Assessment Criteria For Seminar 3, SQL

Data Storage Paradigms, IV1351

The list below are suggestions about things to check, you don't have to cover them all. The assessed person's score will *not* be affected by your comments. *Try to give concrete suggestions. Motivate your comments, give examples,* ***try not to write just "yes" or "no"***. Make sure to discuss and/or ask the teacher about questions regarding your own or the assessed solution(s).

- Are views and materialized views used in all queries that benefit from using them? Can any query be made easier to understand by storing part of it in a view? Can performance be improved by using a materialized view?
- Did you change the database design to simplify these queries? If so, was the database design worsened in any way just to make it easier to write these particular queries?
- Is there any correlated subquery, that is a subquery using values from the outer query? Remember that correlated subqueries are slow since they are evaluated once for each row processed in the outer query.
- Are there unnecessarily long and complicated queries? Are you for example using a UNION clause where it's not required?
- Analyze the query plan for at least one of your queries using the command EXPLAIN (or EXPLAIN ANALYZE), which is available in both Postgres and MySQL. Where in the query does the DBMS spend most time? Is that reasonable? If you have time, also consider if the query can be rewritten to execute faster, but you're not required to do that. The postgres documentation is found at `https://www.postgresql.org/docs/current/using-explain.html` and `https://www.postgresql.org/docs/current/sql-explain.html`. There's also some explanation of EXPLAIN in the document *Tips and Tricks for Project Task 3*.