

Fall 2018 - Problem Set 2 Description

ECE 464: Databases

Papers are due on Nov 13th at 0000. Email to eugene.sokolov.cooper@gmail.com

Students will write a project proposal researching various database designs and DBMSs (or creating your own new DBMS), surveying them for a new project that would revamp the WWW - similar to the problems discussed by Florescu et. al. The goal should be to convince me that a particular DBMS is best at solving the issues discussed in class and presented by Florescu et. al. with regards to internet data. Students can focus on a particular area or topic of interest, ie. taking the standpoint from Amazon or Google, the DoD, etc.

How would you describe, discuss, design, evaluate, and/or build:

- The problem and project at hand
- Pros and cons of different databases designs and DBMSs you propose using (whether SQL or NoSQL)
- Physical database design
- Manage and store the data (discuss the size of the data)
- Query/index evaluation, types of queries/indices you would use
- Scalability
- Robustness and recovery mechanisms

Comments regarding the write up:

- Individual work
- No page minimum, enough to get your point across. Pretend I am funding your project for a grant/startup - too little and I don't understand your premise, too much and I lose interest
- Citing papers, conference publications, talks, etc. is recommended and encouraged