

PROCEDURE

Shaders

- Vertex Shaders
 - Attributes
 - particle starting position
 - particle size
 - particle trajectory angle
 - time offset (for continuous generation)
 - Uniforms
 - time t
 - time life (before regeneration)
 - speed
 - opacity
- Fragment Shaders
 - Color
 - Texture

Three.js

- initialize scene
 - camera
 - light
 - box containing the scene
 - table
 - geometry
 - texturing
 - load candle obj created with blender
 - init of smoke and flame Geometry
 - setting first position e angle
 - linking attributes with shaders
 - setting and linking uniform variables
- Audio

SCENE



Table

- *PlaneGeometry*
 - static as floor
- *MeshBasicMaterial*
 - *table texture style*



Candle

- Hand crafted in blender
- imported with LoadingManager
 - positioned on the table



Flame

- BufferGeometry
 - defined as a set of N vertices with *attributes*:
 - position
 - customSize
 - customAngle
 - timeOffset
- ShaderMaterial
 - move positions per flame-like shaping
 - texturing
 - color gradient



Smoke

- BufferGeometry
 - defined as a set of N vertices with *attributes*:
 - position
 - customSize
 - customAngle
 - timeOffset
- ShaderMaterial
 - move positions per smoke-like shaping
 - texturing
 - color gradient