

## Reflective Journal

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Time flies. A semester full of painful but cheerful coding and learning has come to an end. Throughout the twelve weeks of studying COMM 5961, I started to have a broader view on data-driven design. In this reflective journal, I will review what I have learnt and also share my opinions from the perspectives of data and thinking pattern.

Firstly, I would like to talk about data. As the course title *Data Driven Product and Services Design* implies, data plays a vital role in the 21th century. The development of big data and IOT has integrated data with almost everything. As an English major student in college, I solely have an ambiguous impression that data is a tool to calculate and evaluate events and services back then. However, the concept of data in my mind has become gradually systematical and thorough in the past three months.

I have learnt to regard data in multiple perspectives. The concept of data was comprehended through the conceptual framework such as MVC framework. Different formats like csv and json presented the data and facilitated me to further employ. Useful databases like Airtable has been utilized frequently to collect, arrange and present data in different views.

Understanding of data has also been deepened in the whole process of fulfilling the assignments and designing the final project. ParseHub and OpenRefine were leveraged to scrap and refine data in an organized manner. It is worth mentioning that three types of data visualization including the table, charts and map were learnt and also been applied to my final website. After presenting the data, I also learnt how to collect and analyze the data through not only content management concepts like SEO and SEM but also tools like Google Analytics, Google Optimize and Tag Manager to further upgrade the performance on the final website.

Furthermore, in the procedure of dealing with data, it is of great significance to emphasize two different thinking patterns: design thinking and computational thinking. From this perspective, only combine these two thinking patterns can data become valuable and meaningful. This has been fully demonstrated in the final project. I experienced the whole process of empathizing, defining problems, idea forming, prototyping and testing. The user experience journey mapping has rendered me many helpful inspirations to further solve the pain points. I learnt that the five planes of user experience elements should be carefully taken into account when a website is being designed.

Besides design thinking, computational thinking gives me logical approach to decompose the problems and find patterns. In my final project, I always want to add a share section to encourage users to share their stories with musicals. However, the bootstrap template cannot fully accomplish this goal as the front-end server and API is needed. After searching for the relevant articles and reviewing all the data tables on my website, I reminded the functions of Airtable. Could I utilize Airtable to present a special view? The answer is positive. To solve this problem, I tried to simplify the problem as data visualization and found a unified solution, in which the computation thinking is employed.

The concept of data and thinking patterns learnt in this course have been really beneficial, not only for every assignment and the final project in this course, but also future internship and workplace when I have to face multiple real cases and obstacles. I believe the tools and ways of thinking will serve as note to help me compose a life song. I am very looking forward to the learning journey in the next semester and ready to absorb more knowledge and patterns to solve real cases in the business world.