## SI 506 DYU 9

This week's lecture prep revolved around using Facebook and Twitter APIs, Paging and the Oauth protocol. While doing the Problem Set, I faced a problem while paging, and it was unclear till our GSI explained it to us.

While fetching data, we can access only x posts (Facebook) or x tweets (Twitter). What if we want to access more posts and tweets. In that case we need to make multiple requests. Facebook offers Cursor and Timeline Paging. Timeline Paging is based on using timestamps and fetching data. I used the Cursor Paging technique in my solution.

Whenever data is fetched from Facebook, we get two keys in the paging key of the dictionary. The next key in the paging key, is the URL which points to the next set of data. By making a request to the URL using this, we can obtain the next chunk of data.

By utilizing this principle, I made the request to Facebook to obtain initial 25 posts and stored them in a dictionary. I used a for loop and made 7 more requests so that I could get 200 posts. When my for loop was executed for the first time, I made request using the next parameter of the initial request that I had made (outside the loop). I appended the data for posts to my original dictionary and used the value of next parameter in my next request to Facebook i.e. the second iteration of the for loop. In this way, I could obtain and append 200 posts. However, if the next page is unavailable i.e there are less than 25 posts in the next page, we get an error in the current execution stage.

This concept is similar to the concept of pipelining in processors where an instruction is fetched, while the previously fetched one is decoded and the previously decoded instruction is executed. If the next fetch cycle does not have 25 posts, it will cause an error in the current execution, in the Facebook API paging part.