Introduction to Computer Graphics with WebGL

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Prerequisites and References

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Prerequisites

- Good programming skills in an object-oriented language (Java, C++)
- We will use JavaScript (JS) but it is not a prerequisite
- Basic Data Structures
  - Linked lists
  - Arrays
- Geometry
- Simple Linear Algebra

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Coding in WebGL

- Can run WebGL on any recent browser
  - Chrome
  - Firefox
  - Safari
  - IE
- Code written in JavaScript
- JS runs within browser
  - Uses local resources for graphics

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References

Angel and Shreiner, Interactive Computer Graphics (7th Edition), Pearson

Munshi, Ginsburg and Shreiner, OpenGL ES 2.0 Programming Guide, Addison-Wesley

Matsuda and Lea, WebGL Programming Guide, Addison-Wesley

Cantor and Jones, WebGL Beginner's Guide, PACKT Publishing

Parisi, WebGL: Up and Running, O'Reilly

Web Resources and Examples

- www.cs.unm.edu/~angel/
- www.cs.unm.edu/~angel/WebGL/7E
- www.opengl.org
- get.webgl.com
- www.kronos.org/webgl
- www.chromeexperiments.com/webgl
- www.webgl.com
- learningwebgl.com

Before the Next Lecture

- Test your browser at get.webgl.com
  - You should see a rotating cube

- Try some of my examples
  - www.cs.unm.edu/~angel/WebGL/7E
  - Click on any html file