Week 1 Report

In this week, I start to think about the topic I want to do in my project. Because sometimes it is hard for me to find the book that I really want to read when I try to find it in the *Goodreads* (https://www.goodreads.com/) or *Amazon.com: Kindle Edition: Books* (https://www.amazon.com/Books-Kindle-

<u>Edition/s?ie=UTF8&page=1&rh=n%3A283155%2Cp_n_feature_browse-bin%3A618073011</u>). Therefore, I decided to focus on the books ranking.

I read materials listed below:

- 1. https://davidgaughran.com/2018/07/10/the-amazon-algorithm-myth/
- 2. https://www.quora.com/What-are-some-good-books-on-ranking-information-retrieval
- 3. http://lindsayburoker.com/amazon-kindle-sales/recent-amazon-algorithm-changes/
- 4. http://hauserpub.com/can-you-really-beat-amazons-algorithm/

After read these, I have a brief understanding how the books website to order or rank the books in their websites. There is a really complicated algorithm behind the ranking system. When I try to find out how they work and give people different choice of books from their results, I found that it is not easy to just get the simplest answer or choice. Because it is confused when you find, for example the book has highest rating no matter how many people to rate it, but there is another book shows later with higher rating.

At the same time, I start to learn Django, the web framework based on Python. I notice that this web framework follows the model-view-template (MVT) architectural pattern and "it consists of an object-relational mapper (ORM) that mediates between data models (defined as Python classes) and a relational database ("Model"), a system for processing HTTP requests with a web templating system ("View"), and a regular-expression-based URL dispatcher ("Controller")." (from Wikipedia) That means I can get and ordering the data comes from the relational database.

Therefore, I continue read:

- 1. https://en.wikipedia.org/wiki/Django_(web_framework)
- 2. https://docs.djangoproject.com/en/2.1/
- 3. https://developer.mozilla.org/en-US/docs/Learn/Server-side/Django/Home_page

And start to think what kind of website I can create to achieve the simple sorting tasks such as order by different attributes that belong to the data.