

# TEAM 9 MEETING MINUTES



## Meeting Details

<b>Team Name:</b>	Team 9
<b>Meeting Date:</b>	22nd September
<b>Time:</b>	9:00AM - 10:00PM
<b>Venue:</b>	Faculty of Science Common Room
<b>Attendees:</b>	Issac, Matthew, Josh, Dhruv, Dennis
<b>Absent Members:</b>	Rodney
<b>Minutes Taker:</b>	Matthew

## Agenda Details

Tasks	Sub-tasks
Discussions/ Clarifications	<ul style="list-style-type: none"><li>• Demonstrate our Prototype to our Client</li><li>• Discuss challenges</li><li>• Discuss limitations/problems</li><li>• Gather updated requirements for Sprint 3</li></ul>

## Meeting Minutes with Client Starts

- Discussed current standpoint on project progress
- We presented our prototype, and explained the features we have implemented as well as features we are yet to implement .
- The demonstration was done on a windows surface laptop in Linux.
- Client expressed general approval for the work we had done thus far.
- Client offered a reference to a colleague who specializes in particle dynamics to validate the realism of our simulated physics.
- Client emphasized that the low number of particles enables us to focus less on optimizing performance and more on the correctness of the simulation
- Client suggests using “Ray Casts” to detect out-of-bounds collisions, which is a unity feature that involves detecting collisions along an imaginary line from an object. Recommends a C# library for this task.
- Client requires the motion of the particles to be relative to the box, so the player can move it around. Additionally there will be no requirement for the particles to collide with other objects inside the box.
- We enquired about the requirement to incorporate a basic periodic table database and the client responds that it would still be a requirement.

- Matthew presented Blender Sandbox of the Lab
- Client suggested that use lighting sparingly as lighting presents computational drain in unity
- Directional lighting would be preferable
- Client suggest we incorporate real time of particles shadows
- Have the time scales in the window and how many seconds have passed in the simulation (simulated seconds)
- Client suggests to use thread pooling
- Use parallel for each loops
- **Concurrent bag (list you can dump things, thread safe)**

**END 10:00am**