**Learning Journal weeks 8-13**

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**Week 8**

R Studio introduction

Copied and pasted the project management and exporting frames episodes from week 7 journal. All other episodes attempted for the first time in this journal.

Project Management of rstudio

1. Create new project. Select file > new project > new directory > (empty project did not appear) > selected R project instead. Named file r-geospatial. Clicked create project.
2. Entered getwd() into r console. Responded with the user directory of the file.
3. In lower lefthand panel, created 3 new folders: data, doc and results.
4. Saved 3 datasets from online: nordic-data.csv, nordic-data-2.csv, gapminder\_data.csv into new data directory. Found this folder using the response from R studio, went to documents, found the geospatial directory and then the new data directory within that. 3 csv files are now there.
5. Downloaded the zip folder of data from data carpentry. Move downloaded zip file to data directory. Unzip all files.
6. Files all appear in data directory.

Data structures

1. Download and read file: nordic-data.csv. Save as an object named nordic. Inputted nordic < - read.csv(”data/noridc-data.csv”). Ran in console. Recieved error message.
2. Opened new file nordic.data.csv. New tab appears in top left corner, but don’t know where to input the message.
3. Tried to move on, but I can’t type in the console, the mouse won’t click.
4. Made console full page. Then it worked. Typed in nordic <- read.csv(”data/nordic-data.csv”) . Successful. Output appeared in top right corner.
5. Entered nordic$country. Returned with output of the countries.
6. Entered nordic$lifeExp. Output appeared with 3 numbers.
7. Entered nordic$lifeExp + 2. Output added 2 to each of the numbers
8. Entered nordic$lifeExp + nordic$country. Received error message and NA NA NA. Command not meaningful in R. Not meaningul as combines life expectancy and country type.
9. Entered class(nordic$lifeExp). Response was [1] “numeric”.
10. Entered class(3.14) . Response numeric.
11. Entered class(1L). Response integer
12. Entered class(1+1i). Response complex
13. Entered class(TRUE). Response logical
14. Entered class (’banana’). Response character.
15. Entered class(factor(’banana’)). Response factor.
16. How to understand this: R interprets a specific data class.
17. Load file: open file > selected nordic-data-2.csv.
18. Entered: nordic\_2 <- read.csv("data/nordic-data-2.csv") and class(nordic\_2$lifeExp). Response was factor.
19. Entered nordic\_2$lifeExp + 2. Received NA NA NA and error message.
20. Entered class(nordic). Responded with data frame.
21. Start vectors and type coercion.
22. Entered my\_vector <- vector(length = 3), my\_vector . Received FALSE FALSE FALSE.
23. Entered another\_vector <- vector(mode = 'character', length = 3) and another\_vector. Received [1] "" "" "".
24. Entered str(another\_vector). Received chr [1:3] "" "" "".
25. Entered str(nordic$lifeExp). Received num [1:3] 77.2 80 79.
26. Discussion 1 - Why is R so opinionated about what we put in our columns of data? R is trying to keep the data clean and consistent so that each column has one type.
27. Entered combine\_vector <- c(2, 6, 3), combine\_vector. Received [1] 2 6 3.
28. Entered quiz\_vector <- c(2, 6, '3'). Did not receive direct output response but a new loutput appeared in the top right corner under values.
29. Entered coercion\_vector <- c('a', TRUE), coercion\_vector. Received [1] "a" "TRUE".
30. Entered another\_coercion\_vector <- c(0, TRUE), another\_coercion\_vector. Received [1] 0 1.
31. Entered character\_vector\_example <- c('0', '2', '4'), character\_vector\_example. Received [1] "0" "2" "4".
32. Entered character\_coerced\_to\_numeric <- as.numeric(character\_vector\_example)
33. character\_coerced\_to\_numeric. Received [1] 0 2 4.
34. Entered numeric\_coerced\_to\_logical <- as.logical(character\_coerced\_to\_numeric)
35. numeric\_coerced\_to\_logical. Received FALSE TRUE TRUE.
36. Challenge 1 - why is lifeExp different between nordic and nordic 2.
37. Entered str(nordic\_2$lifeExp). Received Factor w/ 3 levels "77.2","79.0 or 83",..: 1 3 2. Data is stored as factors.
38. Ran str(nordic$lifeExp). Received num [1:3] 77.2 80 79. Stored as numbers,
39. Using combine function. Entered ab\_vector <- c('a', 'b'), ab\_vector. Received [1] "a" "b"
40. Entered combine\_example <- c(ab\_vector, 'DC'), combine\_example. Received [1] "a" "b" "DC".
41. Make series of numbers. Entered my\_series <- 1:10. Output appeared in top right panel. Not in console.
42. **Error:** Realised read the instructions wrong. Re-entered my\_series <- 1:10, my\_series. Received output in console [1] 1 2 3 4 5 6 7 8 9 10. Successful.
43. Entered seq(10). Same output received.
44. Entered seq(1,10, by = 0.1). Received 6 rows of output with multiple numbers in each row.
45. Ask questions about vectors. Entered sequence\_example <- seq(10), head(sequence\_example,n = 2). Received [1] 1 2.
46. Entered tail(sequence\_example, n = 4). Received [1] 7 8 9 10.
47. Entered length(sequence\_example). Received [1] 10.
48. Entered class(sequence\_example). Received [1] "integer".
49. Give names to elements in vector. Ran my\_example <- 5:8, names(my\_example) <- c("a", "b", "c", "d"), my\_example. Received a b c d 5 6 7 8
50. Challenge 2 - make vector with numbers 1-26. Multiply vector by 2 and give resulting names A to Z. Used solution on data carpentry to work through it. Would not have got there otherwise.
51. Entered x <- 1:26, x <- x \* 2, names(x) <- LETTERS. No response in consolse but output in top right corner. New row of data.
52. Factors.
53. Entered str(nordic$lifeExp). Received num [1:3] 77.2 80 79.
54. Entered str(nordic$year). Received int [1:3] 2002 2002 2002.
55. Entered str(nordic$country). Received Factor w/ 3 levels "Denmark","Norway",..: 1 3 2.
56. Make vector labelling nordic countries for all in study. Entered nordic\_countries <- ('Norway', 'Finland', 'Denmark', 'Iceland', 'Sweden'), nordic\_countries
57. Received [1] "Norway" "Finland" "Denmark" "Iceland" "Sweden" .
58. Entered str(nordic\_countries). Received chr [1:5] "Norway" "Finland" "Denmark" "Iceland" "Sweden".
59. Turn vector into factor. Entered categories <- factor(nordic\_countries), class(categories). Received [1] "factor".
60. Entered str(categories). Recieved Factor w/ 5 levels "Denmark","Finland",..: 4 2 1 3 5.
61. Entered class(nordic\_countries). Received [1] "character".
62. Entered class(categories). Received [1] "factor".
63. Challenge - why are these numbers used to represent these countries? Alphabetical order.
64. Challenge - is there a factor in nordic data frame? Did not understand the questino or what to do. Used solution to copy over the responses and see how they got there. Entered nordic <- read.csv(file = "data/nordic-data.csv", stringsAsFactors = FALSE), str(nordic$country). Received chr [1:3] "Denmark" "Sweden" "Norway".
65. Used colclasses solution. Entered nordic <- read.csv(file="data/nordic-data.csv", colClasses=c(NA, NA, "character")), str(nordic$country). Received Factor w/ 3 levels "Denmark","Norway",..: 1 3 2.
66. Know where baseline levels are. Entered mydata <- c("case", "control", "control", "case"), factor\_ordering\_example <- factor(mydata, levels = c("control", "case")), str(factor\_ordering\_example). Received Factor w/ 2 levels "control","case": 2 1 1 2.
67. Lists.
68. Entered list\_example <- list(1, "a", TRUE, c(2, 6, 7)) list\_example. Received successful output, the data all listed by numbers between brackets.
69. Entered another\_list <- list(title = "Numbers", numbers = 1:10, data = TRUE ), another\_list. Received right output again.
70. Entered str(nordic). Received 'data.frame': 3 obs. of 3 variables: $ country: Factor w/ 3 levels "Denmark","Norway",..: 1 3 2 $ year : int 2002 2002 2002 $ lifeExp: num 77.2 80 79.
71. Entered str(another\_list). Received List of 3 $ title : chr "Numbers" $ numbers: int [1:10] 1 2 3 4 5 6 7 8 9 10 $ data : logi TRUE.
72. Entered nordic$country. Received [1] Denmark Sweden Norway Levels: Denmark Norway Sweden
73. Entered nordic[, 1]. Received [1] Denmark Sweden Norway Levels: Denmark Norway Sweden.
74. Entered class(nordic[, 1]). Received [1] "factor".
75. Entered str(nordic[, 1]) Received Factor w/ 3 levels "Denmark","Norway",..: 1 3 2
76. Entered nordic[1, ]. Recieved country year lifeExp 1 Denmark 2002 77.2
77. Entered class(nordic[1, ]). Received [1] "data.frame"
78. Entered str(nordic[1, ]). Received 'data.frame': 1 obs. of 3 variables: $ country: Factor w/ 3 levels "Denmark","Norway",..: 1 $ year : int 2002 $ lifeExp: num 77.2

Reflection on R studio

I feel I am just copying the commands in from the data carpentry lessons, although getting the correct responses, I have no real understanding of what I am doing or why.

I am unsure at this stage how it can help me in research or what I can do with it.

Exploring data frames - data carpentry episode

1. Imported gapminder dataset from bottom left panel. R studio had to update, new console popped up and it took time to load and get through. Was installing packages.
2. Entered str(gapminder). received error message
3. entered class (gapminder$year). received error message
4. Re-visited data carpentry page. Copied and pasted the command from miscallaneous tips about getting the data.
5. re-entered str(gapminder). Output appears. Successful.
6. Entered class(gapminder$year). Response integer.
7. Entered class(gapminder$country). Response factor.
8. Entered str(gapminder$country). Factor w/ 142 levels "Afghanistan",..: 1 1 1 1 1 1 1 1 1 1 ...
9. Entered length(gapminder). Response 6
10. Entered class(gapminder). Response data frame.
11. Get number of rows. Entered nrow(gapminder). Got 1704.
12. Number of columns. Entered ncol(gapminder). Got 6.
13. Rows and columns together . Entered dim(gapminder). Response 1704 6.
14. Titles of columns. Entered colnames(gapminder). Response [1] "country" "year" "pop" "continent" "lifeExp" "gdpPercap".
15. Entered head(gapminder). Recieved list of Afghanistan in different years with multiple columns.
16. Challenge 1 - check the last lines of data. Enter tail(gapminder), tail(gapminder, n = 15). Received list of Zambia and Zimbabwe, the final 15 lines of data.
17. Entered gapminder[sample(nrow(gapminder), 5), ]. Abritrary lines of data.
18. Adding columns and rows in data frames.
19. Create new column for whether life expectancy is below world average. Entered below\_average <- gapminder$lifeExp < 70.5 head(gapminder). Successful.
20. Add this as a column. Entered cbind(gapminder, below\_average). New column appears in response.
21. Want first 6 lines of output. Entered head(cbind(gapminder, below\_average)). First 6 lines of afghanistan data appears.
22. Tried to add vector of below average. Entered below\_average <- c(TRUE, TRUE, TRUE, TRUE, TRUE) head(cbind(gapminder, below\_average)). Received error message.
23. Factors.
24. Entered levels(gapminder$continent). Response [1] "Africa" "Americas" "Asia" "Europe" "Oceania" .
25. Entered levels(gapminder$continent) <- c(levels(gapminder$continent), "Nordic")
26. gapminder\_norway <- rbind(gapminder, list('Norway', 2016, 5000000, 'Nordic', 80.3,49400.0, FALSE)), tail(gapminder\_norway). Received output. successful.
27. Change factor into a character vector. Enter str(gapminder) and gapminder$continent <- as.character(gapminder$continent), str(gapminder). Successful.
28. Appending to a data frame.
29. Glue two data frames together. Entered gapminder <- rbind(gapminder, gapminder), tail(gapminder, n=3). Successful.
30. Remove rownames. Entered rownames(gapminder) <- NULL, head(gapminder). Successful.
31. Challenge 3 - create new data frame within R. Copied commands from the challenge, successful, new panel appeared in top right.

Subsetting data

1. Accessing elements using their indices.
2. Entered x[1]. Got A, 2. Different to a, 5.4
3. Entered x[4]. Got D, 8. Different to d, 4.8 Think responses still okay, command is getting the proper answer from the data.
4. Get multiple elements at once. Entered x[c(1, 3)].
5. Slices of vector. Entered x[1:4]. Getting correct format of output.
6. Entered 1:4. Response [1] 1 2 3 4
7. Entered c(1, 2, 3, 4). Same response.
8. Ask for same elementm, multiple times. Entered x[c(1, 1, 3)].
9. Entered x[0]. Response named numeric(0).
10. Skipping and removing elements
11. Entered x[-2]. All elements except one specified.
12. Skip multiple elements. Entered x[c(-1, -5)].
13. Challenge 1 - used solution to work backwards. Did not understand by myself.
14. Subsetting by name
15. extract elements by name. Entered x <- c(a = 5.4, b = 6.2, c = 7.1, d = 4.8, e = 7.5), x[c("a", "c")]. Received a c, 5.4 7.1 . Successful.
16. Subsetting through other logical operations. Entered x[c(FALSE, FALSE, TRUE, FALSE, TRUE)]. Received c e , 7.1 7.5.
17. Entered x[names(x) == "a"]. Received a , 5.4 .
18. Challenge 2 - worked through solutions as could not do by myself.
19. Data frames.
20. Entered head(gapminder[3]). Got data f rame in output.
21. Entered head(gapminder[["lifeExp"]]). Got [1] 28.801 30.332 31.997 34.020 36.088 38.438.
22. Extract columns by name. Entered head(gapminder$year). Got [1] 1952 1957 1962 1967 1972 1977.
23. Select specific rows/columns. Entered gapminder[1:3, ]. Specific rows and columns received.
24. Entered gapminder[3, ]. Received country year pop continent lifeExp gdpPercap, 3 Afghanistan 1962 10267083 Asia 31.997 853.1007.
25. Challenge - gapminder[1:20] returns error because undefined columns selected. gapminder[1:20, ] subsets data to first 20 rows.
26. Create new data frame called gapminder\_small. Entered gapminder\_small <- gapminder[c(1:9, 19:23),]. New data frame appears in top right panel.

Data frame manipulation with dplyr

1. Entered mean(gapminder[gapminder$continent == "Africa", "gdpPercap"]). Received [1] 2193.755.
2. Entered mean(gapminder[gapminder$continent == "Americas", "gdpPercap"]). Received [1] 7136.11.
3. Entered mean(gapminder[gapminder$continent == "Asia", "gdpPercap"]). Received [1] 7902.15.
4. DPLYR package.
5. Install package. Entered install.packages('dplyr'). Pop up screens. Successful.
6. Load package. library("dplyr"). Successful.
7. Keep variables you select. year\_country\_gdp <- select(gapminder, year, country, gdpPercap).
8. Repeat with year\_country\_gdp <- gapminder %>% select(year,country,gdpPercap).
9. Filters. copied and pasted long command. filtered only with european countries.
10. Challenge - worked backwards from solution to produce data frame for african values of lifeexp, country and year. Used year\_country\_lifeExp\_Africa <- gapminder %>%, filter(continent=="Africa") %>%, select(year,country,lifeExp). New frames.
11. Enter str(gapminder).
12. Entered gapminder %>% group\_by(continent) %>% str(). Successful.
13. Using summarise. Copy and pasted long command. data frame split into multiple pieces.
14. Challenge - worked backwards from solutions. copied and pasted long commands to see effect. noticed min and max to get shortest and highest life expectancies.
15. Function. Copied and pasted command. Groups multiple variables.
16. count function. copied and pasted command. successful.
17. calculate minimum, maximum, mean and se of each continent life expectancy. Copied and pasted command. Successful.
18. Mutate. Copied and pasted command. created new variables prior.

Introduction to visualisation

1. Use ggplot function. Entered library("ggplot2"), ggplot(data = gapminder, aes(x = lifeExp)) + geom\_histogram(). Received **error**: Error in ggplot(data = gapminder, aes(x = lifeExp)) : could not find function "ggplot"
2. Repeated with other commands. kept receiving error message. ggplot not found.
3. **Problem:** Had copied and pasted the commands...not sure why error being received. Moved onto next episode for now. Can’t work out why after repeatedly trying different commands. None recognised.
4. **Solution** - Googled ggplot2 problems. Realised I had to install the package first before working with it. Got the code from this website: https://www.dummies.com/programming/r/how-to-install-and-load-ggplot2-in-r/
5. Entered install.packages("ggplot2"). Successful.
6. Re-entered library("ggplot2"), ggplot(data = gapminder, aes(x = lifeExp)) + , geom\_histogram()
7. Successful!! Plot appears in bottom left panel.
8. Entered ggplot(data = gapminder, aes(x = lifeExp)). Not enough to draw the plot.
9. Entered ggplot(data = gapminder, aes(x = lifeExp)) + , geom\_histogram(). Received `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`. and plot.
10. Challenge - modify command so plot shows distributino of gdp per capita, rather than life expectancy. Entered ggplot(data = gapminder, aes(x = gdpPercap)) + , geom\_histogram(). Successful. Plot created for gdp per capita.
11. Histogram. Look at data from most recent year and only from Americas. Entered gapminder\_small <- filter(gapminder, year == 2007, continent == "Americas") and ggplot(data = gapminder\_small, aes(x = country, y = gdpPercap)) + geom\_col(). Successful. Plot appears.
12. Use coord flip function to swap axes. Entered ggplot(data = gapminder\_small, aes(x = country, y = gdpPercap)) + , geom\_col() +, coord\_flip(). Countries swapped to other axis. Successful.
13. Challenge - create a new bar plot showing the gdp per capita of all countries in the americas for 1952-2007, colour coded by year. Used solution and copied over commands to watch changes. Colours were changed.

Writing data

1. Saving plots.
2. Copied and pasted command from episode. Then entered dev.off(). Received RStudioGD, 2.
3. Challenge - copied and pasted commands from challenge solution and turned off the pdf device after.
4. Writing data.
5. Copied and pasted command from exercise. Error- received message: Error in file(file, ifelse(append, "a", "w")) : cannot open the connectionIn addition: Warning message:In file(file, ifelse(append, "a", "w")) : cannot open file 'cleaned-data/gapminder-aus.csv': No such file or directory
6. Re-attempted but received same message. Don’t understand the error message.

Data carpentry - R

Looking at the link provided on week 8 homework, realised I did the wrong data carpentry lessons. Re-started the epsiodes

1. Open r studio. File > Create new project > new directory > new project.
2. Create file for scripts. File > new file > r script. Click save icon. Saved “script.R”
3. Entered dir.create("data"), dir.create("data\_output"), dir.create("fig\_output") . Created new directories in bottom right panel.
4. Download dataset. Copied and pasted: download.file("https://ndownloader.figshare.com/files/11492171" "data/SAFI\_clean.csv", mode = "wb"). Successful. Dataset downloaded.
5. Exercise - install tidyverse package. Clicked on packages tab in bottom right panel, inputted tidyverse to textbox. Multiple minutes to install and a lot of output in the bottom console. Successful

Introduction to R

1. Tested math. typed 3 + 5 and 12 / 7. Output displayed correct numbers.
2. Typed area\_hectares < - 1.0, (area\_hectares < - 1.0). Output 1.
3. Typed area\_hectares. Output 1.
4. Artithmetic. Convert to acres. Enter 2.47 \* area\_hectares. Output 2.47
5. Change object’s value, enter area\_hectares <- 2.5, 2.47 \* area\_hectares. Output 6.175
6. exercise - what is current content of the object. No change, area still 6.175. Not re-run the line.
7. Exercise - create length and width variables and assign values. Entered length <- 2.5, width <- 3.2, area <- length \* width area. Output 8. successful.
8. Functions. Entered b <- sqrt(a). Error. Object not found.
9. Function with multiple arguments. Output 3.
10. Entered args(round). Successful. function (x, digits = 0) NULL
11. Different number of digits. Enter round(3.14159, digits = 2). Output 3.14.
12. Switch the order of arguments. Enter round(digits = 2, x = 3.14159). Output 3.14.
13. Exercise - type ?round and look at output. ceiling, floor, trunc, round, signif.
14. Vectors and data types. Ran hh\_members <- c(3, 7, 10, 6)
15. hh\_members. Output successful.
16. Vector containing characters. Enter respondent\_wall\_type <- c("muddaub", "burntbricks", "sunbricks") respondent\_wall\_type. Output with characters. Successful.
17. Inspect content of vector. Enter length(hh\_members). Output 4.
18. Enter length(respondent\_wall\_type\_. Output 3.
19. Class function. Enter class(hh\_members). Output numeric. Successful.
20. Enter class(respondent\_wall\_type). Output character. Successful.
21. Overview of object structure and elements. Enter str(hh\_members). Output successful.
22. Enter str(respondent\_wall\_type). Output successful.
23. Add other elements to vector. Use C function. Copied and pasted command. Successful.
24. Exercise - what happens when you mix types in a single vector. R converts them to be the same type.
25. Copied and pasted multi line command from exercise. R finds common denominator to convert content.
26. How many values in combined logical are true - 1.
27. Extract values from a vector through indices/square brackets. Copied and pasted command. Output successful.
28. Entered: respondent\_wall\_type[c(3, 2)]. Output successful.
29. Repeat incides to create object with more elements. Copied and pasted long command. Successful.
30. Conditional subsetting. Copied and pasted long command. Successful.
31. Wanted to select only particular variables. Entered hh\_members > 5. successful.
32. Entered hh\_members[hh\_members > 5]. Successful.
33. Combine multiple tests. Entered hh\_members[hh\_members < 3 | hh\_members > 5]. Successful.
34. Entered hh\_members[hh\_members >= 7 & hh\_members == 3].
35. Search for strings in vector. Copied and pasted long command. successful.
36. Entered possessions %in% c("car", "bicycle", "motorcycle", "truck", "boat"). Successful.
37. Entered possessions[possessions %in% c("car", "bicycle", "motorcycle", "truck", "boat")]. Successful.
38. Missing data. Entered rooms <- c(2, 1, 1, NA, 4), mean(rooms). Output NA. Successful.
39. Entered max(rooms). Output NA. successful.
40. Entered mean(rooms, na.rm = TRUE). Ouytput 2. successful.
41. Entered max(rooms, na.rm = TRUE). Output 4. successful.
42. For data missing values. Entered rooms[!is.na(rooms)]. Successful.
43. Entered na.omit(rooms). Successful.
44. Entered rooms[complete.cases(rooms)]. Successful.
45. Exercise - create a new vector with the NAs removed. Looked at solution to work backwards. Used median function. Copied and pasted solution to check. Successful.

Starting with data

1. Load data into R memory using read csv function. Copied and pasted multi line command. A lot of output, took some time to load but successul.
2. Check data has been loaded. Entered interviews. Successful. data appears in output.
3. Data frames. Entered class(interviews). successful.
4. Indexing and subsetting data frames. Entered interviews[1, 1]. Successful.
5. entered interviews[1, 6]. Successful.
6. Entered interviews[[1]]. Multiple numbers appear in output. Successful.’
7. Entered interviews[1]. Successful.
8. Entered interviews[1:3, 7]. Successful.
9. Entered interviews[3, ]. Successful.
10. Entered head\_interviews <- interviews[1:6, ]. Change in top right panel.
11. Entered interviews[, -1]. successful.
12. Entered interviews[-c(7:131), ] . Successful.
13. Subset data frames by calling column names. Copied and pasted multi line command. Successful, column names appeared in output.
14. Exercise - create data frame, use tail and nrow functions. create new data from from last row. combine functions to reproduce behaviour. Could not work out solution by myself, looked at the provided solution to understand how they produced it. Transferred solution into r.
15. Factors. entered respondent\_floor\_type <- factor(c("earth", "cement", "cement", "earth")). Changes in top right panel.
16. Entered levels(respondent\_floor\_type). successful.
17. Entered nlevels(respondent\_floor\_type). successful.
18. reorder levels in vector. Entered respondent\_floor\_type # current order. Successful.
19. Entered respondent\_floor\_type <- factor(respondent\_floor\_type, levels = c("earth", "cement")), respondent\_floor\_type. successful.
20. Converting factors. Entered as.character(respondent\_floor\_type). Successful.
21. Entered year\_fct <- factor(c(1990, 1983, 1977, 1998, 1990)),as.numeric(year\_fct). Not correct.
22. Entered as.numeric(as.character(year\_fct)) . Years appear. successful.
23. Recommended way. Entered as.numeric(levels(year\_fct))[year\_fct]. successful.
24. Renaming factors. Copied directly the long command from episode. Output appears. successful.
25. Create bar plot. entered plot(memb\_assoc). Plot appears in bottom left panel. Successful.
26. Copied and pasted multi-line command. Successful.
27. Create bar plot for different data. Plot replaced with new one in bottom left corner.
28. exercise - rename levels of factors and create bar plot. Looked at solution to see how they did it. Transferred to R. Successful.
29. Formatting dates. Entered str(interviews).
30. Use lubridate package. Load package. Entered library(lubridate). **Error:** received message saying date was masked from package. not sure why. It says masked from package:base. Maybe not available on what I am using but did successfully install tidyverse.

Introducing dplyr and tidyr

1. Load tidyverse.
2. Use dplyr functions.
3. Select colums and filter rows. Enter select(interviews, village, no\_membrs, years\_liv). Successful.
4. Select rows on specific criteria. Entered filter(interviews, village == "God"). successful.
5. Pipes. Entered interviews2 <- filter(interviews, village == "God"), interviews\_god <- select(interviews2, no\_membrs, years\_liv). Changes in top right panel.
6. Nest functions inside one another. Entered interviews\_god <- select(filter(interviews, village == "God"), no\_membrs, years\_liv).
7. Entered interviews %>%, filter(village == "God") %>%, select(no\_membrs, years\_liv). Successful.
8. Create new object with smaller data, assign a new name. Entered interviews\_god <- interviews %>%, filter(village == "God") %>%, select(no\_membrs, years\_liv), interviews\_go. Successful.
9. exercise - using pipes, subset interview data. Looked at solution to work out how they did it. Transferred into R to check. Successful.
10. Mutate. Enter interviews %>%, mutate(people\_per\_room = no\_membrs / rooms). Successful.
11. Insert filter into chain. Entered interviews %>%, filter(!is.na(memb\_assoc)) %>%, mutate(people\_per\_room = no\_membrs / rooms). Successful.
12. exercise - create new data frame that meets specific criteria. Entered interviews\_total\_meals <- interviews %>%, mutate(total\_meals = no\_membrs \* no\_meals) %>%, filter(total\_meals > 20) %>%, select(village, total\_meals).
13. Split apply combine data analysis and summarise function.
14. Entered interviews %>%, group\_by(village) %>%, summarize(mean\_no\_membrs = mean(no\_membrs)). Successful.
15. Group by columns. Entered interviews %>%, group\_by(village, memb\_assoc) %>%, summarize(mean\_no\_membrs = mean(no\_membrs)) .
16. rearrange results to inspect values. Entered interviews %>%, filter(!is.na(memb\_assoc)) %>%, group\_by(village, memb\_assoc) %>%, summarize(mean\_no\_membrs = mean(no\_membrs), min\_membrs = min(no\_membrs)) %>%, arrange(min\_membrs). Successful.
17. Sort in descending order. Copied and pasted long command. successful.
18. Counting. Entered interviews %>%, count(village). Successful.
19. Entered interviews %>%, count(village, sort = TRUE).
20. Exercise - how many households have an average 2 meals/day, 3 meals/day. used solution to see how the command worked, transferred to R.
21. Spreading and gathering. Copied and pasted multi line commands. Successful.
22. Applying spread to clean data. Copied and pasted multi line command. Successful.
23. Entered interviews\_items\_owned <- interviews %>%.
24. Entered separate\_rows(items\_owned, sep=";") %>%
25. Entered mutate(items\_owned\_logical = TRUE) %>% spread(key = items\_owned, value = items\_owned\_logical, fill = FALSE)
26. make a table showing number of respondents in each village. copied and pasted multi-line command. Successful.
27. Calculate average number of borrowed items. Copied and pasted multi line command. successful.
28. Exercise - create new data frame that has a column for each month. records true and false. did not know how to do this on my own, used solution. Transferred to R, successful.
29. exercise - how many months were respondents without food. Used solution and transferred. Successful.
30. exporting data. Copied and pasted very long command. Changes in top right panel. Successful.
31. Save data frame to data output directory. Entered write\_csv(interviews\_plotting, path = "data\_output/interviews\_plotting.csv"). manually checked data output directory, file appears. Successful.

Backups

Googled and installed Duplicati.

Not sure how to use it, or what I can link to it. Watching episodes of tutorials on youtube here: https://www.youtube.com/watch?v=sJUydn2feIo&list=PL0gtWo1zHMjypJQAP1bcxRkr-lls7uztm&index=4

Configured new back up. Named duplicati backup\_foar705. encryptions settings left on default. passphrase: foar705 (weak password but for purposes of this backup - okay).

All uni work stored on my computer in the directory “Uni” will be backed up on duplicati every 3 days at 9pm. Next back up will be 5 October. Backups won’t occur on weekends.

username for backup: ellenkirkpatrick password:duplicatibackup123

**Proof of concept project**

Aim: complete user stories to remove them as issues, test if they work and move them to complete column in github project management.

Identifying commonalities.

Process identified in previous journal. In short, download sources directly to Zotero and a test folder, upload sources to Voyant tools. Voyant server dropped due to unreliability and unresponsiveness.

Voyant tools successful in acceptance criteria and can be used to find common themes. Issue closed and moved to tested and complete in project.

Extracting metadata

Moved second issue/user story: extracting metadata and source directly from Voyant to ‘in progress’ column in github.

Opened issue. Submitted comment about how this user story is no longer required. Due to changes in the first user story, identifying commonalities, the source is saved already in Zotero. There is no need to re-extract the source and metadata from Voyant.

Issue closed. Created a new column in project “not required/removed”. Moved closed issue to that column.

Saving source/metadata in same spot

Moved issue/user story: saving metadata and source in the same place to in progress column. Commented on issue the steps that are required to do this. This user story will now take place second, due to changes with other user stories. It is now much more straightforward as it does not need to extract from Voyant. When extracting the source from the database, it comes with all information attached. Zotero is successful at storing these together, clicking on the source in the library demonstrates it can store both together.

Annotations

Annotations user story is dependent on the source being successfully saved to Zotero. It is also dependent on being able to identify common themes through Voyant otherwise there will be insufficient information for annotations.

Opened issue. Followed acceptance criteria to test whether Zotero can add annotations. Successful. Notes can be added to each source, and they can be edited and accessed whenever by clicking on the source.

Issue closed and moved to tested and complete.

Grouping

Final user story of proof of concept project. Completion of grouping means that sources are succesfully stored together, and annotated and grouped depending on their relevance. This means further down the research process they can be accessed at any time and content not lost. It also makes the final reporting stages much easier as the metadata is stored in Zotero and can be transferred over to publishing programs.

The grouping user story is dependent on the annotations user story. Without annotations, there is insufficient information to decide on how the sources should be grouped.

Opened issue. Followed acceptance criteria to add tags to sources. Can be done in Zotero. Select source and in right hand panel click tags. Input relevant tag. Multiple tags can be added at once. Repeat steps to add tags to other sources. If typing similar, an existing tag will pop up. Labelling sources with the same tag will link them together.

Search for tags in internal Zotero searchbar. Sources will appear by their tag names. Zotero successful at grouping sources together.

Closed issue. Moved to tested and complete.

Project - general

All user stories/issues now closed. All in tested and complete, except for extracting source/metadata from Voyant which is no longer required. It is in its own column.

Not sure where to go from here, have attempted to automate the process through Voyant shell but was unsuccessful. Can begin writing an entire workflow process on how to complete these steps in order to store data more efficiently. Otherwise unsure where to go from now.

Overleaf

Have written an initial draft of documenting entire workflow process. This includes what needs to be done to follow step by step of accessing sources, downloading to zotero, downloading to computer, uploading to Voyant and then annotating/grouping in Zotero.

Don’t have notes quite yet on what is required or a pre-requisite in overleaf draft. This information has been added in the github project. It is added within the project on the issues.

**Week 9**

Went to consultation hours and spoke to Shawn.

Proof of Concept - include details of errors in overleaf document, and any changes made. Make new “problems” section and write about what original aim was, and what the changes were and why.

OSP - downloaded softwareX template onto overleaf. Will use to start working on OSP. Can make a version somehow through github - haven’t worked out how.

Voyant

Talked to other students using Voyant. They haven’t had the same troubles as me using Voyant server, it opens for them each time. Have talked about collaborating to see if any of the process can be automated.

Github

Created a new release on PoC repositry. Named it v1.0 - included in the metadata section of draft OSP. Checked and it is now tagged as such. This is the version release that Shawn mentioned during consultation. Successful.

Created another repositry for overleaf import for OSP. Labelled “OSP - E Kirkpatrick”. Github repositries now related to the proof of concept project are 4. Don’t think it is possible to combine together so that everything related to the proof of concept project and design is in one place.

Edited the readme text on github. Using this website to try and format it more: https://help.github.com/en/articles/basic-writing-and-formatting-syntax#headings

Original Software Publication Process

Started on initial draft of OSP. Working through sections and updating github repositry accordingly - i.e. checking license, readme and release etc.

Many sections of the OSP I do not exactly understand. Committing regularly to github for version control.

**Week 10**

Creating github submodules

Problem: too many github repositries regarding similar project. Ie. repositry for OSP, workflow process PoC & the project management are all separate.

Solution: in consultation hours, Brian directed that submodules can be created within repositries. Needs gitbash direction. Was looking at this website: https://git-scm.com/book/en/v2/Git-Tools-Submodules . Not sure if it is helpful or not.

Error: tried to follow instructions but was unable to implement. Accidentally created a new github repositry by duplicating another one. Requested for this to be deleted - successful. But still have not been able to combine all relevant repositries into a single one.

Temporary solution - in proof of concept documentation, put relevant links in final section of workflow. Will still be attempting to link github repositries.

Voyant

Spoke to other students doing Voyant.

Aim: looking for a way to automate process with Voyant.

Process: Found this github: https://github.com/corajr/zotero-voyant-export. Unfortunately the files and instructions are corrupt and cannot be used. None of the previous versions work either.

Overleaf

Aim: insert images to overleaf so they can be used for lightning talk and OSP.

Inputted \usepackage{graphicx} to open graphic package.

Use left hand panel to upload image.

https://www.overleaf.com/learn/how-to/Including\_images\_on\_Overleaf - provides guide on how to include images.

Have not tested yet. Need to get the appropriate screenshots first (voyant tool, particularly trends tool, step by step process - how to add tages, and notes).

**Week 11**

Github - creating submodules

Aim: create sumodules to combine github repositries all related to proof of concept project.

Process:

1. Met with Brian.
2. He guided me through gitbash solution and combined implementation and instructions repositry as a github submodule in the parent directory of PoC project.
3. Successful in combining respositries. All commits included too.
4. Copied and pasted code used in gitbash into a word documentation file. Will be repeating at home for the OSP repositry as it is related to the proof of concept project.

Solution: implementation and instructions now included within the proof of concept project repositry on github. Successful. Everything in the one place. Just need to repeat for OSP.

Gitbash script:

Ellen@Ellen-PC MINGW64 ~

$ cd Documents/

Ellen@Ellen-PC MINGW64 ~/Documents

$ git clone https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project.git

Cloning into 'E-Kirkpatrick-PoC-project'...

remote: Enumerating objects: 39, done.

remote: Counting objects: 100% (39/39), done.

remote: Compressing objects: 100% (35/35), done.

remote: Total 39 (delta 11), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (39/39), done.

Ellen@Ellen-PC MINGW64 ~/Documents

$ ls

'~'/

 analysis.docx

"Application for Vice Cahncellor's job"/

'bank balance.jpg'

'Bluetooth Exchange Folder'/

'centrelink confirmation.pdf'

'CLO position'/

'Cover Letter for Alliance Gambling Reform- E Kirkpatrick.docx'

'Cover Letter for Campus Engagement Intern - E Kirkpatrick.docx'

'Cover Letter for Client Liaison Officer - E Kirkpatrick.docx'

'Cover Letter for Graduate Intern - E Kirkpatrick.docx'

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'E Kirkpatrick CV.docx'

'E Kirkpatrick Mission Aus Cover Letter.docx'

 E-Kirkpatrick-PoC-project/

'Ellen Kirkpatrick Resume - swim school.docx'

'Ellen Kirkpatrick Resume.docx'

 Fax/

"katie's response.docx"

'Literacy Tutor TAFE.pdf'

'My Music'@

'My Pictures'@

'My Videos'@

'Outlook Files'/

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'Personal Response to Criteria for Research Assistant.docx'

'queens health letter.pdf'

 R/

 RATickets-1CompoundwithBenF.pdf

 report\_kirkpatrick\_459641-319794-1.pdf

'resumes and applications'/

 r-geospatial/

 SCAN0134.JPG

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'SCAN0136 - Copy.pdf.JPG'

 SCAN0136.JPG

 SCAN0137.JPG

 SCAN0138.JPG

'Scanned Documents'/

'TAFE academic record.pdf'

'tax assessment notice 2016.pdf'

'tax payment details 2016.docx'

 Untitled.jpg

 vlc-2.2.1-win32.exe\*

'What to do in a first aid situation - buddy program.docx'

'Working with children check.pdf'

'Yacht Club receptionist'/

 Youcam/

Ellen@Ellen-PC MINGW64 ~/Documents

$ cd E-Kirkpatrick-PoC-project/

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ ls

License  main.tex README.md

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git log

commit 524b8d52c1f1c9c8e68958c1fce7caec0e47a713 (HEAD -> master, origin/master, origin/HEAD)

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:45:14 2019 +1100

    Update README.md

commit fd9ee3c38fee55e2606181c6f95938c040e09d1f

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:44:52 2019 +1100

    Update README.md

commit 265900b56b63746f77e5f01fe6666833f19a89e4

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:38:34 2019 +1100

    Update README.md

    Included description of programs/softwares

commit b9cf79757a883b56be465504e82f0586ac1efdde

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ **git submodule add** [**https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git**](https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git) **(actual magic right here)**

Cloning into 'C:/Users/Ellen/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions'...

remote: Enumerating objects: 20, done.

remote: Counting objects: 100% (20/20), done.

remote: Compressing objects: 100% (15/15), done.

remote: Total 20 (delta 5), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (20/20), done.

warning: LF will be replaced by CRLF in .gitmodules.

The file will have its original line endings in your working directory

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git status

On branch master

Your branch is up to date with 'origin/master'.

Changes to be committed:

  (use "git restore --staged <file>..." to unstage)

        new file:   .gitmodules

        new file:  E-Kirkpatrick-POC-Implementation-and-instructions

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "combining repositries for proof of concept project"

\*\*\* Please tell me who you are.

Run

  git config --global user.email "you@example.com"

  git config --global user.name "Your Name"

to set your account's default identity.

Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'Ellen@Ellen-PC.(none)')

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$  git config --global user.email "ellen.kirkpatrick@students.mq.edu.au"

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git config --global user.name "Ellen Kirkpatrick"

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "combining repositries for proof of concept project"

[master a994a5c] combining repositries for proof of concept project

 2 files changed, 4 insertions(+)

 create mode 100644 .gitmodules

 create mode 160000 E-Kirkpatrick-POC-Implementation-and-instructions

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git push

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 4 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 571 bytes | 71.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0)

To https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project.git

   524b8d5..a994a5c  master -> master

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

Duplicati

**Error:** Checked duplicati and no scheduled tasks. So previous configuration had not continued and backups were not working. Big problem

Process:

1. Configured new set-up with Brian.
2. New data backup will go straight to cloudstor which is more helpful.
3. Exported backup configuration settings into a file. Saved in “uni>session 2” directory on computer, emailed to myself and also uploaded on cloudstor.
4. Created new passphrase using Brian’s dice phrase creator —> “chinkummitre”
5. Ran backup. Successful! All “uni” repositry is backed up successfully onto cloudstor.
6. Next back up scheduled for tomorrow: 22nd October at 1pm (or when computer is next turned on)
7. The duplicati icon on the toolbar turns green during the backup procedure - indicates it is working.
8. Need to constantly check to ensure it is backing up.

Solution:

Re-configured backup settings - every 3 days for “uni” directory to cloudstor.

Smart backup settings.

Feeling much better and relieved about having this directory constantly backing up and actually working this time.

**22 Oct -** First automatic duplicati backup successful. When computer turned on, the backup started automatically. Next one scheduled for 3 days time. It only took a few minutes. Manually checked cloudstor and backup appeared. Yay!!

Solo attempt at creating github submodules

Aim: create submodule for github reposisitry containing OSP within the parent repositry of PoC project. This it to keep all relevant project work in the same place and to make it easier when accessing documents.

Process:

1. Referred to the script used with Brian when creating first submodule.
2. Opened gitbash.
3. Followed the same steps - replacing the urls with the relevant ones.

Result:

Successful!! New submodule appears in PoC repositry. Yay!!!!

**Error-** it does have some numbers after the name which was not the case for the other submodule but the link itself is working and all of the commits have carried over.

Gitbash script used:

Ellen@Ellen-PC MINGW64 ~

$ cd Documents/

Ellen@Ellen-PC MINGW64 ~/Documents

$ git clone https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project.git

Cloning into 'E-Kirkpatrick-PoC-project'...

remote: Enumerating objects: 39, done.

remote: Counting objects: 100% (39/39), done.

remote: Compressing objects: 100% (35/35), done.

remote: Total 39 (delta 11), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (39/39), done.

Ellen@Ellen-PC MINGW64 ~/Documents

$ ls

'~'/

 analysis.docx

"Application for Vice Cahncellor's job"/

'bank balance.jpg'

'Bluetooth Exchange Folder'/

'centrelink confirmation.pdf'

'CLO position'/

'Cover Letter for Alliance Gambling Reform- E Kirkpatrick.docx'

'Cover Letter for Campus Engagement Intern - E Kirkpatrick.docx'

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'E Kirkpatrick CV.docx'

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'Ellen Kirkpatrick Resume.docx'

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"katie's response.docx"

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'My Pictures'@

'My Videos'@

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'Personal Response to Criteria for Research Assistant.docx'

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 R/

 RATickets-1CompoundwithBenF.pdf

 report\_kirkpatrick\_459641-319794-1.pdf

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 SCAN0138.JPG

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'TAFE academic record.pdf'

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'tax payment details 2016.docx'

 Untitled.jpg

 vlc-2.2.1-win32.exe\*

'What to do in a first aid situation - buddy program.docx'

'Working with children check.pdf'

'Yacht Club receptionist'/

 Youcam/

Ellen@Ellen-PC MINGW64 ~/Documents

$ cd E-Kirkpatrick-PoC-project/

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ ls

License  main.tex README.md

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git log

commit 524b8d52c1f1c9c8e68958c1fce7caec0e47a713 (HEAD -> master, origin/master, origin/HEAD)

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:45:14 2019 +1100

    Update README.md

commit fd9ee3c38fee55e2606181c6f95938c040e09d1f

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:44:52 2019 +1100

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commit 265900b56b63746f77e5f01fe6666833f19a89e4

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Date:   Sun Oct 13 21:38:34 2019 +1100

    Update README.md

    Included description of programs/softwares

commit b9cf79757a883b56be465504e82f0586ac1efdde

Author: ellenkirkpatrick <53601793+ellenkirkpatrick@users.noreply.github.com>

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ **git submodule add** [**https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git**](https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git) **(actual magic right here)**

Cloning into 'C:/Users/Ellen/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions'...

remote: Enumerating objects: 20, done.

remote: Counting objects: 100% (20/20), done.

remote: Compressing objects: 100% (15/15), done.

remote: Total 20 (delta 5), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (20/20), done.

warning: LF will be replaced by CRLF in .gitmodules.

The file will have its original line endings in your working directory

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git status

On branch master

Your branch is up to date with 'origin/master'.

Changes to be committed:

  (use "git restore --staged <file>..." to unstage)

        new file:   .gitmodules

        new file:  E-Kirkpatrick-POC-Implementation-and-instructions

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "combining repositries for proof of concept project"

\*\*\* Please tell me who you are.

Run

  git config --global user.email "you@example.com"

  git config --global user.name "Your Name"

to set your account's default identity.

Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'Ellen@Ellen-PC.(none)')

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$  git config --global user.email "ellen.kirkpatrick@students.mq.edu.au"

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git config --global user.name "Ellen Kirkpatrick"

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "combining repositries for proof of concept project"

[master a994a5c] combining repositries for proof of concept project

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 create mode 100644 .gitmodules

 create mode 160000 E-Kirkpatrick-POC-Implementation-and-instructions

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git push

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 4 threads

Compressing objects: 100% (3/3), done.

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Total 3 (delta 0), reused 0 (delta 0)

To https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project.git

   524b8d5..a994a5c  master -> master

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

Updated readme to reflect the new submodules which exist.

Github submodules update

Made changes to the overleaf workflow process file and committed it over to github.

**Error -** file updates in original implementation and insutructions repositry but changes are not updated in the submodule. This defies the entire point of having the submodules.

Not sure if there is a script which can make any changes automatic in the submodule, or whether this needs to be done each time.

According to this website it is possible: https://gist.github.com/gitaarik/8735255

Played around with script but not successful. I think I am working in the wrong directory and need to push changes.

Script used:

Ellen@Ellen-PC MINGW64 ~

$ cd Documents\

> cd Documents/

bash: cd: too many arguments

Ellen@Ellen-PC MINGW64 ~

$ cd Documents/

Ellen@Ellen-PC MINGW64 ~/Documents

$ ls

'~'/

analysis.docx

"Application for Vice Cahncellor's job"/

'bank balance.jpg'

'Bluetooth Exchange Folder'/

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'Cover Letter for Campus Engagement Intern - E Kirkpatrick.docx'

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'E Kirkpatrick CV -2 - Copy.docx'

'E Kirkpatrick CV -2.docx'

'E Kirkpatrick CV -NDIS.docx'

'E Kirkpatrick CV.docx'

'E Kirkpatrick Mission Aus Cover Letter.docx'

E-Kirkpatrick-PoC-project/

'Ellen Kirkpatrick Resume - swim school.docx'

'Ellen Kirkpatrick Resume.docx'

Fax/

"katie's response.docx"

'Literacy Tutor TAFE.pdf'

'My Music'@

'My Pictures'@

'My Videos'@

'Outlook Files'/

'Participation Fisher Road program.pdf'

Payment\_K236422462.pdf

Payment\_K237386375.pdf

'Personal Response to Criteria for Research Assistant.docx'

'queens health letter.pdf'

R/

RATickets-1CompoundwithBenF.pdf

report\_kirkpatrick\_459641-319794-1.pdf

'resumes and applications'/

r-geospatial/

SCAN0134.JPG

SCAN0135.JPG

'SCAN0136 - Copy.pdf.JPG'

SCAN0136.JPG

SCAN0137.JPG

SCAN0138.JPG

'Scanned Documents'/

'TAFE academic record.pdf'

'tax assessment notice 2016.pdf'

'tax payment details 2016.docx'

Untitled.jpg

vlc-2.2.1-win32.exe\*

'What to do in a first aid situation - buddy program.docx'

'Working with children check.pdf'

'Yacht Club receptionist'/

Youcam/

Ellen@Ellen-PC MINGW64 ~/Documents

$ cd E-Kirkpatrick-PoC-project/

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ ls

E-Kirkpatrick-POC-Implementation-and-instructions/ OSP---E-Kirkpatrick/

License README.md

main.tex

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git submodule update --init

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git submodule update

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git pull --recurse-submodules

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (3/3), done.

remote: Total 3 (delta 2), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (3/3), done.

From https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project

315952d..175ead9 master -> origin/master

Fetching submodule E-Kirkpatrick-POC-Implementation-and-instructions

From https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions

4497eb6..4902aaa master -> origin/master

Fetching submodule OSP---E-Kirkpatrick

Updating 315952d..175ead9

Fast-forward

README.md | 1 +

1 file changed, 1 insertion(+)

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git submodule add -b master

usage: git submodule [--quiet] [--cached]

or: git submodule [--quiet] add [-b <branch>] [-f|--force] [--name <name>] [--reference <repository>] [--] <repository> [<path>]

or: git submodule [--quiet] status [--cached] [--recursive] [--] [<path>...]

or: git submodule [--quiet] init [--] [<path>...]

or: git submodule [--quiet] deinit [-f|--force] (--all| [--] <path>...)

or: git submodule [--quiet] update [--init] [--remote] [-N|--no-fetch] [-f|--force] [--checkout|--merge|--rebase] [--[no-]recommend-shallow] [--reference <repository>] [--recursive] [--] [<path>...]

or: git submodule [--quiet] set-branch (--default|--branch <branch>) [--] <path>

or: git submodule [--quiet] summary [--cached|--files] [--summary-limit <n>] [commit] [--] [<path>...]

or: git submodule [--quiet] foreach [--recursive] <command>

or: git submodule [--quiet] sync [--recursive] [--] [<path>...]

or: git submodule [--quiet] absorbgitdirs [--] [<path>...]

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git status

On branch master

Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git pull

Already up to date.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git subodule init

git: 'subodule' is not a git command. See 'git --help'.

The most similar command is

submodule

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git sumbodule

git: 'sumbodule' is not a git command. See 'git --help'.

The most similar command is

submodule

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git submodule

4497eb62523bacfd47535bc0b43e3691d1976d3a E-Kirkpatrick-POC-Implementation-and-instructions (heads/master)

a933e55771157e489c4ba6bc0e4c7f26fc07fcd9 OSP---E-Kirkpatrick (heads/master)

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git status

On branch master

Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git add main.tex

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git push

Everything up-to-date

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ ls

E-Kirkpatrick-POC-Implementation-and-instructions/ OSP---E-Kirkpatrick/

License README.md

main.tex

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ cd E-Kirkpatrick-POC-Implementation-and-instructions/

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git add

Nothing specified, nothing added.

Maybe you wanted to say 'git add .'?

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git add main.tex

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git push

To https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git

! [rejected] master -> master (non-fast-forward)

error: failed to push some refs to 'https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions.git'

hint: Updates were rejected because the tip of your current branch is behind

hint: its remote counterpart. Integrate the remote changes (e.g.

hint: 'git pull ...') before pushing again.

hint: See the 'Note about fast-forwards' in 'git push --help' for details.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git pull main.tex

fatal: invalid gitfile format: main.tex

fatal: Could not read from remote repository.

Please make sure you have the correct access rights

and the repository exists.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git pull 'main.text'

fatal: 'main.text' does not appear to be a git repository

fatal: Could not read from remote repository.

Please make sure you have the correct access rights

and the repository exists.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git pull 'main.tex'

fatal: invalid gitfile format: main.tex

fatal: Could not read from remote repository.

Please make sure you have the correct access rights

and the repository exists.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git submodule update

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git submodule update --init

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git submodule update --remote

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git pull

Updating 4497eb6..4902aaa

Fast-forward

main.tex | 60 +++++++++++++++++++++++++++++++++++++-----------------------

1 file changed, 37 insertions(+), 23 deletions(-)

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git submodule update --remote

**Error** - changes still not updated. Think some where in there is some of the right code, just got to work out how to input it correctly. Also worried about what changes I am actually doing with this code!

Attempt 2:

https://stackoverflow.com/questions/5828324/update-git-submodule-to-latest-commit-on-origin/5828396#5828396

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ cd submodule\_dir

bash: cd: submodule\_dir: No such file or directory

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git checkout master

Already on 'master'

Your branch is up to date with 'origin/master'.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ git pull

Already up to date.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project/E-Kirkpatrick-POC-Implementation-and-instructions (master)

$ cd

Ellen@Ellen-PC MINGW64 ~

$ cd Documents/E-Kirkpatrick-PoC-project

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "pulled update to submodule"

[master 46489eb] pulled update to submodule

1 file changed, 1 insertion(+), 1 deletion(-)

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git submodule foreach git pull origin master

Entering 'E-Kirkpatrick-POC-Implementation-and-instructions'

From https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions

\* branch master -> FETCH\_HEAD

Already up to date.

Entering 'OSP---E-Kirkpatrick'

From https://github.com/MQ-FOAR705/OSP---E-Kirkpatrick

\* branch master -> FETCH\_HEAD

Already up to date.

**Error -** Still not successful!!

Attempt 2 or 3 - Pushing changes to github submodules

Took problem to consultation hours. Previous attempts were on the right track, starting with the pull.

**Problem identitifed** - was pulling the changes, but not committing or pushing them finally. So just had to add a few steps.

**Process:**

Ellen@Ellen-PC MINGW64 ~

$ cd /Documents/E-Kirkpatrick-PoC-project

bash: cd: /Documents/E-Kirkpatrick-PoC-project: No such file or directory

Ellen@Ellen-PC MINGW64 ~

$

Ellen@Ellen-PC MINGW64 ~

$ cd Documents

Ellen@Ellen-PC MINGW64 ~/Documents

$ /E-Kirkpatrick-PoC-project: No such file or directory

bash: /E-Kirkpatrick-PoC-project:: No such file or directory

Ellen@Ellen-PC MINGW64 ~/Documents

$ ls

'~'/

analysis.docx

"Application for Vice Cahncellor's job"/

'bank balance.jpg'

'Bluetooth Exchange Folder'/

'centrelink confirmation.pdf'

'CLO position'/

'Cover Letter for Alliance Gambling Reform- E Kirkpatrick.docx'

'Cover Letter for Campus Engagement Intern - E Kirkpatrick.docx'

'Cover Letter for Client Liaison Officer - E Kirkpatrick.docx'

'Cover Letter for Graduate Intern - E Kirkpatrick.docx'

'Cover Letter for Research Assistant.docx'

'Critical Theory.docx'

Default.rdp

desktop.ini

'doctor note.pdf'

'doctors note may 2016.pdf'

'E Kirkpatrick CV -2 - Copy.docx'

'E Kirkpatrick CV -2.docx'

'E Kirkpatrick CV -NDIS.docx'

'E Kirkpatrick CV.docx'

'E Kirkpatrick Mission Aus Cover Letter.docx'

E-Kirkpatrick-PoC-project/

'Ellen Kirkpatrick Resume - swim school.docx'

'Ellen Kirkpatrick Resume.docx'

Fax/

"katie's response.docx"

'Literacy Tutor TAFE.pdf'

main.tex

'My Music'@

'My Pictures'@

'My Videos'@

'Outlook Files'/

'Participation Fisher Road program.pdf'

Payment\_K236422462.pdf

Payment\_K237386375.pdf

'Personal Response to Criteria for Research Assistant.docx'

'queens health letter.pdf'

R/

RATickets-1CompoundwithBenF.pdf

report\_kirkpatrick\_459641-319794-1.pdf

'resumes and applications'/

r-geospatial/

SCAN0134.JPG

SCAN0135.JPG

'SCAN0136 - Copy.pdf.JPG'

SCAN0136.JPG

SCAN0137.JPG

SCAN0138.JPG

'Scanned Documents'/

'TAFE academic record.pdf'

'tax assessment notice 2016.pdf'

'tax payment details 2016.docx'

Untitled.jpg

vlc-2.2.1-win32.exe\*

'What to do in a first aid situation - buddy program.docx'

'Working with children check.pdf'

'Yacht Club receptionist'/

Youcam/

Ellen@Ellen-PC MINGW64 ~/Documents

$ cd E

E Kirkpatrick CV -2 - Copy.docx E Kirkpatrick CV -NDIS.docx E Kirkpatrick Mission Aus Cover Letter.docx Ellen Kirkpatrick Resume - swim school.docx

E Kirkpatrick CV -2.docx E Kirkpatrick CV.docx E-Kirkpatrick-PoC-project/ Ellen Kirkpatrick Resume.docx

Ellen@Ellen-PC MINGW64 ~/Documents

$ cd E-Kirkpatrick-PoC-project/

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git pull

Already up to date.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ ls

E-Kirkpatrick-POC-Implementation-and-instructions/ License main.tex OSP---E-Kirkpatrick/ README.md

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git pull --recurse-submodules

Fetching submodule E-Kirkpatrick-POC-Implementation-and-instructions

From https://github.com/MQ-FOAR705/E-Kirkpatrick-POC-Implementation-and-instructions

4902aaa..bc032d5 master -> origin/master

\* [new branch] Submodule-instructions -> origin/Submodule-instructions

Fetching submodule OSP---E-Kirkpatrick

Already up to date.

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git commit -am "pulling updates from original implementation repository into submodule"

On branch master

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$ git push

Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Delta compression using up to 4 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (2/2), 273 bytes | 54.00 KiB/s, done.

Total 2 (delta 1), reused 0 (delta 0)

remote: Resolving deltas: 100% (1/1), completed with 1 local object.

To https://github.com/MQ-FOAR705/E-Kirkpatrick-PoC-project.git

175ead9..46489eb master -> master

Ellen@Ellen-PC MINGW64 ~/Documents/E-Kirkpatrick-PoC-project (master)

$

**Result** - Successful! Changes to implementation and workflow instructions now reflected in the submodules. Changes pushed.

Proof of Concept

Submitted workflow process on turnitin early.

Github repository up to date - contains license, readme, release, submodules and the project management for the proof of concept.

Uploaded images which were going to be in OSP to github repository (OSP no longer an assessment). Committed the draft versions anyway to github.