Final Evaluation

Due date: June 11 (Friday), midnight

Overview and Logistics

Your final assignment for the quarter, which nominally replaces the final examination is a **written essay** on the topic of the future of data management. The details of the assignment are specified below.

Deliverables. You will deliver a hardcopy of your essay to the instructor *on or before the announced deadline.* Additionally, you will submit the electronic version of your essay in PDF format using `handin` as follows:

```
handin dekhtyar final-365 <File>
```

Value. This assignment is worth 5% of your final grade.

Grading. All submissions that are handed in on or before Wednesday, June 9 will be graded by the end of the day Thursday, June 10, which means that your grade will be available (at least from the instructor) early morning on Friday, June 11, or before. Submissions made on June 10-11 will be graded over the weekend and the results will become available on Monday, June 14.

Assignment

It is simple: write an essay on what management of data would look like 10-12 years from now.

It is complicated: you've got to do it right.

The Invariants. While the essay is a perfect way for you to express your opinions, you need to make sure that you are expressing them on the right topics. Some observations that can be made today are not really much of a subject for discussion, so, devoting a whole essay to stating them is *not what this assignment is about.* In particular, allow me to make some observations for you to give you a starting point.

- **There is a lot of data around, and there will be even more in the future.** Humans come up with the types of data that can be stored and managed at about the pace of the hardware (storage capacities mostly) necessary to story such data, and the bandwidth necessary to transport it.
- **Databases will persist.** As defined during the first lecture in the course, databases are "organized collections of data". This definition alone is sufficient to assure us on this point.
- **More and more people get exposed to databases and data management.** One word: Facebook. In broad terms, that's 500 000 000 database users (as well as data points).
- **Theory meets practice every day.** Academic research in the field of databases finds its way into commercial database management systems rather fast and with frightening regularity.

The Known Unkowns. What will the DBMS of "tomorrow" look like? Who will be using them and how? What (new) types of data will be brought into the realm of databases? Who will win the "data wars" and why? Will you be writing SQL queries 10 years from now? Why or why not?

These and other related questions are what you are asked to write about.

Dos

Do:

- Figure out what question(s) you are asking yourselves, and what answer you want to give.
- Provide evidence for your factual statements, and explain your motivations. Cite any sources you have used in your essay and provide support for your positions.
- Search for, and read relevant information. Academic papers, technical and popular articles, opinion pieces count. Make certain all relevant information is appropriately cited in your essay.
- For each citation include the author, title of the article, publiation information and/or url.

- Take time to think about the assignment, compile research on your thoughts, organize them, and write them up.
- Make sure your essay has substance. The easiest way for me to ensure of that is to establish a minimum page limit. I expect everyone to write at least 4-5 "standard" (single space, font size 10-12) pages of text, excluding bibliography.

Don'ts

Don't:

- Don't plagiarize. The essay must be written in your words. Lifting of sentences or paragraphs from on-line sources will be considered academic cheating. If you want to quote a source, use appropriate quotation style, name the author(s) of the quote and cite the source.
- Don't worry too much about page limit.Concentrate on staking out a position and documenting your thoughts on it and evidence pro and against it (if necessary). If you do it right, you will note have a problem with being under the page limit.
- Don't go on tangents. This is a database class and the assignment is concerned with the role of databases and data management in the future. It is not a place for essays on future of computing in general, or a specific field within computing (unless the field is data management).

Good Luck!