Instituto Politécnico Nacional
Escuela Superior de Cómputo
Computer Graphics
Presentation : Cloth Modeling
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12/06/2023

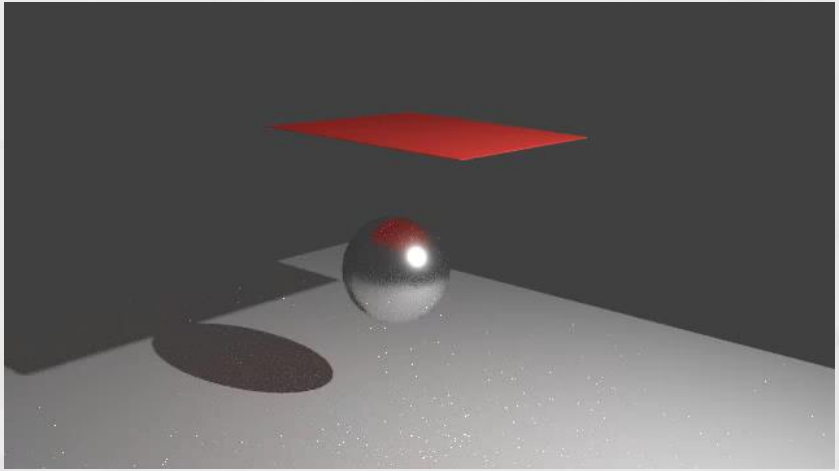
CLOTH MODELING

ALAN ADRIAN MALAGÓN BAEZA

CLOTH MODELING

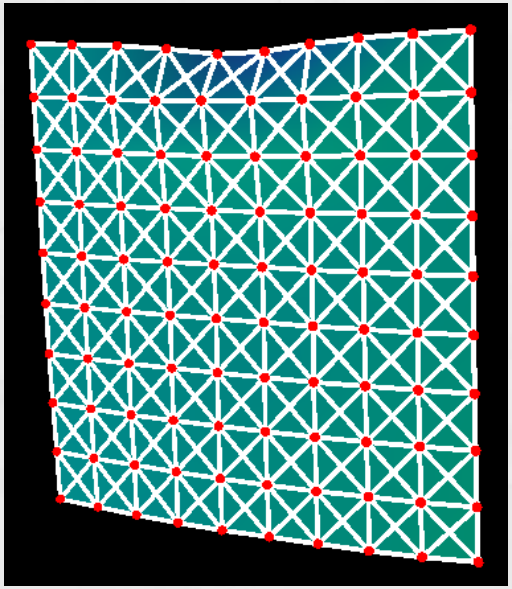
Simulating cloth within a computer program

- Geometric
- Physical
- Particle/energy

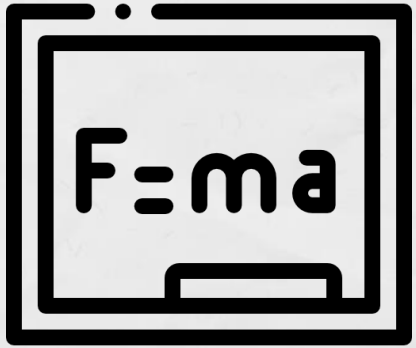


Background

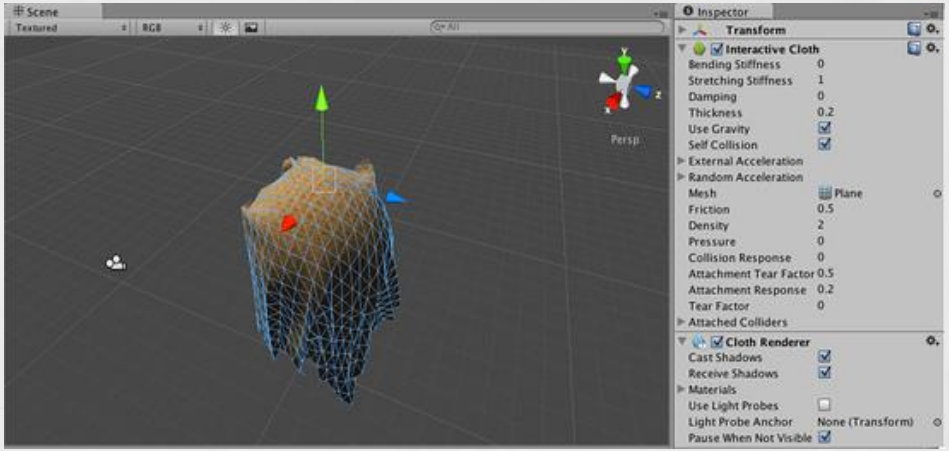
Particles -> Mesh



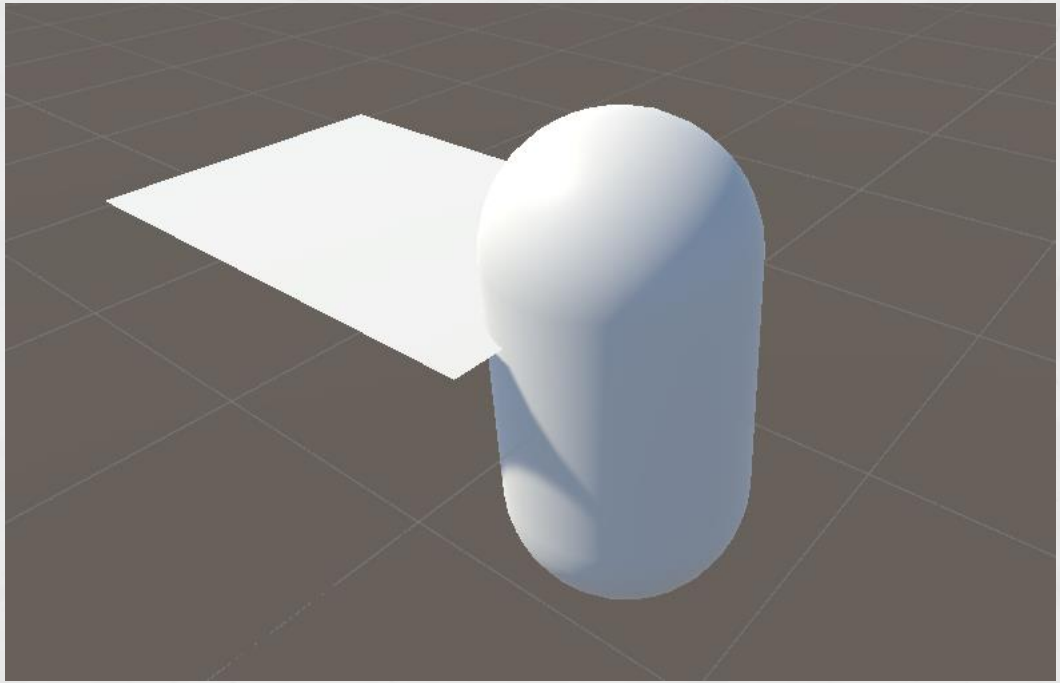
Newtonian Physics

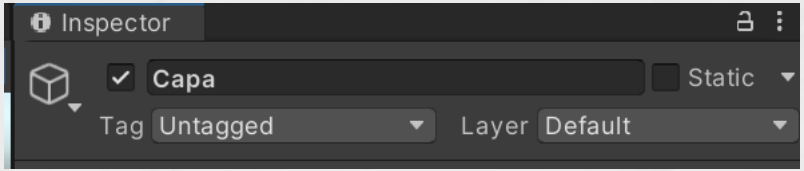


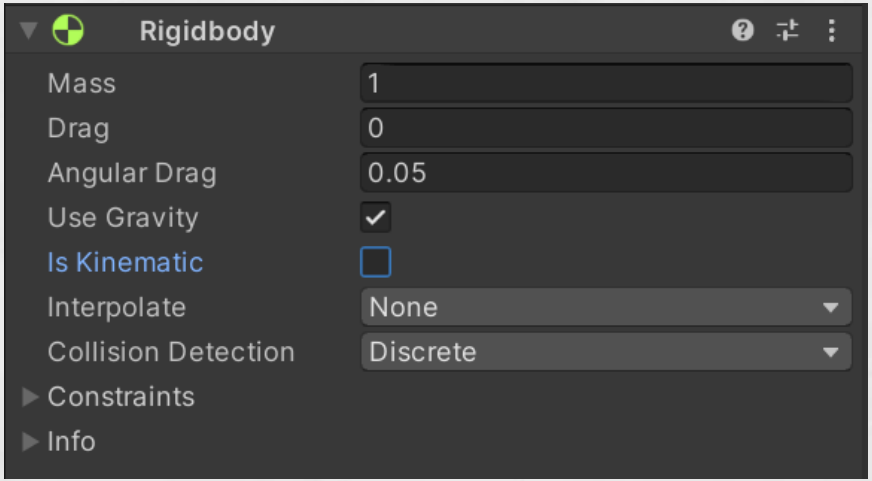
Cloth in Unity

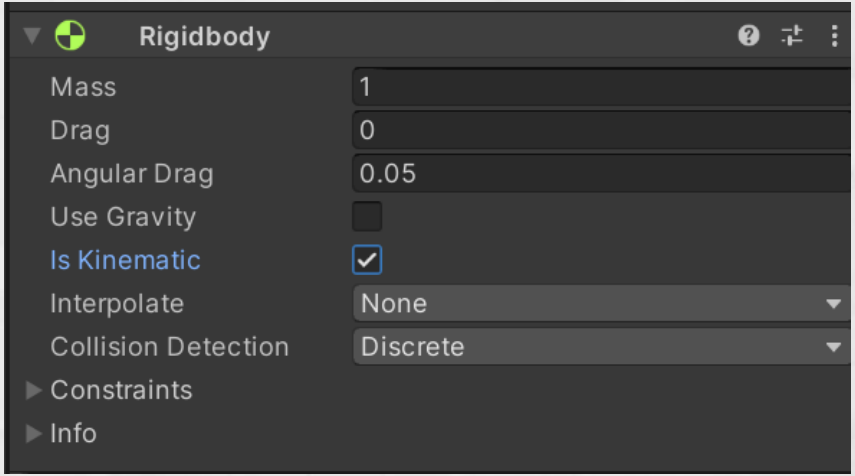


SampleScene*
Main Camera
Directional Light
Minion
Capa

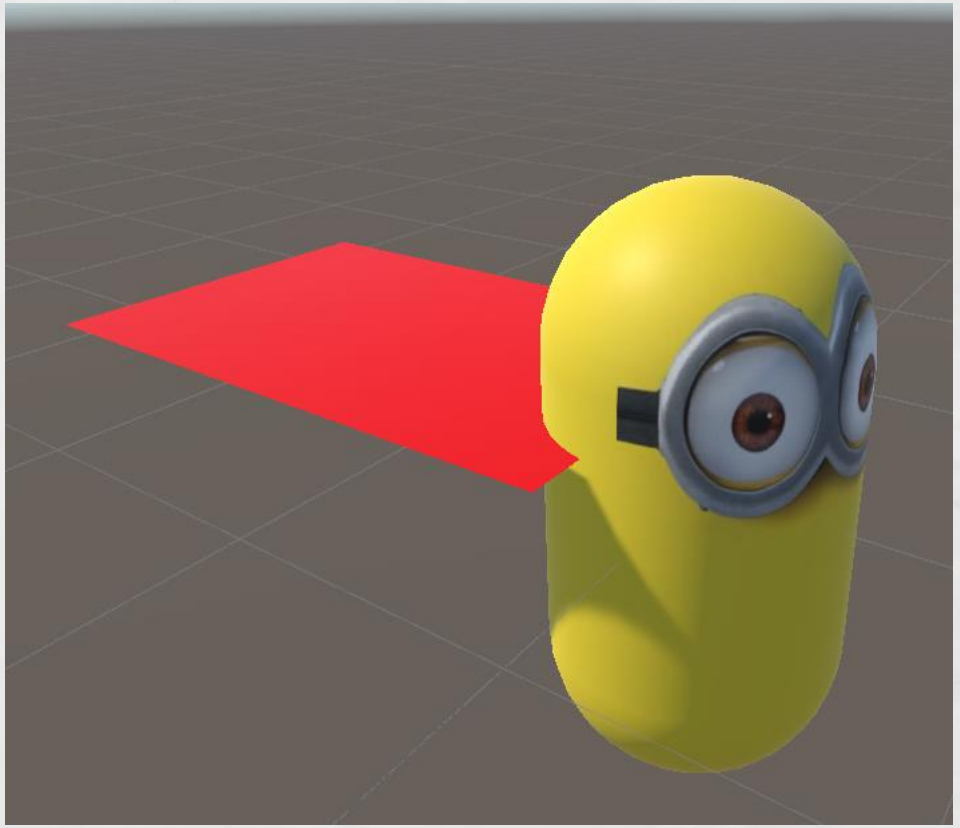


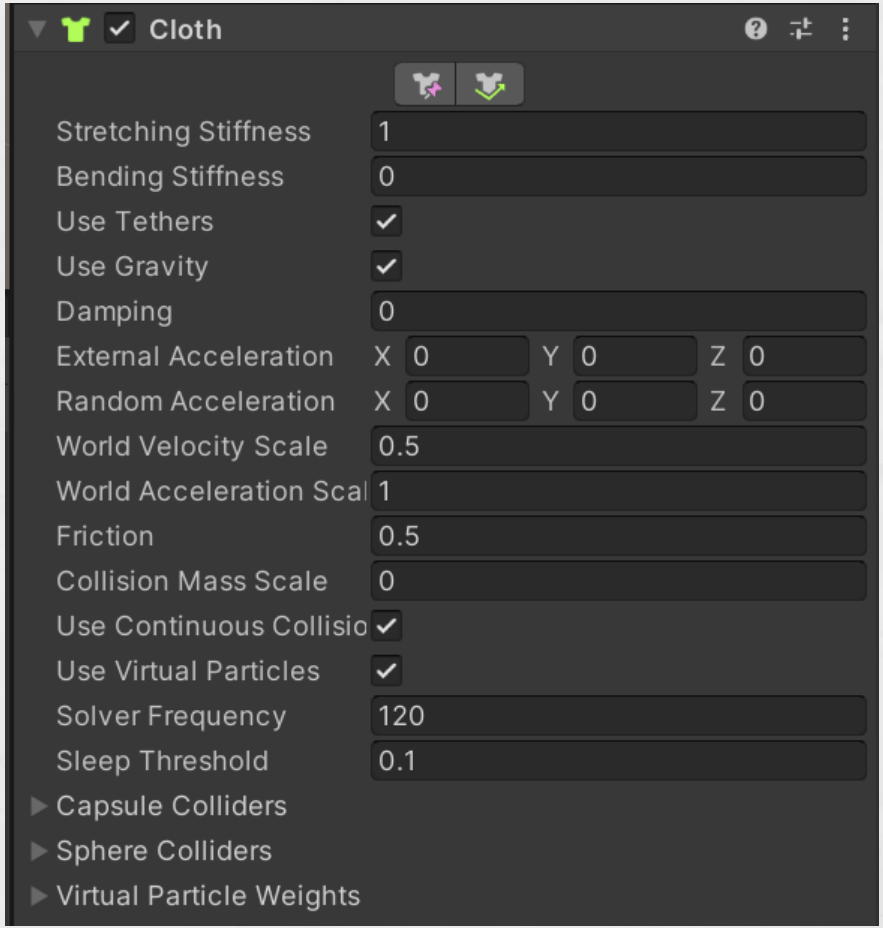

Inspector
Capa
Static
Tag
Untagged
Layer
Default


Rigidbody
Mass
1
Drag
0
Angular Drag
0.05
Use Gravity
Is Kinematic
Interpolate
None
Collision Detection
Discrete
Constraints
Info

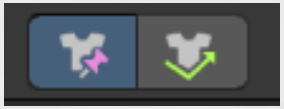

Rigidbody
Mass
1
Drag
0
Angular Drag
0.05
Use Gravity
Is Kinematic
Interpolate
None
Collision Detection
Discrete
Constraints
Info

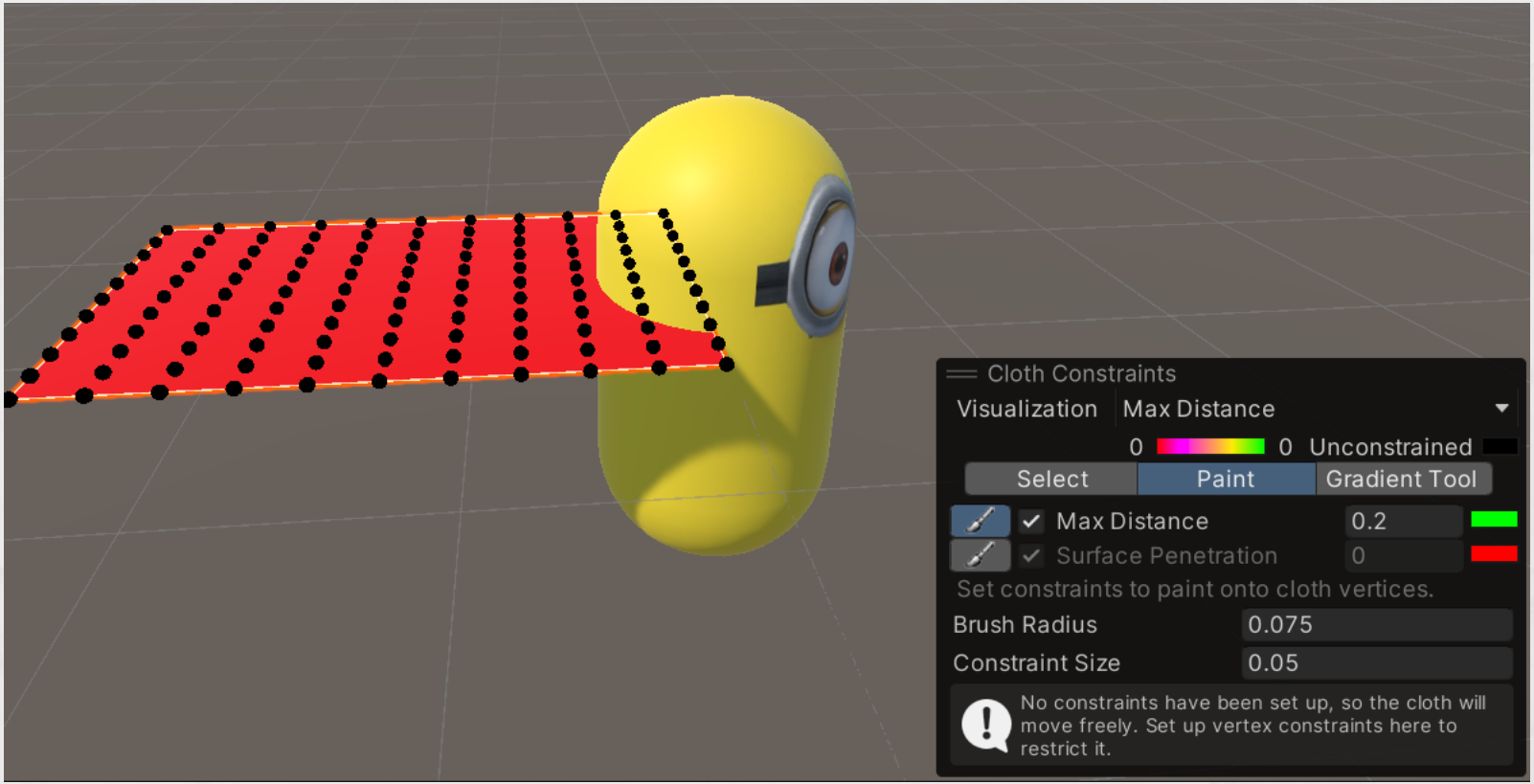
Assets > Materials
minion
Rojo

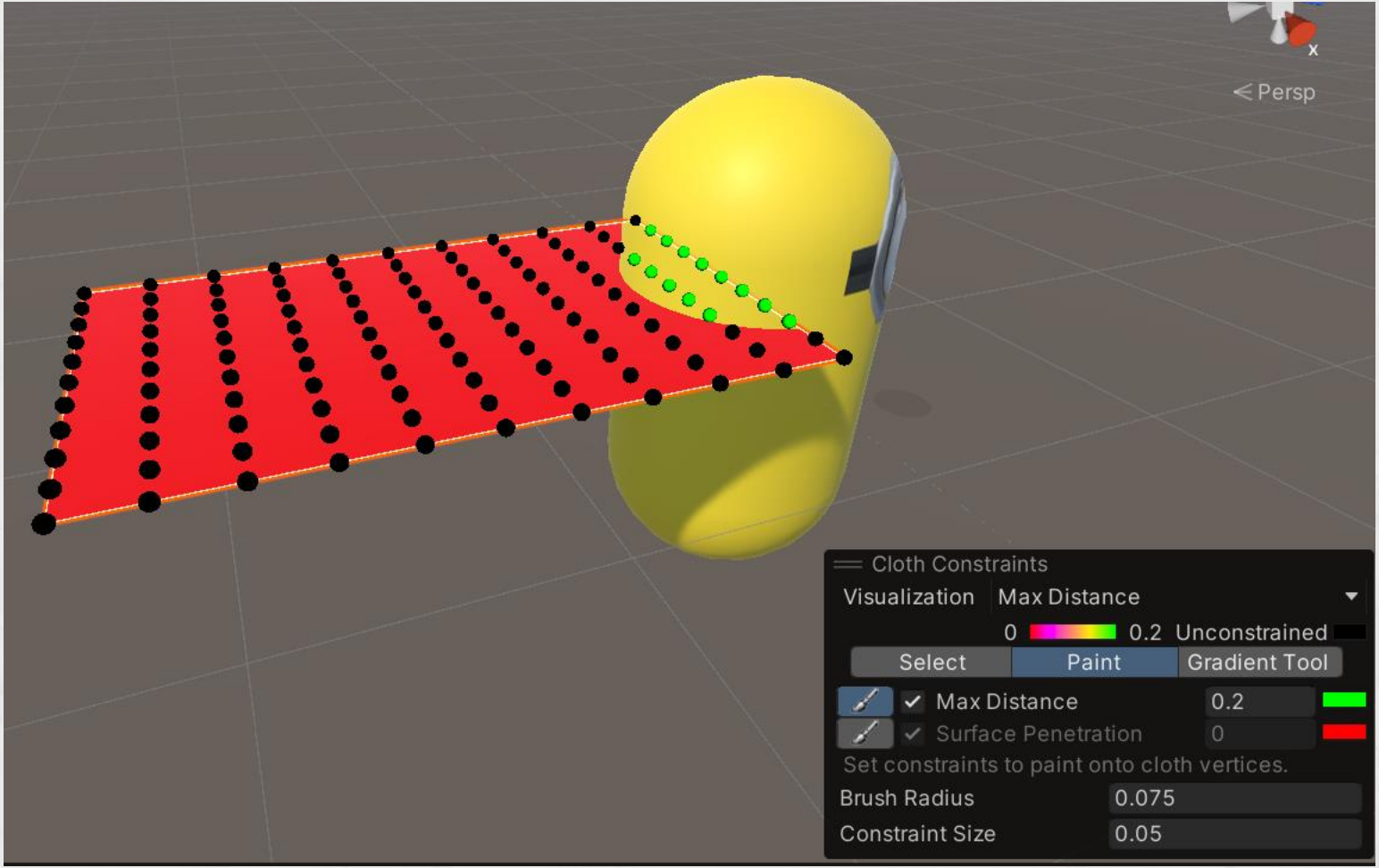


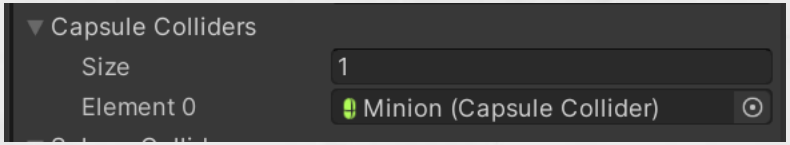

Cloth
Stretching Stiffness 1
Bending Stiffness 0
Use Tethers
Use Gravity
Damping 0
External Acceleration X 0 Y 0 Z 0
Random Acceleration X 0 Y 0 Z 0
World Velocity Scale 0.5
World Acceleration Scal 1
Friction 0.5
Collision Mass Scale 0
Use Continuous Collisio
Use Virtual Particles
Solver Frequency 120
Sleep Threshold 0.1
Capsule Colliders
Sphere Colliders
Virtual Particle Weights

Edit cloth constraints

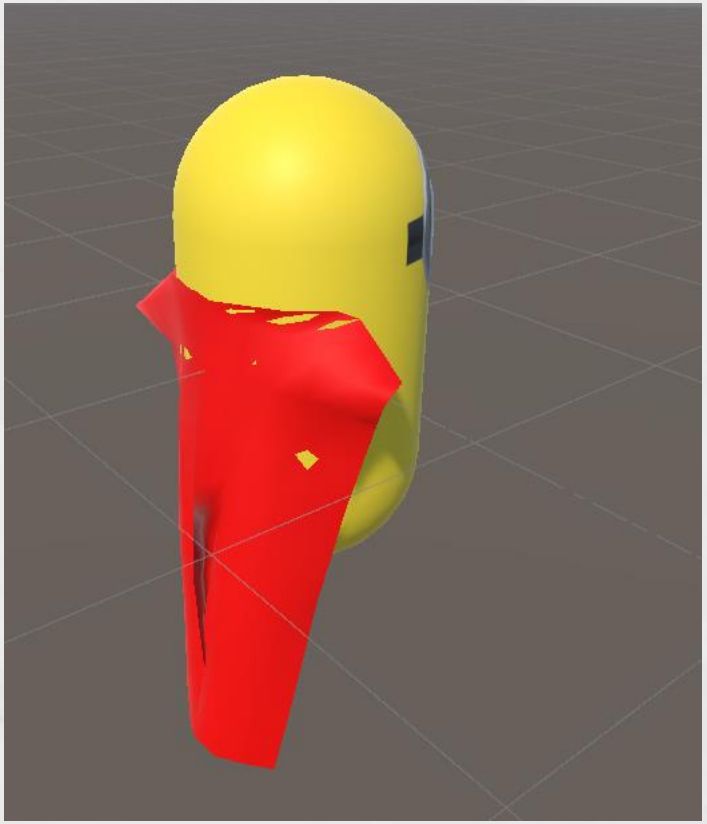


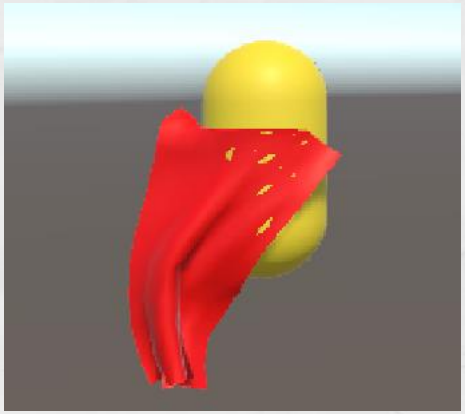


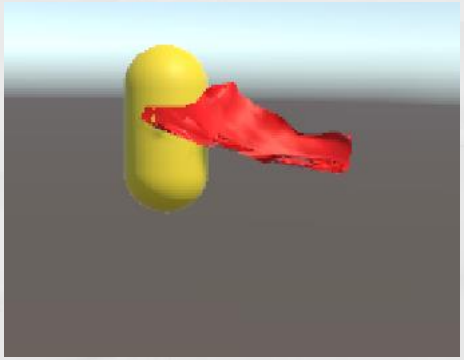

x
Persp
Cloth Constraints
Visualization
Max Distance
0
0.2
Unconstrained
Select
Paint
Gradient Tool
Max Distance
0.2
Surface Penetration
0
Set constraints to paint onto cloth vertices.
Brush Radius
0.075
Constraint Size
0.05


Capsule Colliders
Size
1
Element 0
Minion (Capsule Collider)

Cloth
Stretching Stiffness
1
Bending Stiffness
0
Use Tethers
Use Gravity
Damping
0.3
External Acceleration
X 0
Y 0
Z 0
Random Acceleration
X 0
Y 0
Z 0
World Velocity Scale
0.5
World Acceleration Scal
0.9
Friction
0.5
Collision Mass Scale
0
Use Continuous Collisio
Use Virtual Particles
Solver Frequency
120
Sleep Threshold
0.1

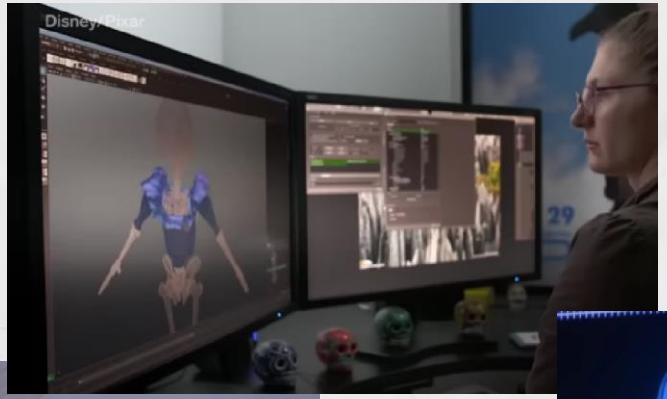


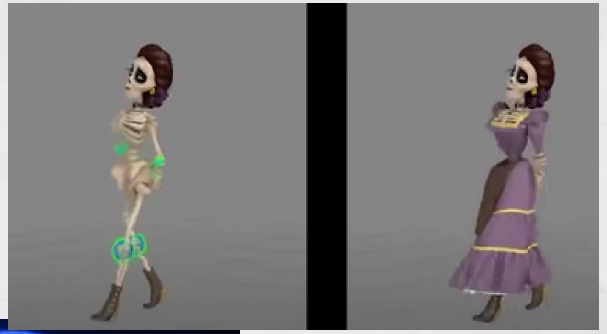


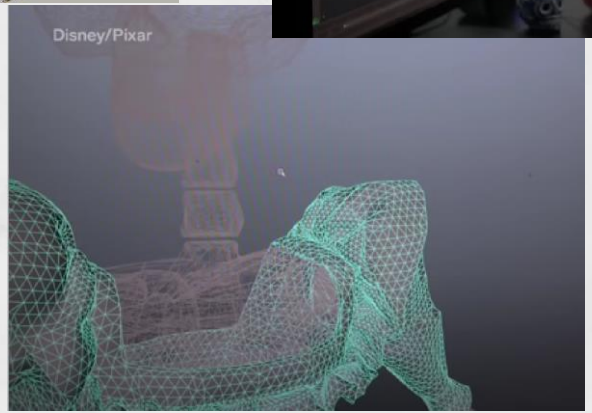


Applications

Films







Hanifa

Anifa Mvuemba

THANKS!
Q&A

RESOURCES

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