Bug Report for Energy Skate Park, Version 2.01.02 Testing on Windows XP Professional, Service Pack 2 Java Version 1.4.2_14

May 23, 2007

Energy vs. Time Graph:

- 1. When the E vs. T graph is open and you click Reset, the track and skater disappear and the plot stops recording new information.
- 2. The numerical values are hard to read when data is plotted behind them.



- **3.** There is some really strange behavior of the E vs. T graph when you move the slider around on the plot. If you pause the motion, move the slider around on the E vs. T graph, and then click Resume, the graph sometimes stops plotting new info. If you click pause again and try to move the slider around, sometimes the movement of the skater does not match the point on the graph.
- **4.** The graph needs to zoom out even further. Currently you cannot zoom out past 10,000 J, but I can physically zoom out to make big complicated tracks where the total energy can go above 10,000 J. You encounter the same problem for negative energy values (if you were to move the PE=0 line up towards the top of the screen).

Energy vs. Position Graph:

5. You encounter the same problem with not being able to zoom out past 10,000 J on the vertical axis as stated in #4 above.



- 6. The data still covers the legend, title, and axes (see pic above). I think it would be best to contain the plotted info in the while area only.
- 7. When you click and hold the skater to move him around, the graph says his kinetic energy is zero, even though you can see the skater moving around. I'm not sure if this is done on purpose or not, but when I force the skater to move and I see him moving around, I expected him to have some non-zero kinetic energy (same applies to Energy vs. Time and Energy Bar Graph).

Energy Bar Graph:

8. The graphs cover the title.



- **9.** Can you put units on the vertical axis to so that users can compare the info in this graph to the info displayed in other graphs?
- 10. The bar graph does not show negative energy values very well.

Recording & Playback:

11. If you record motion, play it back, hit pause, and then hit slow motion, you might expect the motion to continue playing at the point where you stopped it, only in slow motion now. However, hitting slow motion at this point automatically rewinds the motion and plays it in slow motion. It doesn't seem like you want it to rewind automatically. You encounter the same problem if you hit playback after pausing the motion—it automatically rewinds. You do not encounter this problem if you hit Step after hitting pause.

- **12.** At the end of a motion you recorded, Step should be either grayed out because it doesn't do anything, or it should automatically rewind the motion and start stepping the motion forward.
- **13.** When you are playing back motion, the Record button should be grayed out because it shouldn't do anything. Pressing record while playing back a motion causes your recording to disappear and the skater continues moving around as if you were no longer recording.
- **14.** The Energy vs. Position graph does not re-plot or re-display information when you are playing back the motion of the skater.