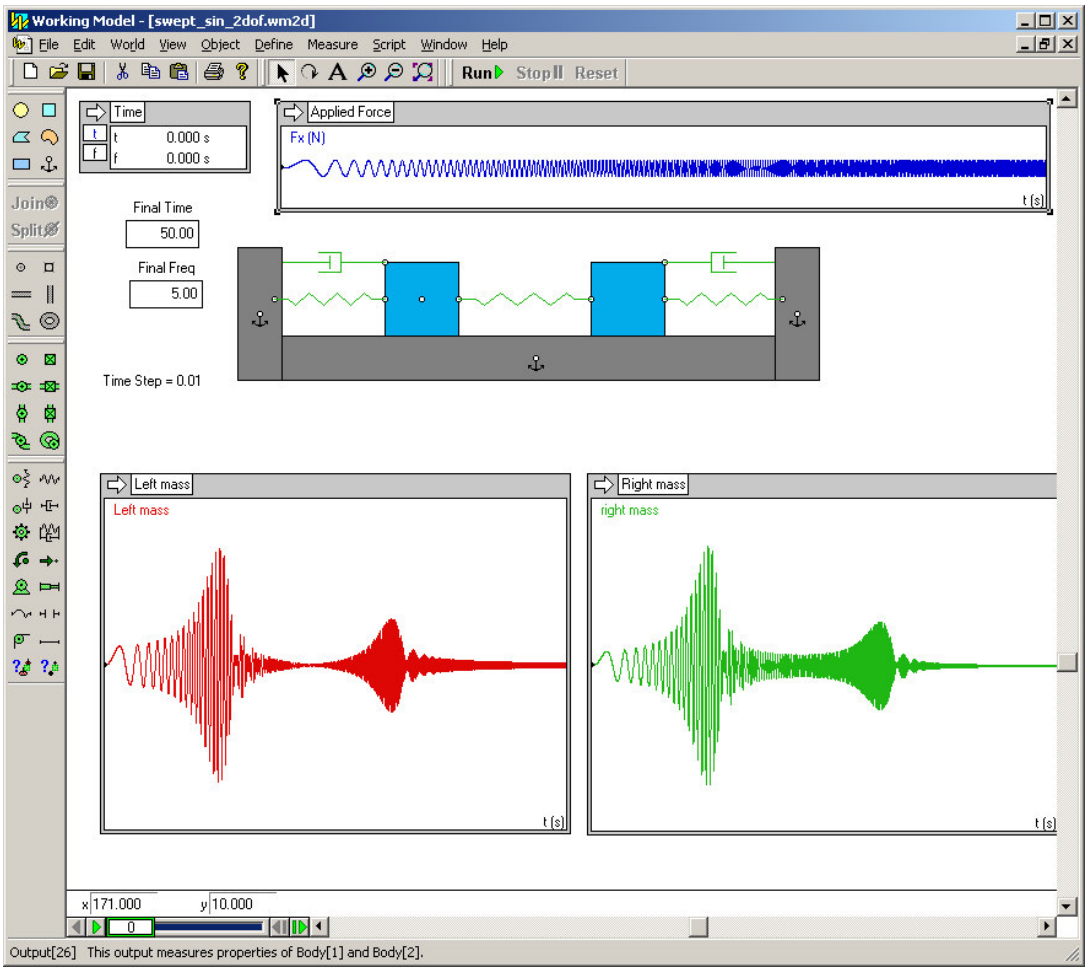
EM 406 Vibrations
PRELAB 4: Frequency Response for 2-DOF systems

In this lab you will be taking frequency response data for a 2-DOF and analyzing it in Matlab. In this prelab you will be looking at a similar system in Working Model. If you do not have Working Model on you r laptop anymore then please find somebody who does and borrow theirs.

For you to do:

Download this Working Model simulation called "swept_sin_2dof.wm2d" from Angel or the lab section of the EM406 webpage. A snapshot of this model is shown below for a sweep rate of 50 seconds. You can change the sweep rate by changing the "final time."



Run this simulation for different sweep rates (from relatively fast to very slow).

Record your observations and turn them in (individually) at the beginning of lab. I want you to really think about this and for you not to give me a shallow discussion. How do the time histories change? What are some of the unique characteristics of the time histories? What can you tell about the system? Etc. Include snapshots of your Working Model simulation to support your observations.