**Meeting Minutes – 19/02/2025**

In attendance: Sam, Max, Atticus, Iestyn, Blossom

**Action Points:**

Coding Initial Conditions and Random Positions  
 Simulation Step Function  
 Checking for a Wall Collision  
 Function for Calculating a Wall Collision  
 Checking for a Ball-to-Ball Collision  
 Function for Calculating a Ball Collision  
 Overleaf Report Basic Formatting

**Preliminary Actions**

* Setting up a GitHub
* Group Name: Modelling Innit
* Finish by 20th March

**Getting Started**

* Naive function “SimulationStep” that:
  + Inputs of timestep, position, velocity, ball properties, box properties, (gravity)
  + For each particle (N):
    - Checks how close it is to a wall, and calculates wall collision velocity
    - Checks how close is it is to each other particle (N) (except itself), and calculates particle collision velocity
  + Outputs of new position, new velocity
* Current Plan; Just the barebones of the SimulationStep function, i.e. Initial Conditions, for loops and general vibe.
* Starting on the formatting of the Overleaf Project

**Overleaf Conventions**

* Capitalise phrases with a name i.e. Forward Euler, Verlet, Newtonian
* “Time step”
* Group consensus needed on any disputes or ambiguity