my appointment with Petra on Thursday I need to ask her on how I upload the data for Child mortality in the same script as the other data
- I also need to ask her on I'm need to mutate my data like on last week lesson
- I need to ask about, which values I need to have in "filter" and "select" to made it work.

## 8 05/12/2019

### 8.1 Thoughts/Intentions

**11:15 am:** So today at 11:30 I had a appointment with Petra

- Before my appointment with Petra I spent Monday trying to begin on my project.
- On Monday I managed to upload my data for Maternal mortality, but I had a lot of problems on how to upload my data for child mortality and which values I needed to have in "filter" and "select"

### 8.2 Action

- In my appointment with Petra today I asked her on the things I had troubles with on Monday. And she managed to give me some good answers on my questions, but she also helped me on how I changed the name on one of my columns in my data set because their where quite long and a bit hard to work with.



- After my appointment with Petra I went to the library to continue my work with the project.
- The first thing I did was to upload my other data on child mortality, which Petra told me I could just call whatever I liked, but I just called it "Interviews1". I already tried this on Monday, but at that time it did not work for me.
- After that I changed the name in one of the columns in child mortality to something shorter because the original title was quite long, which made it very difficult to work with. I also changed one of the columns in Maternal mortality to something shorter.
- After that I looked at the pipes I made on Monday because Petra told me that I needed to change the "Interviews-Plotting" to "Interviews-Denmark" and in "filter" I needed to put "Denmark" and in "Select" I needed to put "Entity, Year and Maternal Mortality" and subsequently it worked.
- The next thing I tried was to make a plot for Denmark. I put year as X and Maternal mortality as Y in my plot. At the same time I changed the color on the dots to yellow and I got a very fine graph for Danish maternal mortality.
- After it all worked out with Denmark I once again made the pipes and the plots with maternal mortality for Norway and Sweden. It also worked, so now I got three very nice plots.
- In the end I did all the steps once again, but this time it was with child mortality and again I did it with Denmark, Norway and Sweden.

### 8.3 Final Thoughts

**Around 14:30 pm** So today I did quite a lot of work on my final project and I am very satisfied with what I have achieved, but I will still like to make some changes.

- It really helped to get some help from Petra.
- Even though I have made some very fine plots I would like to make some graphs where both Denmark, Norway and Sweden are in because I think it will make it easier to compare the countries.

## 9 06/12/2019

### 9.1 Thoughts/Intentions

**08:30 am:** Today I will try to continue on my work from yesterday and I will try to make some other graphs where, like I mentioned, both maternal - and child mortality for Denmark, Norway and Sweden are in.

- I think it will be quite hard to figure out in R, but I will try and if it doesn't work I will just make a comparison between the countries in their only plots.

### 9.2 Action

- Once again I will open the "R for Social Scientists" website because it is quite useful and of course I will open my final project in R.
- So even though I just said that my goal for today was to figure out how to merge the three countries into one graph I just remember that last week we learned to modify the plot to extract more information from it. So I just add transparency to avoid over plotting because many of the dots in my plots lie above each other.
- It helped a bit but the dots for Danish and Swedish maternal mortality are still above each other.
- The alpha function I just used for my plots only helped a little bit with the over plotting problem. So I will try the "geom-jitter" function, which will introduce a little bit of randomness into the position of my points. It function helped a bit on the points in the plot for Norway, which have been quite even in the last couple of plots.
- And I will do the same with the plots for child mortality
- I have tried to make a bar plot for maternal mortality in Denmark, but it did not work. In the bar plots there are no y-axis, so the plot only shows the x-axis which is years and then the program just fills the whole plot up, which is not correct!
- In continuation of the bar plots I also tried to put maternal mortality on the x-axis, but the program just made a "ERROR".
- In my attempt to combine the data from Denmark, Norway and Sweden I have also tried to put Denmark and Norway in the same plot. As before I used the function "ggplot(data = Interviews-Denmark, aes(x = Year, y = Maternalmortality)) + geom-point()" and then I tried to put "Interviews-Norway" after "Interviews-Denmark" but it made a "ERROR".
- I think the next thing I will try is to google how to combine plots in R. I found a website and tried some of the functions, but in R it just made a "ERROR".

### 9.3 Final Thoughts

**10:50 am** Today I made some adjustments on the plots I made yesterday both on the plots for maternal - and child mortality

- I had some problems with different things, but I think I can solve them and if not I will just use the plots I already made because I think there are fine for what I am aiming to do with my final project.
- But allover I am at good spirit!