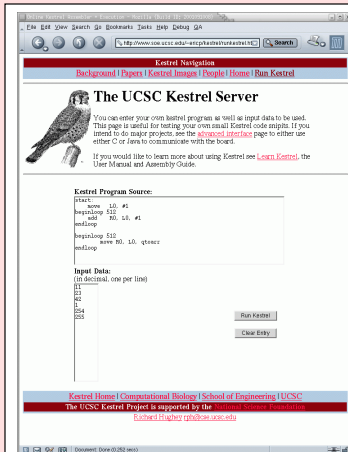


Using Kestrel

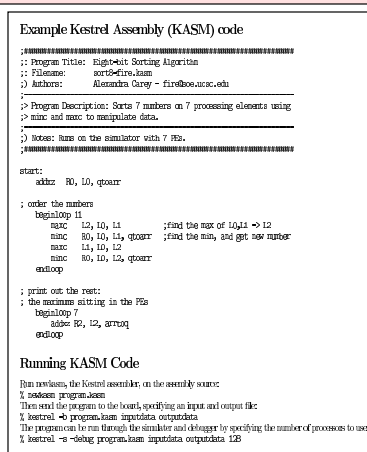
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Abstract

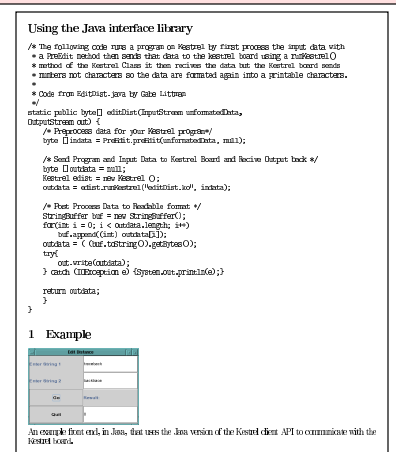
Kestrel is a linear array of microprocessors, each governed by the board's controller. Programming for the Kestrel board involves writing assembly code and then loading the program, along with the input data, to a kestrel board, possibly on a remote machine, for execution.



Kestrel interactive web server



Example code and running it



Using the Java interface library

Programming Kestrel

- Each program reads data from an input queue, processes it, and sends it to the output queue.
- Programming for Kestrel is in KASM, the Kestrel assembly language.
- C and Java programs interface with Kestrel to load assembly files and pre- and post-process data, sending it to and from the board.



Problems and Future Work

- Programming in assembly can be cumbersome, but work on a compiler is underway. This will allow programming with a C-like syntax.
- Future plans also include making easy public access to the Kestrel boards for outside projects.

