ASE 2024 - Assignment 1

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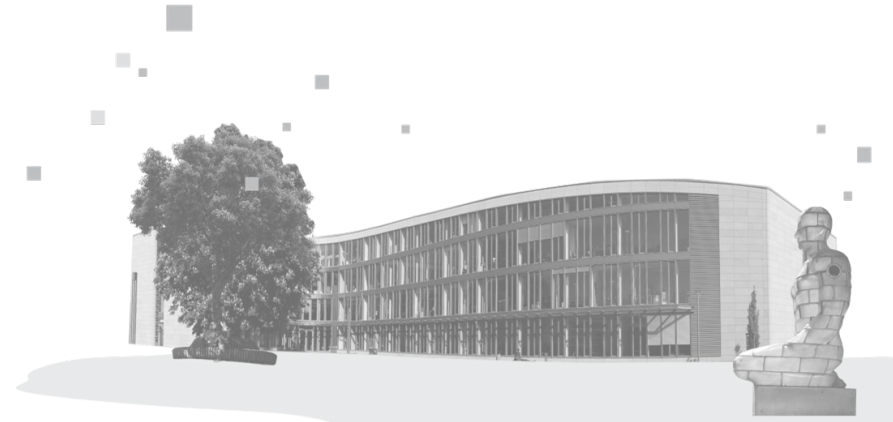
Task 1

- very little experience in query development
- a lot of time spent looking up (basic) SQL syntax, semantics, keywords, rules
  - often encountered syntax errors
  - much trial-and-error implementing intermediate results
- decomposition of complex query description into relevant subqueries difficult
- implementation using GPT much faster in comparison
  - issues with correctness of generated query, but no syntax errors
- two separate GPT prompts/tries
  - prompt including entire schema, produced no correct query, even after several corrections
  - prompt including only three relevant tables from the schema, produced correct result after only one small correction

Task 2

- expanding our own query was easier
  - more effort for understanding the Chat-GPT query before adjusting it
- insights from task 1 made it easier to understand Chat-GPTs implementation & implement the required changes into both queries manually
- both approaches were simple to expand
- getting Chat-GPT to modify both queries was more difficult
  - good results with prompts including the initial query, the initial description and only relevant parts of the schema
  - both approaches led to similar errors (showing all likers, not grouping properly)
- integration into iterative query development process seems reasonable
  - understanding the assignment and breaking it down to relevant chunks is important

Task 3

- getting Chat-GPT to create an actual execution plan is difficult
  - instructions on how to create one with psql instead of creating one
- results lack important information
  - no knowledge about table sizes, indices, data distribution, or optimization decisions
- many single parts of the actual psql execution plan were included
  - but not properly connected
  - incomplete for some CTEs