WebGL: Future Web

by Stephen Stadler

WebGL

WebGL (Web Graphics Library) is a JavaScript API for rendering interactive 3D and 2D graphics within any compatible web browser without the use of plug-ins. WebGL does so by introducing an API that closely conforms to OpenGL ES 2.0 that can be used in HTML5 <canvas> elements.

Support for WebGL is present in Firefox 4+, Google Chrome 9+, Opera 12+, Safari 5.1+ and Internet Explorer 11+; however, the user's device must also have hardware that supports these features.

History

3D on the Web https://en.wikipedia. org/wiki/Web3D

1999 NeMo (Virtools 1.0)

2001 Director 8.5 Shockwave3D

2005-06 Unity Web Player

2007 Flash 9 Papervison

2011 WebGL

2011 Flash 11 Stage3D

Frameworks

JavaScript Others

three.js Unity

Flash

Demo

three.js

Nike+ Model

- 1. Export from Blender
- 2. Import via three.js
- 3. Deploy to Server

Game

Unity

Nike+ "Pre" Runner

- 1. Create Character
- 2. Animate Texture
- 3. Add Nike Fuel
- 4. Build WebGL

The Future

VR

Virtual Reality will change our perception of the world

Unity & Cardboard

Nike+ "Pre" Runner VR

- 1. Import Cardboard
- 2. Add Cardboard to Scene
- 3. Build Android

Thank You!

For attending my Prefontation

Questions?

stephen.stadler@nike.com