Babylon.js v3.0
Why Babylon.js?

• Two pillars:
  • Simplicity (one feature = one line of code)
  • High performance on every platform

• Everything is open source
• Multiple tools to learn / experiment
• Open and intuitive documentation
• 150,000+ searchable samples on the Playground
• Highly active community
Features

- WebGL 2 support
- WebVR 1.0 and 1.1
- PBR: Physically Based Rendering
- glTF 2.0 support
- Advanced shadows
- Collisions & physics
- Particles, postprocesses
- Integrated GUI
- Exporters for 3dsmax, blender, Unity, FBX
- Spector.js: Convenient WebGL debugger
WebGL 2

- Uniform buffers
- Multiple render targets
- Multisample render targets
- Vertex array objects
- Non Pow2 textures
- Texture LOD
- Depth frag
- Standard derivatives
- Automatic fallback to WebGL1 + extensions
WebVR

- Complete support for 1.0 and 1.1
- Automatic fallback to device orientation events
- Support for controllers (HTC, Oculus, GearVR)
- Support for Gamepads
Tooling
Sandbox – Help designers test their assets
createScene = function () {

// This creates a basic Babylon Scene object (non-mesh)
var scene = new BABYLON.Scene(engine);

// This creates and positions a free camera (non-mesh)
var camera = new BABYLON.FreeCamera("camera1", new BABYLON.Vector3(0, 5, -10), scene);

// This targets the camera to scene origin
camera.setTarget(BABYLON.Vector3.Zero());

// This attaches the camera to the canvas
camera.attachControl(canvas, true);

// This creates a light, aiming 0,1,0 - to the sky (non-mesh)
var light = new BABYLON.HemisphericLight("light1", new BABYLON.Vector3(0, 1, 0), scene);

// Default intensity is 1. Let's dim the light a small amount
light.intensity = 0.7;

// Our built-in 'sphere' shape. Params: name, subdivs, size, scene
var sphere = BABYLON.Mesh.CreateSphere("sphere1", 16, 2, scene);

// Move the sphere upward 1/2 its height
sphere.position.y = 1;

// Our built-in 'ground' shape. Params: name, width, depth, subdivs, scene
var ground = BABYLON.Mesh.CreateGround("ground1", 6, 6, 2, scene);

return scene;
}
Playground Search

Here you can search something in the babylon playground. To do so, enter a text in the field below.

Search in titles, desc...  
Search in tags...  
Search in code...  

Your last search: equirectangular

79 result(s) for shadow

Moving dude: (11BH6Z)

Using attachToBone and dummy parenting to control the dude

```javascript
light.setDirectionToTarget(new BABYLON.Vector3(0, 0, 0));
scene.clearColor = new BABYLON.Color3(0, 0, 0);

// show
var sh = new BABYLON.ShaderMaterial(
    "Material", "shaders/plain",
    {color: new BABYLON.Color3(1, 0, 0), specular: new BABYLON.Color3(0, 1, 0)}
)

var group = new BABYLON.SceneNode;
```
Spector.js – Debug under the hood
References

• http://www.babylonjs.com
• http://sandbox.babylonjs.com
• http://playground.babylonjs.com
• http://spector.babylonjs.com

• @babylonjs
• @spectorjs