Dr. Beam 2.0.1

What is Dr. Beam
Dr. Beam is a direct manipulation environment in which analyzing a beam is as simple as applying loads and supports and watching what happens. Just about anything you might want to do to a beam in terms of loading and supporting can be modeled easily using Dr. Beam. Point loads, distributed loads, specified displacements and concentrated moments are all provided, as are simple, fixed and spring supports, and internal hinges. Quantitative information can be viewed directly in a number of ways using diagrams, labels, recorders, and envelopes.

Dr. Beam differs from many other beam analysis programs in that it was designed primarily for simulating and visualizing behavior as opposed to simply performing analyses. Dr. Beam is quick to learn (5 - 15 minutes), easy to use, and the direct manipulation environment adds an interactive feel to beam analysis that you won't want to give up.

Hardware Requirements
FPU
Dr. Beam no longer requires an FPU. Hooray!

RAM
Dr. Beam runs nicely in 1 Mb of RAM using 256 colors. If your screen is using more colors than this, Dr. Beam will inform you of how much memory is required to run in your screens configuration, and then quit.   Please note that thousands and millions of colors are of no benefit to Dr. Beam. This only demands more space for the off-screen buffers. To solve problems of this nature, either increase Dr. Beam's memory partition from the Finder via the Information dialog, or decrease the depth of the monitor from the Monitors control panel.

Help
Dr. Beam comes with an on-line help reference in the Apple menu. A more comprehensive reference and a someday a tutorial are available over the internet at the following address:
 http://ecsel.engr.washington.edu/DrBeamSupport/main.html
These materials include Quicktime movies which can be very helpful in demonstrating some of the more involved operations in Dr. Beam.

Wait, There's More…
Dr. Beam is only one component in a suite of computer based tools developed to teach Mechanics of Materials to undergraduate engineers. Other tools include a complete set of computer based lectures, a moment and shear quizzer (Dr. Quack), a three-dimensional stress visualizer (Dr. Stress), and a material testing machine simulator (Dr. Baldwin). A complete description of these materials, as well as the materials themselves, may be accessed at:
 http://ecsel.engr.washington.edu/main.html

Credits
Dr. Beam was written by Stephen Cooper and Greg Miller at the University of Washington. Financial support was provided by the NSF sponsored ECSEL project. If you have any comments or questions, mail the authors at:
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