

NM2207 Final Project Write-Up

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My data story is about the perceptions of LGBTQ+ community in Singapore, as well as the recent developments in terms of the long-awaited repeal of Section 377A. I believe strongly in equality and have always empathised with the challenges and prejudices that the LGBTQ+ community face, hence I wanted to explore further whether Singaporeans' perceptions regarding the LGBTQ+ community have changed over the years, and after the repeal of Section 377A. While there is growing acceptance of the LGBTQ+ community in Singapore as a whole, there is a rather stark difference when different age groups are compared. This was a nuance I wanted to explore more into, hence I split the data gathered by IPSOS into Gen Zs and Baby Boomers. Through my research, I concluded that while the repeal is a step in the right direction, more can be done to further improve the integration and acceptance of the LGBTQ+ community into our society. For Week 13, I added a new line chart to illustrate how Singapore's population make-up has changed over the years, and made minor edits to the aesthetics of my charts.

I enjoy Rice Media's articles and have gained much inspiration from their works, hence I incorporated similar elements such as the choice of font and their style of narrative. I wanted the data story to be conversational while still being informative, so I wrote my story as if I were giving a speech, posing questions and answering them. I also like pixel art, so I utilised pixel art graphics sourced from Google for my icons and buttons to create a more cohesive outlook.

As the data was sourced from multiple sources and rescaled to 100%, rather than using a CSV or Excel file, I had to manually update the charts by accessing the individual data points via objects and arrays, which was quite tedious and made my code quite convoluted. In hindsight, I

could have combined all the data points into a CSV file to make it easier to access it and update my data accordingly without manually changing them one by one.

I wanted my data story to be engaging, so I tried to incorporate several elements which the user could interact with, such as mousing over or out the flag to make it “wave”, and buttons to click to change the year of the data shown. For these, I used concepts from Week 5, such as `getElementById`, `addEventListener`, and `onmouseover/onmouseout`. I also used `alert()` learnt in Week 3, and combined it with `setTimeout()` to delay the window pop-up which provides a bit more insight to the data presented after the specific buttons are clicked and the charts are updated (*Window setTimeout() Method*, n.d.).

I also incorporated a simple interactive activity where users could click on the pride flag to complete it, where I utilised my knowledge of `Math()` and related Math objects such as `Math.random()`. I referenced the code from Week 5’s codealong, where we coded a button which changed the colour of a div every time it was clicked, and modified the values of it such that only varying shades of red were generated by only varying the R values while setting the G and B values to be 0.

I enjoy simple and pleasing animations, hence I found CSS codes to create a typewriter effect for my conclusion heading (*How to Create a Typing Effect*, n.d.). I also included simple animations for my contact form’s submit button by making an arrow appear on hover (*CSS Buttons*, 2023). I referred to online resources such as W3Schools and Stack Overflow to get inspiration and implement more complex ideas that were not taught in class, and also watched YouTube tutorials for a codealong of a similar idea I wanted to implement, such as the “back to top” button, and modified them accordingly to fit to my webpage (*How To Create a Scroll Back To Top Button*, n.d.).

I also wanted to find out more about the views of users themselves, hence I incorporated a live polling segment where users could vote for whether they themselves supported or opposed Section 377A. Personally, this was the most challenging part of my whole coding process. I struggled to understand how `fetch.API` worked initially, as the syntax was much more complicated and technical as compared to what we have learnt previously. I also had troubles linking the server data to my chart, as well as updating the pie chart every time the button was clicked. It was really frustrating because while the numbers appeared correctly in the console, the changes just did not reflect on my chart itself. To solve my issues, I consulted with the TAs multiple times and realised I had to first fetch the server data to input in my cart first before anything can proceed on, and also asked ChatGPT to explain the complex codes for me (OpenAI, 2023).

After testing out my website with a few friends, I realised my voting segment was a little confusing. As I have been talking about the repeal of Section 377A quite consistently throughout my data story, users might have misinterpreted my question as whether they support or oppose the *repeal* of Section 377A, rather than their stand on the law itself. To reduce misreading of the question, I changed the initial colour palette from green for support and red for oppose to a more neutral palette of yellow and blue respectively, to hopefully dissociate the connotations of positive and negative from the words.

Given more time, I would like to explore how I can incorporate more complex animations to my website, such as the texts or content appearing and disappearing as I scroll through the webpage. I would also make my custom cursor more interactive with the elements in my webpage, such as the cursor expanding in size as it hovers on buttons or changing colours as it hovers on texts using CSS `@keyframes` and JavaScript codes.

NM2207 has been a ride. Going from having zero coding knowledge to picking up basic coding skills within a semester while overloading has not been easy, but I am glad that I went through with it and even managed to create a whole web page on a topic I am passionate about. Not everything can be taught in class, so I learnt how to be more resourceful and self-directed in my learning. Lastly, coding is something you really cannot do alone, and I am really grateful for all the support from Prof Kokil and TAs Jeremiah and Wien, as well as the companionship and help from my friends throughout the journey.

1199 words

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