

CSE 135 Phase 3 Report

Arthur de Jesus and Mandeep Sran

Assumptions:

- The assumption that rows would be ordered by top-k with respect to states
- The indices created by primary keys were sufficient when creating precomputed tables
- Precomputed tables were broken up by filtered sales (by state and product), filtered states, products, and then top sales.

Precomputed Tables

- This was completed by doing the aggregation within this new insert instead of at runtime when we ran the query in the main report.
- We then inserted the data from those existing precomputed tables
 - After doing this action, we noticed a significant performance boost as compared to phase 2.

Shortcomings

- After looking through the code, it's quite apparent there's not much complete. We spent a majority of our time learning Javascript, AJAX and JSON. A lot of the time was spent in a different branch off of our Github repository trying to perfect this. Ultimately, we could not complete this section of the phase and were only able to deliver the precomputed tables. Within this submitted form, we've included a folder titled (JSON) with the appropriate JSON files from that branch.
- We worked hard to get the project as near finished as possible, but the following functionality was not implemented
 - Coloring of updated cells with red
 - Coloring of entire column with purple if it was no longer in the top k
 - AJAX + Javascript support for the refresh button
 - Use of TRIGGER to add new purchases to precomputed tables
- This is no doubt upsetting to you as a grader, but is exponentially more upsetting to us. We understand that this isn't acceptable to turn in as a final project, but do want to say that we did not just forget about this project. We continuously and tirelessly worked to figure out how to pull off this phase.
- Our phase 2 performance was abysmal to say the least and since this project relied heavily on phase 2, we struggled. After the queries were released, we got to work with understanding the new technologies required for this project, but it was unfruitful.