Thesis on External Range Reporting

Agenda for February 29, 2016

Since last meeting

1. Report
   (a) Added section to *Theory*: child structure
   (b) Added section to *Implementation*: child structure
   (c) Added section to *Preliminaries*: B-tree
   (d) Added figures of query and sweep line
2. Coding
   (a) Child-structure: Finished with extensive testing
   (b) Main data structure: Implement boiler plate.
   (c) Main data structure: Implement and unit test of *overflowing insertion buffers*
   (d) Main data structure: Implement and unit test of *overflowing point buffers*
   (e) Main data structure: Implement and unit test of *node degree overflow*
   (f) Main data structure: Implement and unit test of *underflowing point buffers*
   (g) Main data structure: Implement and integration test of *insertion*

Plan until next meeting

1. Report
   (a) Finish preliminary section on B-tree
2. Coding
   (a) Main data structure: Implement and unit test of *overflowing delete buffer*
   (b) Main data structure: Implement and integration test of *deletion*
   (c) Main data structure: Implement and integration test of *boostrapping structure*
   (d) Main data structure: Implement and integration test of *construction*.

Questions and remarks

1. Is there are a general LaTeX template for theses?
   (a) Found Anders Møllers template. Are all items needed? Resumé in danish?
2. Gerth's structure is a B-tree on the x values of points. We can have $\mathcal{O}(B)$ points in a node but only have a fanout of $\mathcal{O}(B^\epsilon)$. How?
3. Bottom up and top down filling of underflowing point buffers. This is vague in the paper.

Bug of the week

Anders' LaTeX template spells Acknowledgements incorrect in table of contents. Almost all theses using his template has this misspelled.