Sept 25th:

- Group created; three members met in campus.
- Exchange ideas for main topic, created google doc for group discussion.
- Topic we gathered: Covid related, Crime rate related, Average wage in a nz city, Ukraine war related, Allergy related.

Sept 27th:

- Group is named Team Rooster, all members met in the lab.
- We did some recap on previous labs from lab1 to lab6.
- We tried to do some searching for data that relevant to topics until lab ended.

Oct 2nd:

- Second group meetup to finalize the topic.
- Gather collected data in a folder and test if they are legitimate to be used
- We decided on Covid related events as our topic as we struggle to find much suitable data for other topics

Oct 4th:

- We came up with some specific ideas about our topic according to what we have found so far, which are the impacts on well-being. Crime rate, vaccine rate, economy before and after covid. Each person is assigned with a task to do.
- we have been continuously looking for required data for hours and some are relatively easier to find like vaccine rate, crime rate, some are found but requiring data wrangling, like economy
- Major challenge to all of us are the date range/type and district name are not always aligned, so we must modify them either by manual or by functions. If we realize some data have very short coverage, we will discard the data.

Oct 7th:

- Group meetup after lecture. After discussion, well-being is abandoned, and economy is separated into general GDP and agriculture.
- We found web scraping doesn't work 100% times, so we download the csv/xlsx files to be read into our R.
- Tried to read files from GitHub directly within R
- We found tabular files on agriculture and GDP changes in stats.nz, which we then downloaded for analysis.

Oct 9th

- No Group meetup in campus today, but did zoom meeting online
- Everyone confronts different level of difficulties on wrangling and merging data frames as well as plotting with styles
- Add death rate as a task as its direct result for Covid test cases
- Git repository is created for project

- death rate and vaccine rate data frames has been modified good enough to make plots

Oct 11th

- Group meet in the lab, all members are present
- Had a discuss session which we talked about what we did and what caused troubles while we are wrangling data
- Asked tutors' opinion, spatial plotting (sf, sp) are introduced, it can show New Zealand map by region.
- Attempted to create multi bar chart for crime rate. Had problem of how to combine and sort data in a way it can be used for multi bar chart ggplot.
- GDP, crime rate data frames have been modified enough to be used for ggplots.

Oct 13th

- Extra group meetup in campus
- Some has issues of installing certain packages
- The daily test cases need to be converted into weekly
- Agriculture data frames has been modified good enough to make plots
- NZ map can be showed in R but without any values
- After a group discussion, the graphs produced by GDP were improved and merged from six graphs to two.

Oct 16th

- git pushed most our work on GitHub
- NZ map with crime rate and vaccine rate are successfully created
- report has been finished today.
- Some minor changes on the graph to adjust the size.
- Presentation power point has been created

Oct 17th

- The report has been completed and uploaded to GitHub.
- Team meeting on zoom, preparation for the next day's presentation.