

## Final Writeup [Pun Ling]

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### I. Introduction

I wanted to choose something I really liked for this project. Hence, I came up with Strawberries! Plus, it is currently Strawberry Season.

Despite all the strawberries in the grocery stores, you hardly find any grown locally. Most are labelled with their country of origin being the USA, Korea, or Japan. Moreover, the prices of strawberries tend to fluctuate a lot.

In this project, I wanted to explore the reasons behind this and understand the impact of global and market forces on strawberry production. For example, this included tariffs and more recently, Covid-19, which slowed down strawberry production and in turn impacted strawberries in Singapore.

I also investigate which countries' market forces would leave the biggest impact on Singapore and the world in terms of strawberries. This information can all be found in the charts, including the monetary value and quantity of strawberry imports. Singapore is heavily dependent on strawberry imports.

However, despite this heavy reliance on imports, Singapore has started to grow its own strawberries on vertical farms. This initiative is part of the city-state's efforts to create sustainable agriculture and food security. Although the quantity is still small, and will never be able to let Singapore fully stop importing strawberries from overseas, it is a positive step towards reducing the country's dependence on imports.

### II. Highlights and Concepts

My favourite thing about my project is the overall feel of the website. It feels fun, just like strawberries! I took the concepts I learnt about CSS in NM2207, especially on colour values to create a cohesive colour scheme. Additionally, I self-studied various CSS concepts from <https://www.w3schools.com/> and completed all the CSS practices. This gave me even more knowledge on how I could manipulate the style of the website. For example, I added a CSS transition

effect that I learnt from the website on one of the images and paired it together with javascript to create a fade-in animation when it is scrolled onto. Apart from that, I also liked the rounded borders(25px) which made the whole website even more cohesive! Lastly, I drew some strawberry graphics to make the whole website true to the theme!

I adore the interactive buttons, the ones that reveal hidden information as well as the header with a drop-down menu. When you hover over the button, it turns a different colour! I learnt that while doing the CSS practices. I learnt how to unhide information using the 'if Function' in Javascript from NM2207. I also used <https://www.w3schools.com/> to help refresh my memory. Originally I struggled because my button did not work as I liked and users had to click twice before the hidden information showed up which distracted the experience. I asked my brother to test out the website and he suggested that rather than it being a random mistake, there might be a function that is causing it to act this way. Hence I used Chat.GPT from <https://openai.com/> which was able to help identify what went wrong!

I think the biggest highlight would have to be the charts. I struggled with this the most and at first, I could not even get them to show up. I wrote about these challenges I faced in my previous few diary entries. Thankfully, we have done many practices in NM2207 about charts so I was able to refer back to see what went wrong and made the necessary changes! I heavily relied on past classwork and codealongs to complete the charts. I also used Chat.gpt from <https://openai.com/> to help me in identifying my mistakes and helping me figure out how to correct them. It was very confusing at first and I spent many hours just making each chart. However, I finally managed to get the charts to fit my vision in the end!

### **III. Reflection**

I think this module has been one of the most difficult but rewarding modules I have taken since coming to NUS, especially without a coding background.

Initially, during the start of the semester, I was really interested in learning to code so in my free time I took and completed the various exercises on HTML, CSS, and Javascript from <https://www.w3schools.com/>. I would excitedly update my NM2207 homepage with the new things I learnt, including my own diary entries for fun!

I really enjoyed learning CSS as I love designing, but the biggest challenge came with Javascript. I was finding it hard to comprehend the different

functions and I started slipping and being unable to catch up with the timeline. I ended up pushing things till the very end as I tried avoiding it. However, I learnt the hard way it only gets more overwhelming the more you push it off. I struggled with the final project for weeks before sitting down and breaking the things I needed to do into small actionable steps. Coding is a big thing but I realise you can break it down into functions and lines. I would always be so happy when the code finally worked! Also, I learnt sometimes you do not have to make everything so difficult and mentally exhausting for yourself and make use of online tools like Chat.GPT.

Overall, this project has really taught me many things, both hard and soft skills.

## IV. Citations

### Images used:

No author. (2019, January 29). Image of strawberries [Photograph]. GLTJP.  
[https://static.gltjp.com/glt/prd/data/article/12000/11995/20190129\\_093234\\_70b72e27\\_w1920.jpg](https://static.gltjp.com/glt/prd/data/article/12000/11995/20190129_093234_70b72e27_w1920.jpg)

Villagran, J., & Esposito, A. (2015, May 17). Mexico's migrant farmers: An industry struggling for labor. Reuters.  
<https://www.reuters.com/article/us-mexico-farms-widerimage-idUSKBN0000X720150517>

Let's Go Mum. (n.d.). Australia's big things: The big strawberry [Blog post].  
<https://letsgomum.com.au/australias-big-things-strawberry/>

No author. (2022, October 26). Image of vertical farm by Singrow [Photograph]. Vertical Farm Daily.  
[https://www.verticalfarmdaily.com/remote/https/agfstorage.blob.core.windows.net/misc/VFD\\_com/2022/10/26/singrow.png?preset=ContentFullSmall](https://www.verticalfarmdaily.com/remote/https/agfstorage.blob.core.windows.net/misc/VFD_com/2022/10/26/singrow.png?preset=ContentFullSmall)

Chew, H. (2020, June 2). S'pore strawberries to be on sale for S\$12 per punnet from June 22, grown locally in Singrow's indoor farm. Mothership.sg.  
<https://mothership.sg/2020/06/sg-strawberries-singrow/>

Ong, T. (2022, January 20). Singrow to start selling Singapore-grown strawberries in March, plans \$15m Series A this year. CompassList.  
<https://www.compasslist.com/insights/singrow-to-start-selling-singapore-grown-strawberries-in-march-plans-15m-series-a-this-year>

**Data Sources used:**

The World Bank. (2022). Comtrade - International Trade Statistics. Retrieved April 15, 2023, from <https://wits.worldbank.org/trade/comtrade/en/country/All/year/2022/tradeflow/Exports/partner/WLD/product/081010#>

The World Bank. (2021). Comtrade - International Trade Statistics. Retrieved April 15, 2023, from <https://wits.worldbank.org/trade/comtrade/en/country/SGP/year/2021/tradeflow/Imports/partner/ALL/product/081010>

**Coding Resources:**

W3schools.com. Learn to code for free. Retrieved April 15, 2023, from <https://www.w3schools.com/>

Chat.GPT. (2023). Retrieved April 15, 2023, from <https://openai.com/>

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