Exercise 2

Option 1. Implement an animation of a firework stick. Particles need to 'shoot' from an origin location, which gradually moves towards the end of the stick. For maximum points it needs to look realistic. Consider also allowing user to move it with the mouse.



Option 2. Add collision detection by following <u>Jakobsen's paper</u> or this <u>tutorial</u>. Setup a simulation that illustrates collision detection working. For maximum points, make it represent something useful! For example, the planet orbiting example from lecture 2 can be extended so that planets bounce against each other on contact. Planets can also have non-spherical shapes (like asteroids) for more interesting collisions to happen.

Option 3. Impress me with something original of equal or higher difficulty ^(C). To avoid discussions concerning the grade, discuss with me your original idea beforehand. An idea: make <u>Line Rider</u> or <u>Angry Birds</u> using our engine.

Your presentation must begin with a demonstration of the working application (1 minute) and continue with a presentation of the source code (4 minutes). It will end with Q and A. Your team-mate does not necessarily need to be there during your presentation.

It is recommended that you fill all the slots for the second Exercise, or there may not be space to present later on. You only need to register for 1 presentation!