Final project-11

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Week 9 submission

Q1: What is the topic you have finalised? The topic ive chosen is: 'The Cost of Living in Singapore.' It's an issue that's close to my heart, driven by observations of my peers, friends, and family, as well as conversations I've witnessed on social media platforms. Many young working adults in Singapore, like myself, grapple with concerns about affording basic necessities while pursuing personal goals like work-life balance and leisure. I want to use data to show why young people struggle to "live, laugh, love".

Q2: What are the data sources you have curated so far? I have found data that is provided publicly by the government on https://www.singstat.gov.sg/ and https://beta.data.gov.sg/, about Singaporean's wages accross industry and wage, and about Singapore's CPI (Consumer Price Index) with 2019 as the base year. I intend to analyse the trends and compare the rate of growth between wages and CPI, and see whether it could provide further insight into why so many Singaporeans are pessimistic about their future.

Week 10 submission

Q1: What is the question that you are going to answer? How does the rising cost of living in Singapore affect people with different levels of income, and is education truly a device for people with lower incomes to stay afloat in Singapore?

Q2: Why is this an important question?

This question addresses the fundamental issue of financial stability for individuals and families in Singapore. If wages do not keep up with the rising cost of living, it can lead to economic hardships, increased debt, and reduced overall quality of life. It also has implications for policymakers, as it highlights potential inequalities in income distribution and the need for policies to address these disparities.

Q3: Which rows and columns of the dataset will be used to answer these questions?

1. Consumer Price Index, 2019 as base year
   Row: "all items"
   Columns: all columns 2022-1993
2. Consumer Price Index by Income Group, Lowest 20%, 2019 as base year
   Row: "all items"
   Columns: all columns 2022-1993
3. Consumer Price Index by Income Group, Middle 60%, 2019 as base year
   Row: "all items"
   Columns: all columns 2022-1993

4. Consumer Price Index by Income Group, Highest 20%, 2019 as base year

   Row: "all items"

   Columns: all columns 2022-1993

5. Basic wage change

   All rows (2022-2001), all columns (year and basic wage change)

6. Year on Year change in average monthly nominal earnings per employee quarterly

   All rows (2022 Q4- 1999 Q3)

   Columns: "Quarter" and "Average_monthly_earnings"

7. Graduate employment survey

   Rows: 2022 -2013

   Columns: "University", "Employment_rate-overall", "Gross_monthly_mean"

Week 11 Submission

Q1: List the visualizations that you are going to use in your project (Answer: What are the variables that you are going to plot? How will it answer your larger question?)

1. Line graph- plotting the trends of different income groups' CPI

   This can help me see the trends of increase in different income groups' CPI, and identify income quartiles that are most vulnerable to rising costs.

2. Income VS education scatter plot

   This visualization will show the relationship between education and income

Q2: How do you plan to make it interactive? (Answer: features of ggplot2/shiny/markdown do you plan to use to make the story interactive) I plan to use Shiny's input widgets like selectInput(), sliderInput(), and textInput() to let users interactively filter or subset data based on their preferences. For example, users can select different income groups or time periods in my shiny app.

Q3: What concepts incorporated in your project were taught in the course and which ones were self-learnt?

Topics	Week
Data Manipulation	3
Tidying Data	4
Functions	5
Data visualisation	8
Shiny apps	9

I faced a lot of chalenges in conceptualising my data and what I wanted to use it to answer my questions. In the previous weeks, I had a rough idea of my data and I thought that the data sets I had were sufficient, however only now when I am starting to work on my visualisation I realise that I needed some slightly different data, or that I needed to use different forms of visualisation. I also face challenges in creating my shiny apps, as I am not fully familiar with the codes and take some time to think about it. However, i am confident that with consistent effort i can achieve the results that I want.