

Ryan O'Connor

Homework #5: Report

SWE 6613

Fall 2022

Process:

I used Python with Panda and Textblob modules. Panda was for handling the data and Textblob was used for the sentiment analysis. This is my first time using Python for a project, so it took me longer than expected to finish this assignment. I learned a lot about Python and handling data, it was fun.

I started off with reducing the data file by removing all the reviews that contained less than 4 words. My reasoning is that in English, you need at least a subject, verb, and object to make a sentence, plus at least an article or pronoun to make the sentence minimally informative. For example, "this app stinks" is technically a sentence but it doesn't tell us anything besides the review being negative. But "the search is broken", or "the feed loads slowly", are both complete sentences that actually tell us something important; albeit vague, we can still use these data points to help discover requirements.

So after the first reduction, I ended up with 2300 data points. Then I did a second reduction by creating a word bank and removing all the reviews that do not contain 1 of those words. The word bank is: "wish|want|help|please|broke|feature|perform|new|fix|bug|lost|add|comp|better|problem|hope|upgrade|competitors|additional|more|extra". I selected these words because they highlight a need or problem that people could be having.

After the second reduction, I ended up with around 600 data points total. Then I chunked the data by splitting the word bank into thirds. As the data was chunked into each piece, a sentiment analysis was ran each piece. That sentiment analysis' and chunks were stored in their own excel files for easier viewing.

Then I manually reviewed the chunks, the sentiment analysis didn't turn out to be as useful as I expected, but it did provide some interesting data. Reading the reviews myself was very effective but time consuming. Luckily I had reduced the data points to around 600.

Results:

Fix the bugs related to cloud storage of the app data. Users are losing their data way too frequently. If there is no cloud storage at the moment, try to implement that feature.

There needs to be a better grinding system where players can earn more fishbucks with the time they spend on the app.

There may be a bug related to the fish tanks, there have been multiple reports of people losing their fish tank data, I'm not sure if this is related to the cloud storage issues.

People are claiming to lose fish bucks data when updates occur, I think this could be related to the fish tank bug and cloud issues.

Optionally, more customizations could be added to the fish tanks, as people report not having many options for it.