Student teams from degree granting institutions are invited to compete in a programming contest to develop an indexing system for main memory data. The winning team will be awarded a prize of $5,000. Submissions will be judged based on their overall performance on a supplied workload. The top three submissions will be invited to compete in a "bakeoff" to be held at SIGMOD; up to two students from each team will receive travel grants to attend the conference.

**Task overview**

The index must be capable of supporting exact match queries and range queries, as well as updates, inserts, and deletes. The system must also support serializable execution of user-specified transactions. The choice of data structures (e.g., B-tree, AVL-tree, etc.) as well as the mechanism for enforcing serializability (locking, OCC, one-at-a-time) is up to you. The system does not need to support crash recovery.

Contestants must supply the source code for their entries, and agree to license their code under the BSD or MIT open source license should their system win the contest.

Submissions may be written in any language, but and x86 shared-library and source code that conforms to a supplied build environment will be required.

**Important Dates**

December 1, 2008: Detailed specification of the system will be available on the website given above.

January 15, 2009: The workload will be made available.

March 15, 2009: Submissions due.

April 15, 2009: Finalists notified.

**Organizers**

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**Sponsorship**

The contest is supported by a grant from the NSF. Prizes will be donated by Microsoft and Vertica Systems.