My calender management

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Overview

I find a challenging aspect of academic research is assoicated with organising both my work and personal time management. Now that I am attempting to work with the skills obtained during my PhD I have so many different projects running at/in different levels of development and collaboration. This repository is a draft approach to my time management using tidyPipes workflow.

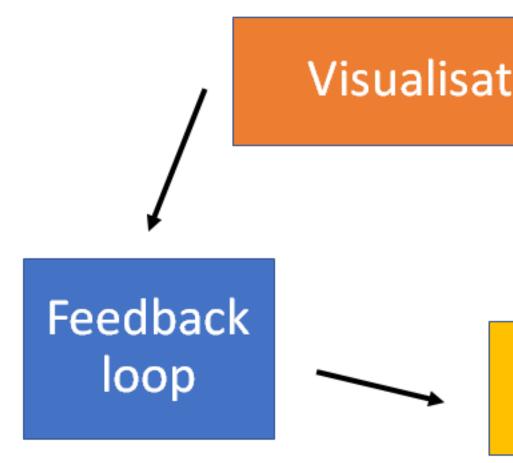
NOTE: This is my first attempt to apply my tidyPipes workflow (Figure above) to my project management and integrate this into my normal workflow.

Generally, this work is focused on writing the scripts to automate the intergration between emails, PhD timeline and other projects. To do this we need to import datasets and modify the structure of these imputs to match the information needed to contruct a timeline of tasks and objectives.

6 CONTENTS

Introduction

Navigating the path between graduate studies and an academic career is a difficult task at the best of times. One of the key steps in becoming a establish researcher in the current academic environment.



To do this efficiently, time management is one key aspect, however when there are so many little projects running it can be hard to know what to work on.



Data from tasks and deadlines from range of file types

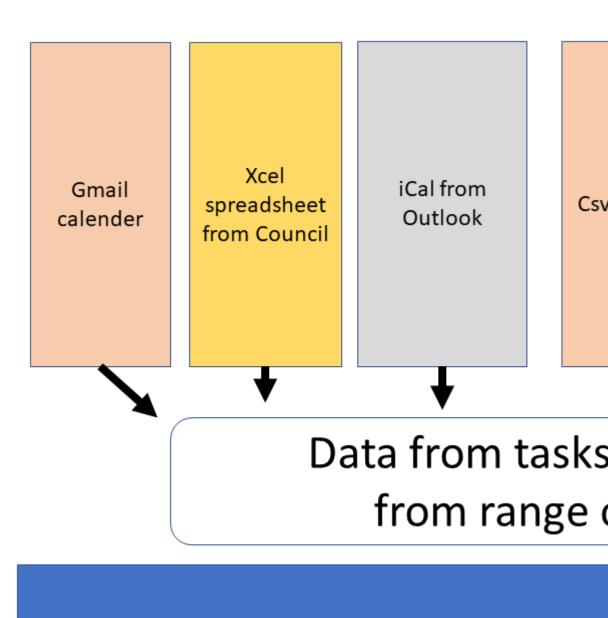
This document is to record the method to proposing my 6month timeline for my PhD completion, as well as, showing the key aspects of the tidyPipes approach to research and the draft project plan for the invertebrate work I am proposing to do with Ben Kefford's lab.

Methods

Generally the concept is to create a baseline dataset of information and then extend this using dataspice to create a tidy format of data that can then be modelled and visualised using the tidyverse suite of tools.

```
library(knitr)
```

```
## Warning: package 'knitr' was built under R version 4.0.2
knitr::include_graphics(path = "./img/TidyPipes-calenderJUL2020v2.png")
```



Overall da

There are multiple difference sources of information for this calendar. To be able to keep this upto date and current I need to write scripts for each data-source to my database of events (here). These are the following importing scripts:

- Timeline figure
 - Past
 - Future

2.1.1 Data/information

The purpose of this vignette is to show how, with reference to a real-world application: creating a timetable for a new module. It assumes you've installed the package following instructions in the README and have attached it as follows:

Overall this is time series data. A good general tutorial for this sort of data is here on youtube. There are several ways to visualise this data, below are two selected bits of code that do this. Overall there are two generalised datasets that may be helpful to other individuals for each project or combination of projects (for the APR for example). The data for this collection of tasks associated with timelines and targets. The baseline dataset is found in the .xlsx file named "baseline-dataset-calender.xlsx". This is the base file I have been adding information to when I change the overall structure of the calendar projects.

2.1.2 Manual data (.csv files)

To begin with I have collated and restructured the avaliable data from downloaded .ics data as a csv and the UCSRC council calendar.

This sorted data was originally saved as "baseline-dataset-calender.xlsx" but as I couldnt get the xcel package to work nicely I converted each project dataset into a csv file stored in the ./data/ folder.

2.1.3 .xlsx

These are excel workbooks. For now this is very simple and works with the current version of excel files (2020). Each "sheet" of the excel file contains a single projects information. This is then converted to a csv file when needed. In the future each project will have its own file that can be added to or modified in a shiny interactive web app.

```
#excel read
#number of sheets in project currently
## Saved as csv's and imported as so below...
```

2.1.4 .csv

Generally the data can be imported as a csv, or other form.

```
library(readr)
## Warning: package 'readr' was built under R version 4.0.2
emailsCalender1 <- read_csv("data/raw_data/anuemails.CSV")</pre>
## Parsed with column specification:
## cols(
##
     .default = col_character(),
##
     `Start Time` = col_time(format = ""),
     `End Time` = col_time(format = ""),
##
    `All day event` = col_logical(),
##
    `Reminder on/off` = col_logical(),
##
     `Reminder Time` = col_time(format = ""),
##
##
     `Billing Information` = col_logical(),
##
     Mileage = col_logical(),
##
     Private = col_logical(),
     `Show time as` = col_double()
##
## )
## See spec(...) for full column specifications.
#str(emailsCalender1)
```

2.1.5 .iCal data

```
#this currently online
```

2.1.6 Other data

Visualisation

Creating timeline charts in R (Generating Timeline charts)

Creating timeline charts in R (Generating Timeline charts)

To do this I have created a calendar for each key project/impact/aspect of short-term timeline, objectives, as well as, my career and life projection. To begin with I need to create timelines and other project goals under covid19. I have put this into a single dataset called dat here.

These figures can be generated using ggplot and other tidyverse approaches due to the implantation of the dataspice packages above. We will use ggplot function from ggplot2 package to generate timeline charts. The following plots can be created using layers to detail charts.

3.1 Timeline

Timeline charts can be used in a lot of applications like tracking equipment or a process status changes, resource availability & scheduling, project timelines, documenting start and end times of events. The beauty of ggplot2 package is that the code can be easily customized, and more details can be added to the plots.

3.2 Activity

Workout timeline with a heat-map of calories burnt with activity type.

3.3 Calendars

Calender information....

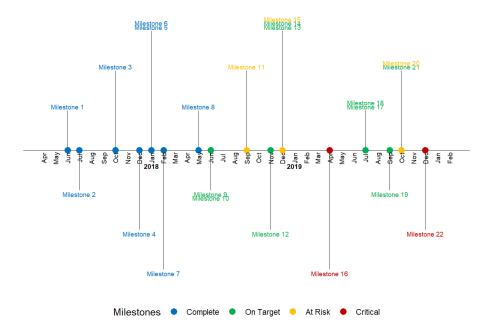


Figure 3.1: image-20200722105325021

3.4 Interactivity

Shiny....

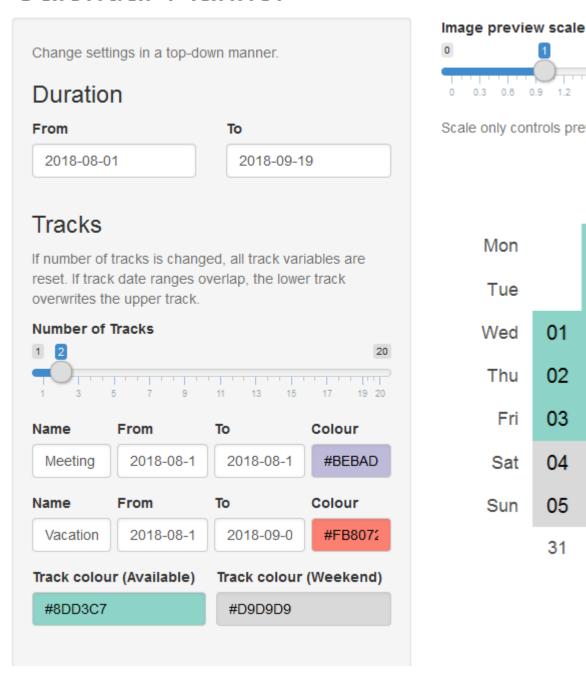
Feedback loop

To create the feedback loop (to get information back from supervisors) I have began to develop a interactive shiny app within the same structure as the baseline dataset so that there is limited coding needed to create the tidypipes "cycle" of community engagement.

library(knitr)

```
## Warning: package 'knitr' was built under R version 4.0.2
knitr::include_graphics(path = "./img/preview.png")
```

Calendar Planner



As computational work takes over our regular management of time over the tradional hard copy "diary". I like this because important information can not be left in the "local cafe" however as I have used "gmail", "outlook" and there suites of applications and tools for calenders I have muddled everything up and missed appointments etc.

There is a lot of my development work in this section because I have attempted to combine these two packages in a way to document all the council emails and other work that I have undertaken as part of the COVID19 pandemic in Australia.

To try and counter this I have developed a tidypipes workflow for my tasks, projects and other collarorations. See presentation here.

Overall outputs

5.1 Timeline

One of the tricky bits about timelines is the format of the date and time of each event. This is different for each event so therefore we have four columns to incorporate this information in the following from for this repository and database. This will also mean that some of the information in other formats will have to be converted into these dimension and any other elements defined in each dataset I am combining to make a overall timeline.

By integrating these stage with some dataspice code/approach's allows for me to generate metadata from each sheet of the excel file quickly using R. Here are the steps to do this.

```
#dataspice from github
library(dataspice)
#each project needs to be imported and then saved as csv in raw_data file to document variable no
project2 <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 4)</pre>
project2
## # A tibble: 22 x 11
##
      eventCode shortName month startDate finishDate startTime
##
                                          <chr>
      <chr>
               <chr>
                         <chr> <chr>
                                                     <dttm>
  1 scr20200~ WorldRef~ june 20/06/20~ 20/06/2020 1899-12-31 09:00:00
  2 scr20200~ Oweek
                          july 44039
                                          44043
                                                    1899-12-31 09:00:00
  3 scr20200~ ReasonSt~ augu~ 44044
                                          <NA>
                                                     1899-12-31 09:00:00
   4 scr20200~ SSAFsurv~ augu~ 44044
                                          <NA>
                                                     1899-12-31 09:00:00
## 5 scr20200~ TownHall2 augu~ 44044
                                          <NA>
                                                     1899-12-31 09:00:00
## 6 scr20200~ openDay
                         augu~ 44044
                                          <NA>
                                                     1899-12-31 09:00:00
```

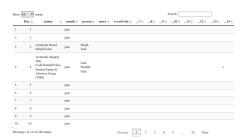
```
##
   7 scr20200~ nic21st
                          augu~ 44044
                                           <NA>
                                                      NA
## 8 scr20200~ SSAFbids
                          sept~ 44075
                                           <NA>
                                                      1899-12-31 09:00:00
                          sept~ 44075
                                                      1899-12-31 09:00:00
## 9 scr20200~ Grad
                                           <NA>
## 10 scr20200~ SSAFFunds sept~ 44075
                                           <NA>
## # ... with 12 more rows, and 5 more variables: endTime <dttm>,
## #
      description <chr>, src <lgl>, ucX <lgl>, week <lgl>
data_actions <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 1)
## New names:
## * `` -> ...7
## * `` -> ...8
## * `` -> ...9
## * `` -> ...10
## * `` -> ...11
data_names <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 3)</pre>
#time
#location
```

5.1.0.1 Past Outcomes

5.1.1 Action timeline

These sources of data are combined for my general timeline below. These summarised actions are also the flagged tasks from outlook calendar to catch up with this information but this can be automated in the future.

```
# DT::datatable(emailsCalender1)
## handmade data
DT::datatable(data_actions)
```



```
# there should be an actions...
data_actions
```

```
## # A tibble: 248 x 14
                               Day action month person notes eventCode ...7 ...8 ...9 ...10 ...11 ...12
##
                        <dbl> <chr> <chr> <chr> <chr> <lgl> <lgl>
                                                                                                                                                                                                  <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> <lgl> 
                                        1 <NA>
##
                                                                             june
                                                                                                    <NA>
                                                                                                                                                         NA
                                                                                                                                                                                                  NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
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                                                                                                                                                                                                                                                                                                                           NA
##
               2
                                        2 <NA>
                                                                             june
                                                                                                  <NA>
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                  NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
               3
                                                                                                   Majid~ NA
                                        3 Acade~ june
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
               4
                                        4 Acade~ june
                                                                                                    Lola; ~ NA
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
               5
                                        5 <NA>
                                                                             june
                                                                                                    <NA>
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
               6
                                        6 <NA>
                                                                                                    <NA>
                                                                                                                                 NA
                                                                                                                                                        NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                                                                           NA
                                                                             june
                                        7 <NA>
                                                                             june
                                                                                                    <NA>
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
                                        8 <NA>
                                                                                                    <NA>
               8
                                                                             june
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
##
              9
                                        9 <NA>
                                                                             june
                                                                                                    <NA>
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                  NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
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                                                                                                                                                                                                                                                                                                                           NA
                                                                                                    <NA>
## 10
                                    10 <NA>
                                                                             june
                                                                                                                                 NA
                                                                                                                                                         NA
                                                                                                                                                                                                 NA
                                                                                                                                                                                                                         NA
                                                                                                                                                                                                                                                  NA
                                                                                                                                                                                                                                                                          NA
                                                                                                                                                                                                                                                                                                   NA
                                                                                                                                                                                                                                                                                                                           NA
## # ... with 238 more rows, and 2 more variables: ...13 <1gl>, ...14 <chr>
```

5.1.2 Future targets

5.1.2.1 Plot current data

```
library(ggplot2)
```

Warning: package 'ggplot2' was built under R version 4.0.2

```
library(scales)
## Warning: package 'scales' was built under R version 4.0.2
library(lubridate)
## Warning: package 'lubridate' was built under R version 4.0.2
##
## Attaching package: 'lubridate'
## The following objects are masked from 'package:base':
##
       date, intersect, setdiff, union
source("./R/importDATAscript.R")
## Warning: package 'readxl' was built under R version 4.0.2
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
       intersect, setdiff, setequal, union
## Parsed with column specification:
## cols(
    eventCode = col_character(),
##
##
    shortName = col_character(),
##
    month = col_character(),
##
    startDate = col_character(),
##
    finishDate = col_character(),
    startTime = col_time(format = ""),
##
    endTime = col_time(format = ""),
##
    description = col_character(),
##
##
    project = col_character(),
##
    ucX = col_logical(),
    week = col_logical()
##
## )
## Parsed with column specification:
## cols(
##
    eventCode = col_character(),
##
    shortName = col_character(),
##
    month = col character(),
    startDate = col_character(),
##
```

```
##
     finishDate = col_character(),
##
     startTime = col_time(format = ""),
##
     endTime = col_time(format = ""),
     description = col_character(),
##
     project = col_character(),
##
##
     ucX = col_logical(),
##
     week = col_logical()
## )
## Parsed with column specification:
## cols(
##
     eventCode = col_character(),
##
     shortName = col_character(),
##
     month = col_character(),
##
     startDate = col_character(),
##
    finishDate = col_character(),
     startTime = col_time(format = ""),
##
##
     endTime = col_time(format = ""),
##
     description = col_character(),
##
    project = col_character(),
    ucX = col_logical(),
##
     week = col_logical()
##
## )
# Now let's load in some data
#milestones is the demo data
#actions is my data
df <- readr::read_csv('./data/milestones.csv')</pre>
## Parsed with column specification:
## cols(
##
    month = col_double(),
##
    year = col_double(),
    milestone = col_character(),
##
     status = col_character()
## )
df
## # A tibble: 22 x 4
##
     month year milestone
                              status
##
      <dbl> <dbl> <chr>
                              <chr>
## 1
         6 2017 Milestone 1 Complete
## 2
         7 2017 Milestone 2 Complete
## 3
       10 2017 Milestone 3 Complete
## 4 12 2017 Milestone 4 Complete
## 5 1 2018 Milestone 5 Complete
```

```
## 6
          1 2018 Milestone 6 Complete
## 7
         2 2018 Milestone 7 Complete
## 8
        5 2018 Milestone 8 Complete
## 9
        6 2018 Milestone 9 On Target
        6 2018 Milestone 10 On Target
## 10
## # ... with 12 more rows
5.1.2.2 Subset dataframe
to correct ggplot subset
df$date <- with(df, ymd(sprintf('%04d%02d%02d', year, month, 1)))
df <- df[with(df, order(date)), ]</pre>
head(df)
## # A tibble: 6 x 5
    month year milestone status
                                       date
    <dbl> <dbl> <chr>
                             <chr>
                                       <date>
## 1
        6 2017 Milestone 1 Complete 2017-06-01
        7 2017 Milestone 2 Complete 2017-07-01
        10 2017 Milestone 3 Complete 2017-10-01
## 3
## 4
        12 2017 Milestone 4 Complete 2017-12-01
## 5
       1 2018 Milestone 5 Complete 2018-01-01
         1 2018 Milestone 6 Complete 2018-01-01
text_offset <- 0.05</pre>
#factoring
status_levels <- c("Complete", "On Target", "At Risk", "Critical")</pre>
status_colors <- c("#0070C0", "#00B050", "#FFC000", "#C00000")
df$status <- factor(df$status, levels=status_levels, ordered=TRUE)</pre>
#direction
positions \leftarrow c(0.5, -0.5, 1.0, -1.0, 1.5, -1.5)
directions \leftarrow c(1, -1)
line_pos <- data.frame(</pre>
    "date"=unique(df$date),
    "position"=rep(positions, length.out=length(unique(df$date))),
    "direction"=rep(directions, length.out=length(unique(df$date)))
)
df <- merge(x=df, y=line_pos, by="date", all = TRUE)</pre>
```

df <- df[with(df, order(date, status)),]</pre>

```
df$month_count <- ave(df$date==df$date, df$date, FUN=cumsum)</pre>
df$text_position <- (df$month_count * text_offset * df$direction) + df$position
head(df)
##
         date month year
                        milestone
                                  status position direction month_count
## 1 2017-06-01 6 2017 Milestone 1 Complete 0.5
## 2 2017-07-01
               7 2017 Milestone 2 Complete
                                           -0.5
                                                     -1
                                                                1
## 3 2017-10-01 10 2017 Milestone 3 Complete
                                           1.0
                                                     1
                                                                1
-1.0
                                                     -1
                                                                1
1.5
                                                                1
                                          1.5
                                                                2
                                                     1
##
    text_position
## 1
          0.55
## 2
          -0.55
## 3
           1.05
## 4
          -1.05
## 5
          1.55
## 6
           1.60
5.1.2.3 Counts
text offset <- 0.05
df$month_count <- ave(df$date==df$date, df$date, FUN=cumsum)</pre>
df$text_position <- (df$month_count * text_offset * df$direction) + df$position
head(df)
         date month year
                        milestone
                                  status position direction month_count
## 1 2017-06-01
                6 2017 Milestone 1 Complete
                                          0.5
                                                     1
## 2 2017-07-01
                7 2017 Milestone 2 Complete
                                           -0.5
                                                     -1
                                                                1
1.0
                                                     1
                                                                1
-1.0
                                                     -1
                                                                1
              1 2018 Milestone 5 Complete
1 2018 Milestone 6 Complete
## 5 2018-01-01
                                          1.5
                                                     1
                                                                1
## 6 2018-01-01
                                          1.5
##
    text_position
## 1
          0.55
## 2
          -0.55
## 3
          1.05
## 4
          -1.05
## 5
           1.55
## 6
           1.60
```

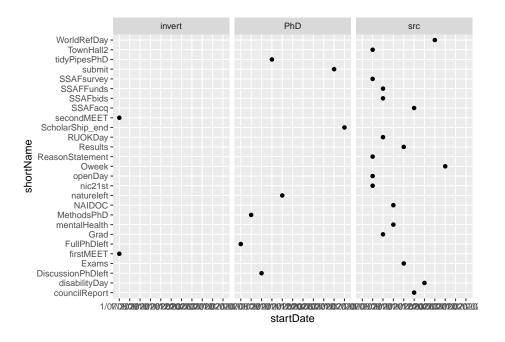
5.1.2.4 Buffering times

```
month_buffer <- 2
month_date_range <- seq(min(df$date) - months(month_buffer), max(df$date) + months(month_format <- format(month_date_range, '%b')
month_df <- data.frame(month_date_range, month_format)</pre>
```

```
year_date_range <- seq(min(df$date) - months(month_buffer), max(df$date) + months(month]
year_date_range <- as.Date(
    intersect(
        ceiling_date(year_date_range, unit="year"),
        floor_date(year_date_range, unit="year")
    ), origin = "1970-01-01"
)
year_format <- format(year_date_range, '%Y')
year_df <- data.frame(year_date_range, year_format)</pre>
```

```
# names(datBASE)
# datBASE$project

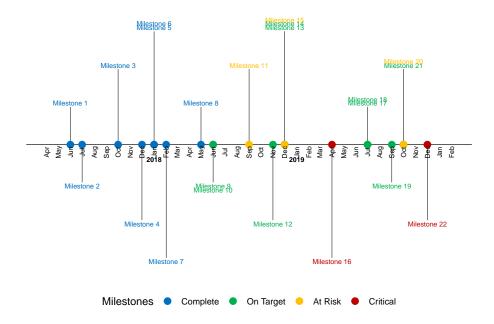
ggplot(datBASE, aes(x = startDate, y = shortName)) +
   geom_point() +
   facet_wrap(~project)
```



5.1.3.2 Final plot option 1

```
See Ben Alex Keen's blog with the following output:
```

```
timeline_plot<-ggplot(df,aes(x=date,y=0, col=status, label=milestone))</pre>
timeline_plot<-timeline_plot+labs(col="Milestones")</pre>
timeline_plot<-timeline_plot+scale_color_manual(values=status_colors, labels=status_levels, drop
timeline_plot<-timeline_plot+theme_classic()</pre>
# Plot horizontal black line for timeline
timeline_plot<-timeline_plot+geom_hline(yintercept=0,</pre>
                color = "black", size=0.3)
# Plot vertical segment lines for milestones
timeline_plot<-timeline_plot+geom_segment(data=df[df$month_count == 1,], aes(y=position,yend=0,xe
# Plot scatter points at zero and date
timeline_plot<-timeline_plot+geom_point(aes(y=0), size=3)</pre>
# Don't show axes, appropriately position legend
timeline_plot<-timeline_plot+theme(axis.line.y=element_blank(),</pre>
                  axis.text.y=element_blank(),
                  axis.title.x=element_blank(),
                  axis.title.y=element blank(),
                  axis.ticks.y=element_blank(),
```



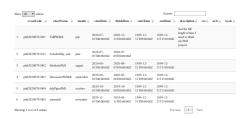
5.1.4 Individual projects

Each of my tasks come from a collection of overall projects I collaborate on and develop code with on timeframes that range from monthly to undefined. The current projects I have integrated into my timeline are:

5.1.5 PhD

Over the duration of my PhD I have currently developed my thesis and publications to align with a 6 month hand-in date from the 1st July 2020.

```
project1 <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 3)
DT::datatable(head(project1))</pre>
```

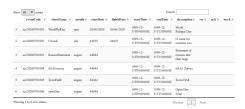


- 5.1.5.1 Introduction
- **5.1.5.2** Methods
- 5.1.5.3 Conclusion
- 5.1.5.4 Discussion
- 5.1.6 Previous achievements and tasks

5.1.7 Council tasks

Being nominated to represent the Graduate community on the University of Canberra Council in November 2019 was a great honour. At the time I did understand the impact of

```
project2 <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 4)
DT::datatable(head(project2))</pre>
```

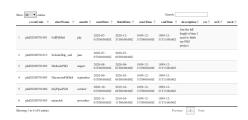


5.1.7.1 UC-Council

Generally it is regarded that there will be about a week (40hrs) of background reading and investigation before each council meeting. Under covid19 conditions I think this may be much greater.

Here are the general tasks and overall timetable of the Council obligations in 2020:

dataCouncil <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 3)
DT::datatable(head(dataCouncil))</pre>



5.1.7.2 UC-SRC

This is a short demo site to help with planning for the SRC for semester 2 2020.

5.1.7.3 Supporting Reproducibility at UC

My Phd studies put me in a unique situation where I can apply the tools and computational development I have done with my PhD and conceptually test the framework for the application in the education sector.

- UCdown
- councilCOMOS
- UCSRC covid support

5.1.8 UC-Invertebrates

This work has its own repository so far.

```
project3 <- readxl::read_excel("./data/raw_data/Sem two planning.xlsx", sheet = 5)
## New names:
## * `` -> ...1
DT::datatable(head(project3))
```



Extra projects

During Covid19 I have undertaken other additional learning and development tasks to keep me informed for my positions on Council and for my PhD work.

6.1 Courses

During Covid19 as there are less academic activities being undertaken in reality I have upskilled with other online courses and personal development courses below:

6.1.1 Coursa

	Enrolment	•	Grade
Course Name	Date	Paid	Y/N Achieved
Using clinical health data for better	2019-07-	N	0.00
healthcare	01		
A Life of Happiness and Fulfillment	2020-04-	N	0.00
	04		
Science Matters: Let's Talk About	2020-04-	N	0.00
COVID-19	03		
Reproducible Research	2020-04-	N	0.00
	21		
Understanding Clinical Research:	2020-04-	N	0.00
Behind the Statistics	04		
The Science of Well-Being	2020-04-	N	0.00
	21		
Learning How to Learn: Powerful	2020-04-	N	0.00
mental tools to help you master tough	04		
subjects			

Course Name	Enrolment Date	Paid	Grade Y/N Achieved
Mindshift: Break Through Obstacles to Learning and Discover Your Mountains 101 Machine Learning	Hidden Potential 2020-04- 04 2020-04- 04	2020- 04-04 N	N 0.00 0.00 0.00

6.1.2 Seminars

During 2020 I will undertake several small seminars with regard to my PhD work. These include progress seminars and other departmental talks.

PAST: - ANU Masters Class - GEM 2020

FUTURE: - GEM - IAE final seminar - ANU lectures?

6.1.3 Teaching

6.1.3.1 ANU: Climate Change

6.1.3.2 ANU: Masters Projects

6.1.4 Community projects

6.1.4.1 Hackett seedlings

6.1.4.2 Ants Surf&Skate

6.1.4.3 Gov Hack...