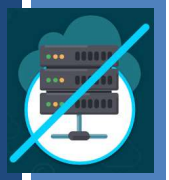
TCSS 562: SOFTWARE ENGINEERING FOR CLOUD COMPUTING

Tutorial #4, Midterm Review



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OBJECTIVES

- Tutorial #3
- Tutorial #4
- Topics for Midterm
- Practice Midterm
- Midterm Wednesday 5/9

FEEDBACK 5/2

- When should we choose serverless computing?
  - When high availability is needed
  - Ability to BURST to support spikes in load
  - Service demand is limited throughout the month: 400,000 GB/sec = 4.63 days
- Poor use cases for serverless computing
  - 24/7 real time stream processing
  - Batch-oriented compute-bound workloads
  - Machine learning over large training datasets

FEEDBACK - 2

- For a database, what are some performance attributes? (Database-as-a-Service)
  - Average query execution time
    - Consider a variety of queries
    - Queries with join(s)
    - Queries over large datasets with filters
  - Data throughput for queries
    - For a queries that produce large result sets, what is the data transfer rate from the server to client
  - Transactions per second
    - How many concurrent queries can the database produce for multiple clients
  - Average transaction time
    - Multi-query transactions that include combination of reads and writes

TUTORIAL #4

- Tutorial #4 Presentation:
- http://faculty.washington.edu/wlloyd/courses/tcss562/TCSS562_s2018_tutorial_4.pdf

MIDTERM REVIEW

- Midterm review guide:
- http://faculty.washington.edu/wlloyd/courses/tcss562/tcss562_s2018_midterm_review.pdf

PRACTICE MIDTERM

- In class, 7 questions

QUESTIONS