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## **Project diary**

Dates	Progress update	Plans for the following week
Week 7 (9/9 - 13/9)	[11/9] Group - Brainstormed on topic choice and were going to choose between sports or travelling. We decided to go for travelling but the topic was too broad so we thought about doing a topic on the countries of the world. Finally, we settled on basing our project on social and economic aspects of countries around the world. We also managed to get 2 websites to get most of our data from.	Start on the retrieval of relevant data from the websites onto jupyter notebook and draft a few wrangled datasets.
Week 8 (16/9 - 20/9)	Hazel - Initially wanted to compare all countries but there are too many countries to create a tidy looking graph, which is why I selected 40 countries, using the HDI index of each country to compare, grouped into 4 groups. Currently I have graphed the income index of the countries, using different colors to differentiate between groups and also graphed the employment percentages of each group. I have been investigating the difference in inequality between genders by graphing the income inequality (Gini coefficient) and will graph the percentage of males vs. females in employment in the grouped countries to compare the difference between the more and less developed countries.  Priscilla - Looked through the websites to pick all the relevant economic and social indicators for our project to draft out a wrangled general dataframe for economic indicators and social indicators respectively.  Nam Vu - Extracted data from the UN pages from: <a href="http://data.un.org/">http://data.un.org/</a> . And researched social indicators. I chose the life expectancy factor and started researching more on it.  Linh Luu - Extracted the table from the website: <a href="http://hdr.undp.org/en/composite/HDI">http://hdr.undp.org/en/composite/HDI</a> using scraping and researched social	Carry on with scraping and tidying datasets and dataframes in R and proceed with plotting dataframes into graphs for comparison of the countries chosen.

	indicators. Finally, I picked the factor of	
	suicide rate and did some first steps of collecting data from male and female suicide rates tables in the UN website.	
Week 9 (23/9 - 27/9)	[25/9] <b>Group</b> - Continued with retrieving relevant data from the websites onto R and wrangle the datasets to make it tidier and suitable to be plotted into graphs for analysis.	Begin writing the report.
Week 10 (30/9 - 4/10)	[2/10] Group - Decided to start using git for easier sharing of codes. Also, we confirmed our topic question.  Hazel - Found a website: https://www.imf.org/external/pubs/ft/weo/2019 /01/weodata/index.aspx and came up with the idea of using this database to find data on unemployment rates whose data are reported by the IMF. The website shows the projected growth for this data so we could use this website to scrape data from the topics we're covering from the UN website and graph it to show the projected outlook for unemployment. Priscilla - Began writing the project report (introduction) and researched the backgrounds of the websites we have chosen. Nam Vu - Collected data for life expectancy then plotted it to see the relationship between HDI and life expectancy. Linh Luu - Graphed tidied datasets of suicide rate in male and female to see what is going on among four groups of countries (countries having high HDI vs low HDI) with ten countries per group. Collected data from HDI and Income Index to have a further look at how suicide rate correlates with HDI factors.	Continue writing the report, adding comparisons between plotted graphs and analysis of outputs.
Week 11 (7/10 - 11/10)	[8/10] Group - Met up to discuss and prepare for the following day's 'lightning presentations' during the lab. Continued with our individual tasks.  Hazel - Fixed Income Inequality bar graph and tried to create a new dataset, altering the HDI index to take into account another factor, e.g. HDI dataset adjusted for income inequality http://hdr.undp.org/sites/default/files/hdr2018 technical_notes.pdf. Also, I wrote about what we would expect from projected unemployment rates, using the graph and graphed the data that was scraped from the	Finalise all graphs and relevant plots in R for addition to the slides and prepare for the official presentation.

	IMF website before putting it into the report and explaining it. <b>Priscilla</b> - Started on the slides for presentation (introduction) and did a little bit	
	of research on our main topic. Helped Linh sort the table in the part of the expectation of unemployment rate.  Nam Vu - Noticed that life expectancy is one of measurements of HDI. Therefore, changed to collect data about Homicide Rate and did some research about Homicide Rate in high and low HDI countries.  Linh Luu - Did some research on our topic question, particularly on HDI also fixed the bar chart of total suicide rate because some	
	errors occured and upgrade the observations up to twenty. Finished graphing the relationship between HDI, Income Index and suicide rate, then scraped and tidied up the prediction of unemployment rate for the next four years. Lastly, started writing report.	
	[9/10] <b>Group</b> - Used the time in the lab to continue with writing our project report and codes on jupyterlab.	
Week 12 (14/10 - 18/10)	[14/10] <b>Group</b> - Met up to do some last-minute refinement of graphs and plots and finalise our slides.	Finish up the project report, project diary, codes etc. for submission.
	[15/10] <b>Group</b> - Met up again to run through our project presentation a few times, so that we can gauge how long our presentation takes and adjust our scripts accordingly.  Finalised the slides once again.	
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homicide rate part in the report.  Linh Luu - Changed a bit in the section of total rate in R code then added some comments and final checked. Finished the report - suicide rate part.	
[22/10] <b>Group</b> - Finished conclusion, tidied up the codes and put all the files required together for submission.	