Fusion: GPU Accelerated PBD Simulator for Unity

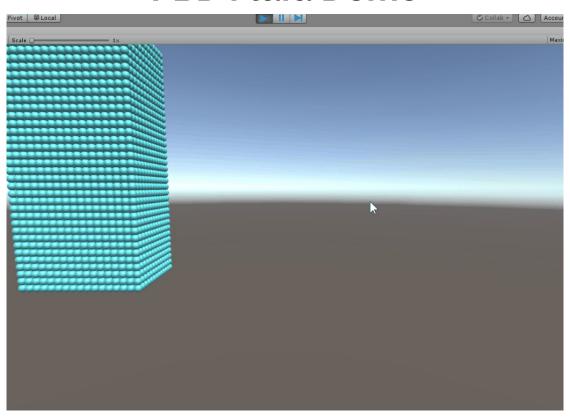
Milestone 3 Presentation

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Milestone 3 Progress - Part 1

- Brand new feature: PBD Fluids on GPU
 - Implemented Position Based Fluid in existing framework (Jacobi Method)
 - **Slow**, need more work

PBD Fluid Demo



Milestone 3 Progress - Part 2

- PBD Cloth
 - Fixed some bugs and refactored code
 - Tool to create cloth of any resolution and size
 - Began moving more calculations onto the GPU
 - Attempted triangle-collisions

PBD Cloth Demo

Project Roadmap

- Milestone 3 (Good progress)
 - Debug some cloth collision bugs -> done
 - Handle rigid-body and/or fluid simulation -> Fluid Almost there
 - Build an easy-to-use interface for the tool in the Unity engine -> started
- Final Milestone
 - Cloth, rigid-body and/or fluid simulation into a single solver and interface
 - Make a simple demo game in Unity with the tool (maybe)

Thanks for your time!