

F13 15-619 Project Grading Rubric

The project final score consists of **performance** score and **report** score.

$$\text{Project Score} = \text{Cost} \times (0.6 \times \text{Performance} + 0.4 \times \text{Report})$$

Cost: If you spend more than 2*Overall_Budget, Cost = 0;
If you don't overrun budget, Cost = 1;
If in between, $0 < \text{Cost} < 1$;

Performance Score:

There will be 2 phases in the final live test.

In phase 1, 4 types of query will be tested sequentially.

In phase 2, all types of query will be tested simultaneously.

Phase 1: q1 only test --> q2 only test --> q3 only test --> q4 only test.

Phase 2: q1, q2, q3, q4 mixed test.

T_{q_i} : the throughput of query type i in phase 1

Tb_{q_i} : the throughput baseline of query type i in phase 1

C_{q_i} : the correctness of query type i in phase 1

Tm_{q_i} : the throughput of query type i in mixed queries in phase 2

Tbm_{q_i} : the throughput baseline of query type i in phase 2

Cm_{q_i} : the correctness of query type i in mixed queries in phase 2

$$\begin{aligned} \text{Performance} = & 0.2 \times \frac{T_{q_1}}{Tb_{q_1}} + 0.2 \times C_{q_2} \times \frac{T_{q_2}}{Tb_{q_2}} + 0.2 \times C_{q_3} \times \frac{T_{q_3}}{Tb_{q_3}} + 0.2 \times C_{q_4} \times \frac{T_{q_4}}{Tb_{q_4}} \\ & + 0.2 \times (0.25 \times \frac{Tm_{q_1}}{Tbm_{q_1}} + 0.25 \times C_{q_2} \times \frac{Tm_{q_2}}{Tbm_{q_2}} + 0.25 \times C_{q_3} \times \frac{Tm_{q_3}}{Tbm_{q_3}} + 0.25 \times C_{q_4} \times \frac{Tm_{q_4}}{Tbm_{q_4}}) \end{aligned}$$

NOTE:

- The baseline in your final score calculation will be the median performance of all teams. However, because we don't know the median yet, currently we are setting the baseline to be the same as the requirement in the project writeup.

Report

Please refer to the project writeup and also make sure you answer the following two questions:

1. Why did you choose HBase/MySQL?
2. What explorations did you make to support your decision?