## 962-C1-584 **Robert J Decker\*** (rdecker@hartford.edu), Dr. Robert Decker, Math Dept, University of Hartford, 200 Bloomfield Ave, West Hartford, CT 06117. *Designing Interactive Mathematics* Software for Your Web Page.

Many mathematics educators have seen little mathematics software programs running on web pages, usually designed to demonstrate a particular concept (such as fractal generating programs). I would like to show that programs such as these can actually be designed by mathematics educators with moderate programming background. Once written, such programs can be placed on your own web page and accessed by students from anywhere in the world at no cost and without having to deal with computer administrators. The presenter will demonstrate one simple and one more involved browser embedded program written in the freely available language TCL/TK, designed to graph functions with parameters. The first program is a bare-bones, short program, which is easy enough to understand that anyone interested can take it and modify it to suit their own purposes. I will use this program to demonstrate how the phenomena of "beats" emerges when two trig functions are added and one slowly varies the frequency of one of the functions in a neighborhood of the frequency of the other. The second program is one the presenter has developed which can graph any number of user-defined functions with any number of parameters, where the user chooses which parameter to vary. (Received September 15, 2000)