PGT Exam Performance Feedback
2018/2019 Semester 1

COMP62421   Querying Data on the Web

Andre Freitas
Bijan Parsia

Comments Please see the attached report.
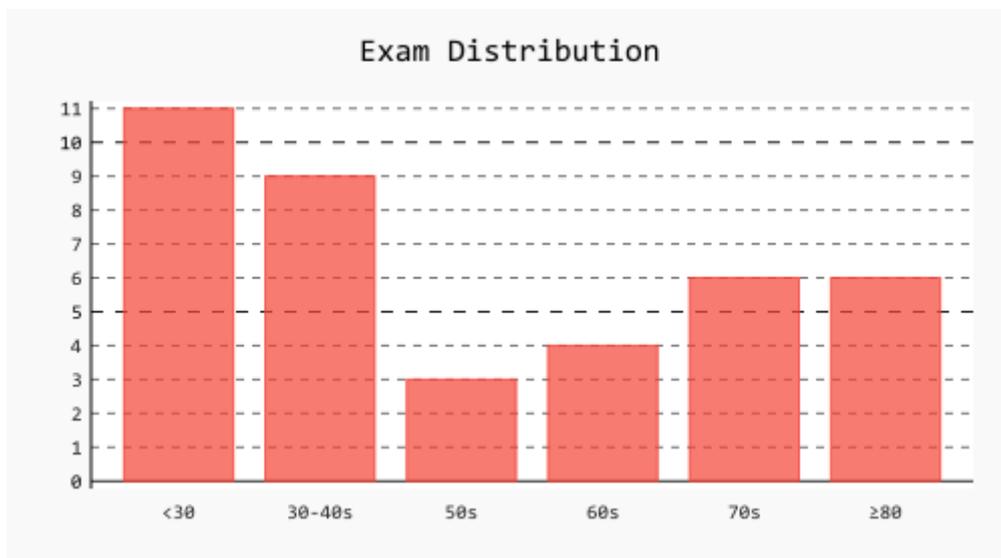
COMP62421 Exam Feedback

Andre Freitas & Bijan Parsia

Overall Exam Performance

Here are the basic stats for the exam:

Mean : 55.12
Median : 52.92
Stdev : 32.43
Min : 15.83
Max : 183.33

This graph shows the distribution of marks in a more granular form.

The exam aimed to verify the ability of the student to recall, apply and explain the core principles behind different types of databases, under a more contemporary perspective. The correction was not strict and it was tolerant towards variations or minor syntactic mistakes.

Question Breakdown

Question Average Percents

Manually Marked Question Average Scores
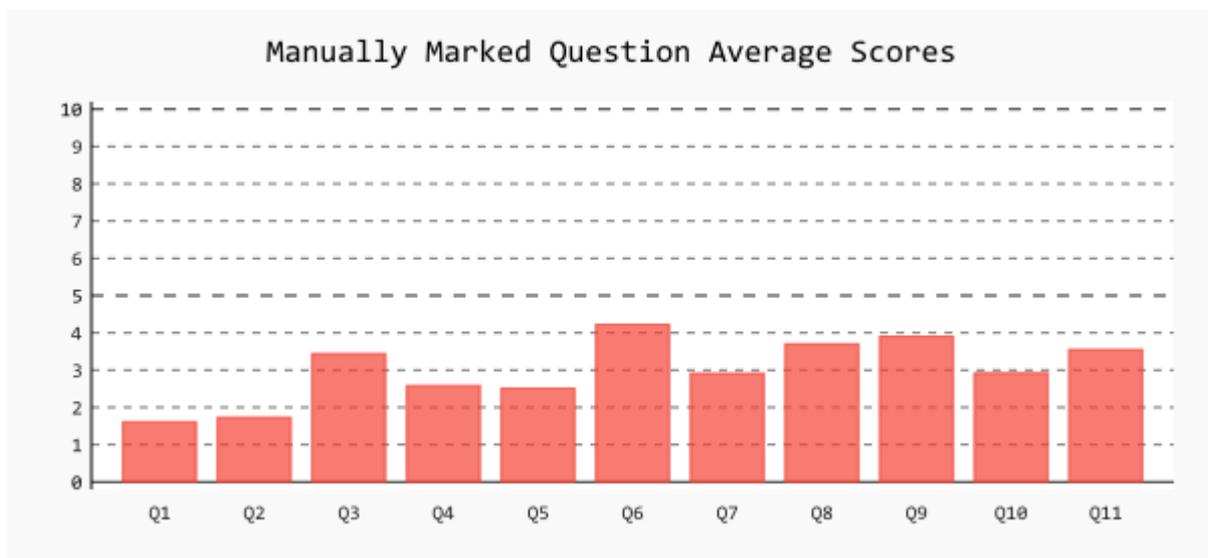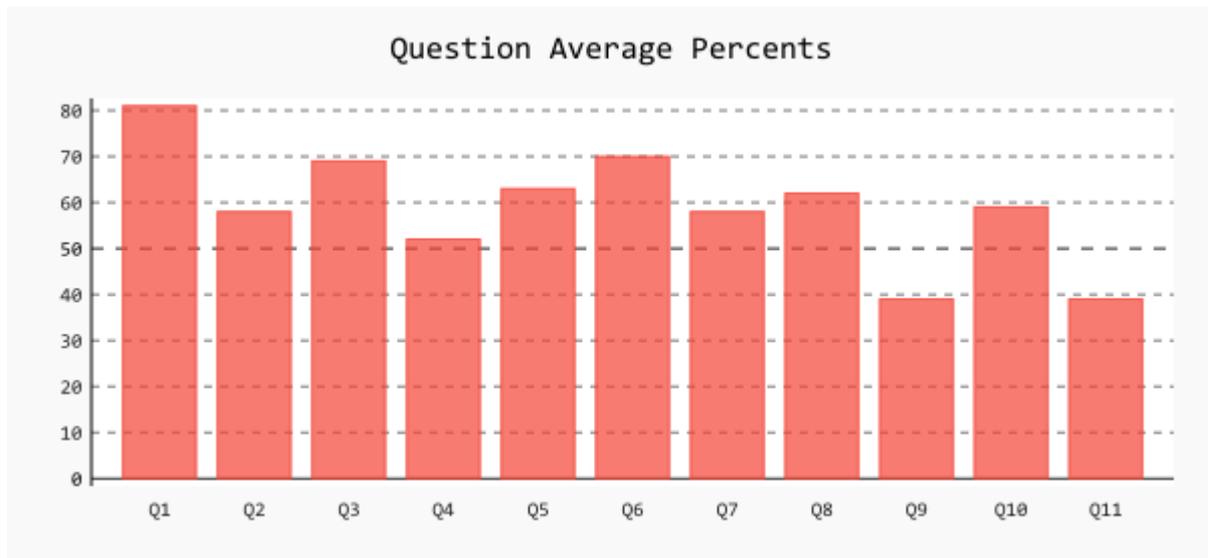
General Question Feedback

* **Q1** mean = 80% (1.61 out of 2; min = 0.0; max=2.0):

The question emphasized the recall of the main components involved in query processing. There were no identifiable recurring error patterns.

* **Q2** mean = 58% (1.73 out of 3; min = 0.0; max=3.0):

The question emphasized recalling and explaining the main optimisation strategies involved in query processing. These strategies were at the core of many of our discussions and were emphasised during all lectures. Most students got at least two of the items right. There were no identifiable recurring error patterns.

* **Q3** mean = 69% (3.44 out of 5; min = 0.0; max=5.0):

The question focussed on the use of relational algebra operators and their relationship with cardinality. Most students got the answer correctly. The most common error was setting the minimum cardinality of 0 to the projection over R (|R| should be minimum and maximum cardinality).

* **Q4** mean = 52% (2.58 out of 5; min = 0.0; max=5.0):

The question targeted the basic understanding of the structure of a SPARQL query and the RDF data model. The correction was tolerant towards simpler syntactic errors. Most students got the basic triple pattern syntax right as well as the query type and most errors concentrated on the aggregation operator position in the query and missing the FILTER() keyword.

* **Q5** mean = 63% (2.51 out of 4; min = 0.0; max=4.0):

The question aimed to articulate the relationship between relational operations and their map-reduce correspondence. Most students were able to articulate properly this answer. There were no recurring error patterns.

* **Q6** mean = 70% (4.22 out of 6; min = 0.0; max=64.0):

The question provided a less constrained space for students to describe how they would address a recurring algorithmic problem in a map reduce setting. The correction was very tolerant towards variations on this description.

* **Q7** mean = 58% (2.91 out of 5; min = 0.0; max=5.0):

This was a recall question around the fundamental properties that distinguish NOSQL from SQL. While some students were able to remember some of the concepts, in many cases there was insufficient rigor within the description or the exemplification was not correct.

* **Q8** mean = 62% (3.7 out of 6; min = 0.0; max=6.0):

In this question most of the students were able to recall the ACID and BASE acronyms. In few cases there was insufficient rigor within the description or the exemplification was not correct.

* **Q9** mean = 39% (3.9 out of 10; min = 0.0; max=10.0):

This question focused on articulating relational algebra expressions into a map-reduce setting. The correction did not penalise students for syntactic errors into their code.

* **Q10** mean = 58% (2.92 out of 5; min = 0.0; max=5.0):

The question did not feature recurring error.

* **Q11** mean = 39% (3.55 out of 9; min = 0.0; max=9.0):

This question allowed students to articulate design decisions using the different types of database components which we covered during the course. The core expectation was that the students would map the requirements depending on the types of data sources and target tasks. This was the most challenging question for this group despite the fact that the correction was very tolerant towards variations in the design decisions (as long as they were justifiable) and rationalised in the answer).