

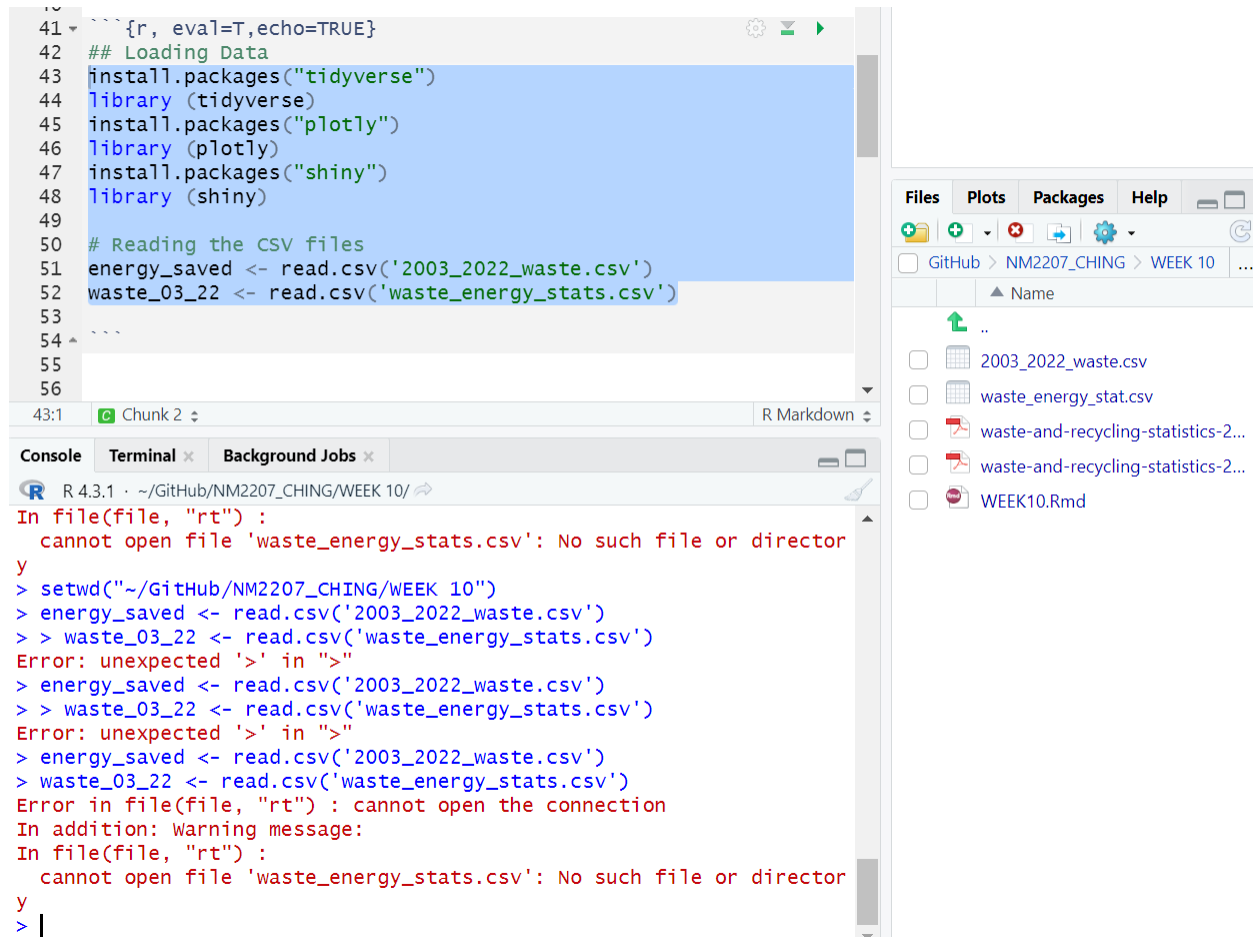
Ching's Week-12 diary on Webpage

Tang Ching Xian

2023-11-17

Here are some issues when I encounter when cleaning the data #Problem Encounter 1

```
knitr::include_graphics("problem1.png")
```



Overcome: by typing separate lines instead of just throwing both at the same time.

#Problem Encounter 2

```
knitr::include_graphics("problem2.png")
```

```

50 # Reading the CSV files
51 energy_saved <- read.csv('2003_2022_waste.csv')
52 waste_03_22 <- read.csv('waste_energy_stats.csv')
53
54 # Cleaning Data
55
56 clean_waste_03_22 <- waste_03_22 %>%
57   rename(
58     waste_type = "Waste Type",
59     total_waste_generated_tonne = "Total Generated ('000
60     tonnes)",
61     total_waste_recycled_tonne = "Total Recycled ('000
62     tonnes)",
63     year = "Year"
64   ) %>%
65   mutate(
66     total_waste_generated_tonne = total_waste_generated_tonne *
67     1000,
68     total_waste_recycled_tonne = total_waste_recycled_tonne *
69     1000
70   )

```

waste_... 300 obs. of 4 ...

Files Plots Packages Help

GitHub > NM2207_CHING > WEEK 10 > ...

Name

..

2003_2022_waste.csv

problem1.png

waste-and-recycling-statistics-2...

waste-and-recycling-statistics-2...

WEEK10.Rmd

waste_energy_stat.csv

74:40 Chunk 3 R Markdown

Console Terminal x Render x Background Jobs x

.../WEEK 10/WEEK10.Rmd

processing file: WEEK10.Rmd

quitting from lines 42-67 [unnamed-chunk-1] (WEEK10.Rmd)

Error in `file()`:
! cannot open the connection

Backtrace:

1. utils::read.csv("waste_energy_stats.csv")
2. utils::read.table(...)
3. base::file(file, "rt")

Execution halted

Overcome: by typing "waste_energy_stat.csv" instead of "waste_energy_stat(s).csv" -> careless typing

#Problem Encounter 3

```
knitr::include_graphics("problem3.png")
```

```

50 # Reading the CSV files
51 energy_saved <- read.csv('2003_2022_waste.csv')
52
53 waste_03_22 <- read.csv('waste_energy_stat.csv')
54
55 # Cleaning Data
56
57 clean_waste_03_22 <- waste_03_22 %>%
58   rename(
59     waste_type = "Waste Type",
60     total_waste_generated_tonne = "Total Generated ('000
61     tonnes)",
62     total_waste_recycled_tonne = "Total Recycled ('000
63     tonnes)",
64     year = "Year"
65   ) %>%
66   mutate(
67     total_waste_generated_tonne = total_waste_generated_tonne *
68     1000,
69     total_waste_recycled_tonne = total_waste_recycled_tonne *
70     1000
71   )

```

waste_... 300 obs. of 4 ...

Files Plots Packages Help

GitHub > NM2207_CHING > WEEK 10

Name

- ☐ ..
- ☐ 2003_2022_waste.csv
- ☐ problem1.png
- ☐ waste-and-recycling-statistics-2...
- ☐ waste-and-recycling-statistics-2...
- ☐ WEEK10.Rmd
- ☐ waste_energy_stat.csv
- ☐ problem2.png

Console
Terminal
Render
Background Jobs

```

processing file: WEEK10.Rmd
|.....| 57% [unnamed]
-chunk-1]
Quitting from lines 42-68 [unnamed-chunk-1] (WEEK10.Rmd)
Error in `rename()` :
! Can't rename columns that don't exist.
X Column `Waste Type` doesn't exist.
Backtrace:
1. ... %>% ...
4. dplyr::rename.data.frame(...)

Execution halted

```

Overcome: Confirm column names mentioned in the 'rename' and 'mutate' function exist in the CSV. They are also case-sensitive, so make sure there are no typos.

#Problem Encounter 4

```
knitr::include_graphics("problem4.png")
```

```

45 #install.packages("plotly")
46 library(plotly)
47 #install.packages("shiny")
48 library(shiny)
49
50 # Reading the CSV files
51 energy_saved <- read.csv('2003_2022_waste.csv')
52
53 waste_03_22 <- read.csv('waste_energy_stat.csv')
54
55 # Cleaning Data
56 clean_waste_03_22 <- waste_03_22 %>%
57   rename(
58     waste_type = "Waste Type",
59     total_waste_generated_tonne = "Total Generated ('000
60     tonnes)",
61     total_waste_recycled_tonne = "Total Recycled ('000
62     tonnes)",
63     year = "Year"
64   ) %>%
65   mutate(
66     total_waste_generated_tonne = total_waste_generated_tonne *
67     1000,
68     total_waste_recycled_tonne = total_waste_recycled_tonne *
69     1000
70   )

```

	2003	2006	2017
Used slag	272.5	269.4	2017
Non-ferrous metals	93.7	92.2	2017
Scrap tyres	35.9	33	2017
Wood	424.1	326.8	2017
Horticultural waste	328.3	220.7	2017
Paper/Cardboard	1144.8	568.8	2017
Glass	71.3	12.4	2017
Food	809.8	133	2017
Ash and sludge	243.4	28.6	2017
Plastic	815.2	51.8	2017
Textile/Leather	150.8	9.6	2017
Others (stones, ceramic, rubber, etc.)	326.4	7.1	2017
Overall	7704.3	4724.3	2017

Overcome: Rearrange the data

#Problem Encounter 5

```
knitr::include_graphics("problem5.png")
```

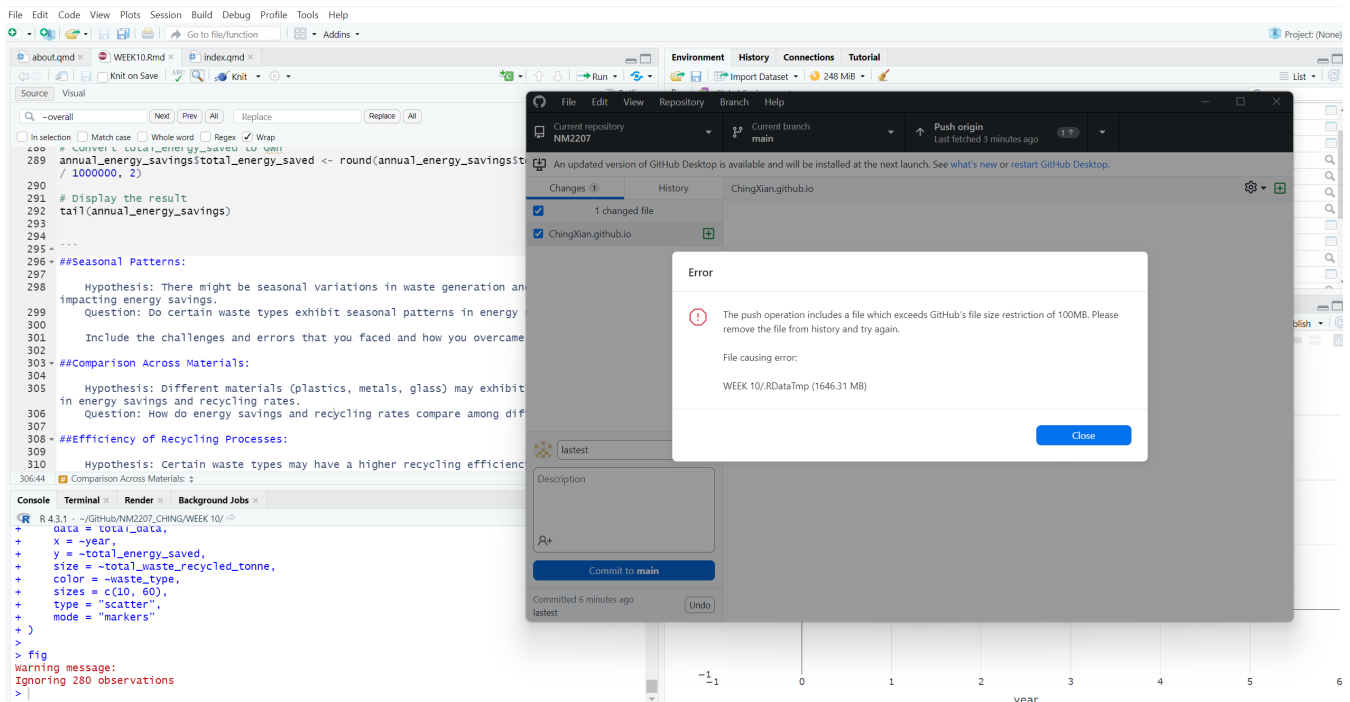
```
> wastestates <- waste_03_22 %>%filter(year %in% c(2003:2022) & waste
_type %in% c("Plastics", "Ferrous metals", "Non-ferrous metal", "Glas
s", "Food"))
Error in `filter()`:
! In argument: `&...`.
Caused by error in `match()`:
! 'match' requires vector arguments
Run `rlang::last_trace()` to see where the error occurred.
> |
```

Overcome: Check the data and

rearrange the data

#Problem Encounter 6

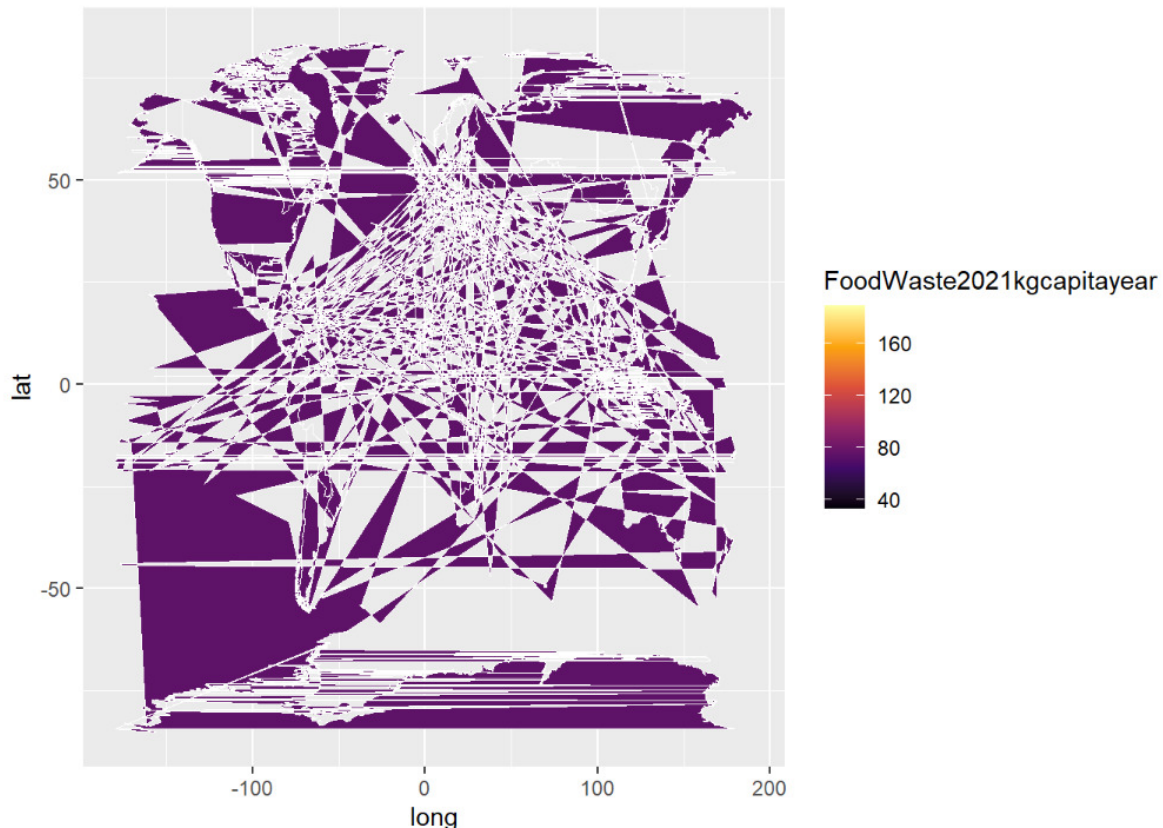
```
knitr::include_graphics("problem10-problem pushign to ghithub.png")
```



Overcome: Reclone repository and redo the whole repository

#Problem Encounter 7

```
knitr::include_graphics("problem11.jpg")
```



Overcome: Research more and edit code.

Sometimes, if the code has problem and due to limited time, I would manually edit the csv.

Challenges on making the webpages better:

There are many more, however, due to limited time, I didn't document everything

But here are some of the error messages I get:

1. Error in `compute_layer()` :! `stat_sf()` requires the following missing aesthetics: geometry

Backtrace:

1. `plotly::ggplotly(map, tooltip = c("region", "Food_emissions_by_country"))`
2. `plotly::ggplotly.ggplot(map, tooltip = c("region", "Food_emissions_by_country"))`
3. `plotly::gg2list(...)`
4. `plotly (local) ggplotly_build(p)`
5. `plotly (local) by_layer(function(l, d) l$compute_statistic(d, layout)) ...`
6. `ggplot2 (local) compute_statistic(..., self = self)`
7. `self$statcompute_layer(data, self$computed_stat_params, layout)`
8. `ggplot2 (local) compute_layer(..., self = self)`
9. `ggproto_parent(Stat, self)$compute_layer(data, params, layout)`
10. `ggplot2 (local) compute_layer(..., self = self)`

Execution halted

Solution: I tried using the `ggplot2` library, however, I get a followed up issue on `[Error in geom_polygon_interactive() :! could not find function "geom_polygon_interactive"]`. Tried `"geom_polygon"` line in the `ggplot` code with `"geom_sf"`. However, I realised the `geom_polygon_interactive` function is not part of the standard `ggplot2` package.

`[Error:! dsn must point to a source, not an empty string. Backtrace: 1. sf::st_read(system.file("shape/world", package = "maps"), quiet = TRUE) 2. sf::st_read.character(...)]`

Then there seems there was an issue with attempting to read the shapefile from the maps package. Used the “rnatrualearth” package to obtain a simplified world map. Additionally, use the sf package to handle spatial data. It rendered, but no map is showing.

Then I tried plotly, but when I render, the render took 3 mins and still nothing appear, I concluded it hanged too cause i could not close the Rstudio.

In the end, I didn’t managed to resolve this, as such my second world map does not have interactive elements.

2. Some of my graph and images are not 100% and centralised.

Solution: At first, i used theme() function and set the plot.margin parameter, however the graph did not change. I used {r, out.width=‘100%’} in the end to make it look better.

3. Sometimes I render, it works but most of the times, i render, this error message appear. [Error in add_html_caption() : ! unused argument (xfun::grep_sub(“^<[>]+aria-labelledby[]=[]“([^\"]+)\$”, “\1”, x)) Backtrace:

1. global .main()
2. execute(...)
3. rmarkdown::render(...)
4. knitr::knit(knit_input, knit_output, envir = envir, quiet = quiet)
5. knitr:::process_file(text, output) ...
6. sew(res, options)
7. knitr:::sew.list(x, options, ...)
8. base::lapply(x, sew, options, ...)
9. FUN(X[[i]], ...)
10. knitr:::sew.knit_asis(x, options, ...)]

Solution: Apparently thorough lots of googling and online conversations, I realised it was due to the unupdated “Quarto” package.

4. Some of mmy shiny app also ran into error when publishing onto the wenpage. [Error in checkAppLayout() : ! Project must not contain both ‘app.R’ and a single-file Shiny app. Backtrace: ■

1. └─rsconnect::deployApp(...)
2. └─rsconnect:::appMetadata(...)
3. └─rsconnect:::checkAppLayout(appDir, appPrimaryDoc)
4. └─cli::cli_abort("Project must not contain both {.file app.R} and a single-file Shiny app.")
5. └─rlang::abort(...)

Execution halted]

Solution: Create a separate file and name of the second shiny document.

1. ^←↵