New Astronomy Department Orbital Simulator

While I was in Astronomy Lab last semester, I got into a conversation with David Sitar, the Astronomy Facility Director, and Outreach Coordinator, about his desire to have a new Orbital Simulator for use in the lab. I have discussed some of the specifications with Mr. Sitar already, and he has offered to be of assistance throughout development. The lab in question requires a simulator to display solar bodies and their relative positions to each other over time.

The current program has to be run through DOSBox, and has a very outdated interface. As a result, much more time has to be spent explaining how to use the software than for any other lab, and takes much longer than it really needs to.

I think a relatively straight forward MVC approach to the problem will work for our purposes. The most important part being that the program be easy to open and straightforward to use. I'm inclined to write it in Java, but this could even be some kind of web app possibly. I don't have any ideas for a partner as of yet, but I was hoping I could pitch it around to the class, and find someone else who finds it interesting, or possibly has some other interest in the astronomy department.

If approved, I will meet with Mr. Sitar, make a full specification list, and write a time line. If I can't find any one interesting in working with me on the project, I am open to partnering up with someone else on some other project.