Concordia University

Dept. of Computer Science and Software Engineering

COMP 6521: Advanced Database Technology and Applications

Winter 2019

Lab Assignment 2 – Grading Guidelines

Marking Scheme LA2

Part I: Code/Demo:		75%
1. Index Construction		
	Design & Implementation	10
	Time to build	7
	Space to store	8
2. Queries Implementation and Performance		
Q1	Correctness	15
	Performance (time)	10
Q2	Correctness	15
	Performance (time)	5
3. Demo Quality & Handling Q/A		5
Part II: Report		Total:25%
Implementation details and choices/options		10
Report organization and presentation		10
Discussion and Analysis of the Results		5

Guide to Demo:

You will be provided a NEW dataset of Points in the 3D space at the demo time, during which you will be asked to build the index on the spot. The index will then be used to answer queries Q1 and Q2 against the NEW dataset.

Guide to Report:

Your project report is due on Monday April 8th. The report should be at most 10 pages in which you should describe the problem, index structure/design, and its features such as type (hash/tree, mixed, etc.), index size in MB, the construction time in millisecons. Report any additional tables and data structures you might have used. It is expected that during the demo, you display the index size and construction time for the NEW dataset provided during the demo.

It is also expected to provide technical details of your code, query processing algorithms (e.g., pseudo codes), any special design idea or implementation that contributed to performance improvement. Last but not least, you are expected to include analyses of the results together with a report of the lessons you learned in this project in terms of what/how to do and what/how not to do. Do not forget the Contribution section, which indicates the role of each team members in the project.

Important: Before your demo time, you should upload to Moodle your implementation and related

artifacts in a zip file under the item LA2-Code already created in Moodle. This is the code which you will download and run for evaluating your project.