

## **Report: “PIN-2022 serie 02” group 22**

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### Introduction:

The subject of this report is to verify that the instructions given in the second series of exercises are correctly done. It should be noted that the backend executable that were given to us can only create a timeline using the collisionDemo.stat for reasons we don't know. Thereby, we had also to test the GUI with our timeline generator.

### Movements simulation:

The movements of the robots are nicely animated on the GUI with a toggle speed of 1x.

- Straight lines: Trajectory seems to be correctly calculated.
- Angular movements: Angular movement is correctly updated and calculated.
- Circular trajectories: Circular motion is correctly animated and calculated.

All movements are correctly simulated. However, when we use the toggle speed and we increment the multiplier, we can see the animations stuttering. We also note that anti-aliasing is used thus giving a nice, pleasant image.

For some unknown reasons, sometimes the GUI crashes during the animation of a timeline. Perhaps, it is happening when too many particles are shown.

### Explosions simulation:

The timeline created with collisionDemo.stat doesn't work properly. It's impossible to start it.

### Particles collision:

Same goes with particles collision. Impossible to test it.

### Conclusion:

The timeline generator only runs using the collisionDemo.stat and the timeline is unusable. What a pity. The GUI runs fine excepted the unknown crashes and stutterings that are occurring when the toggle speed is set up above 1x.