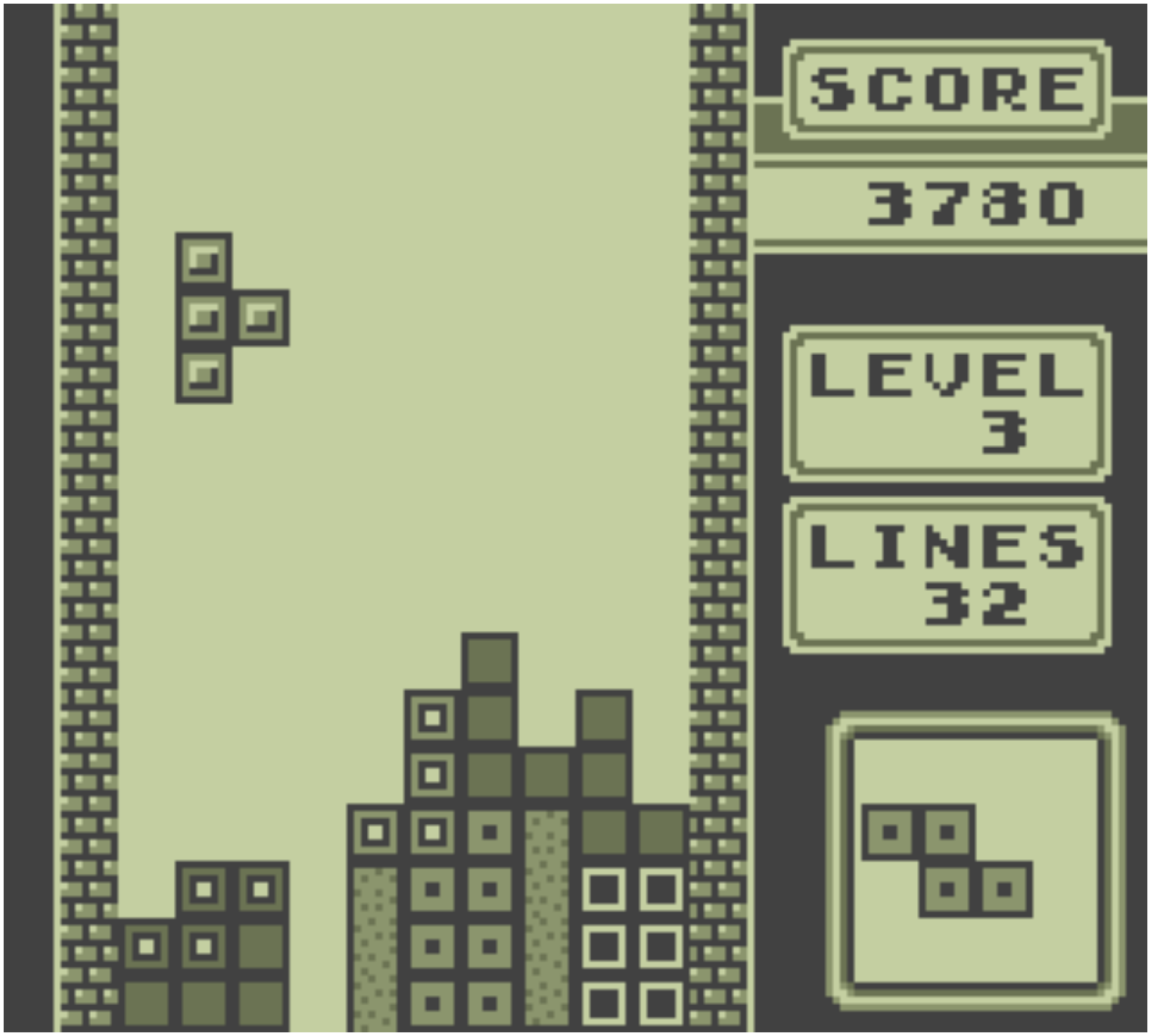
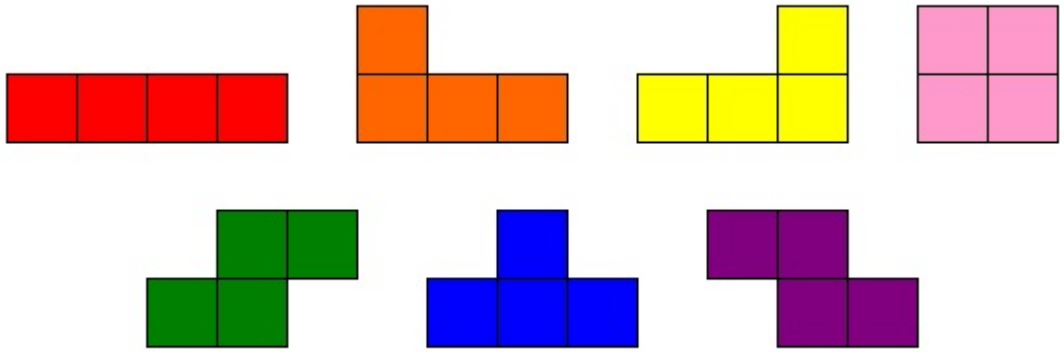

SCORE
3780
LEVEL
3
LINES
32

Tetris

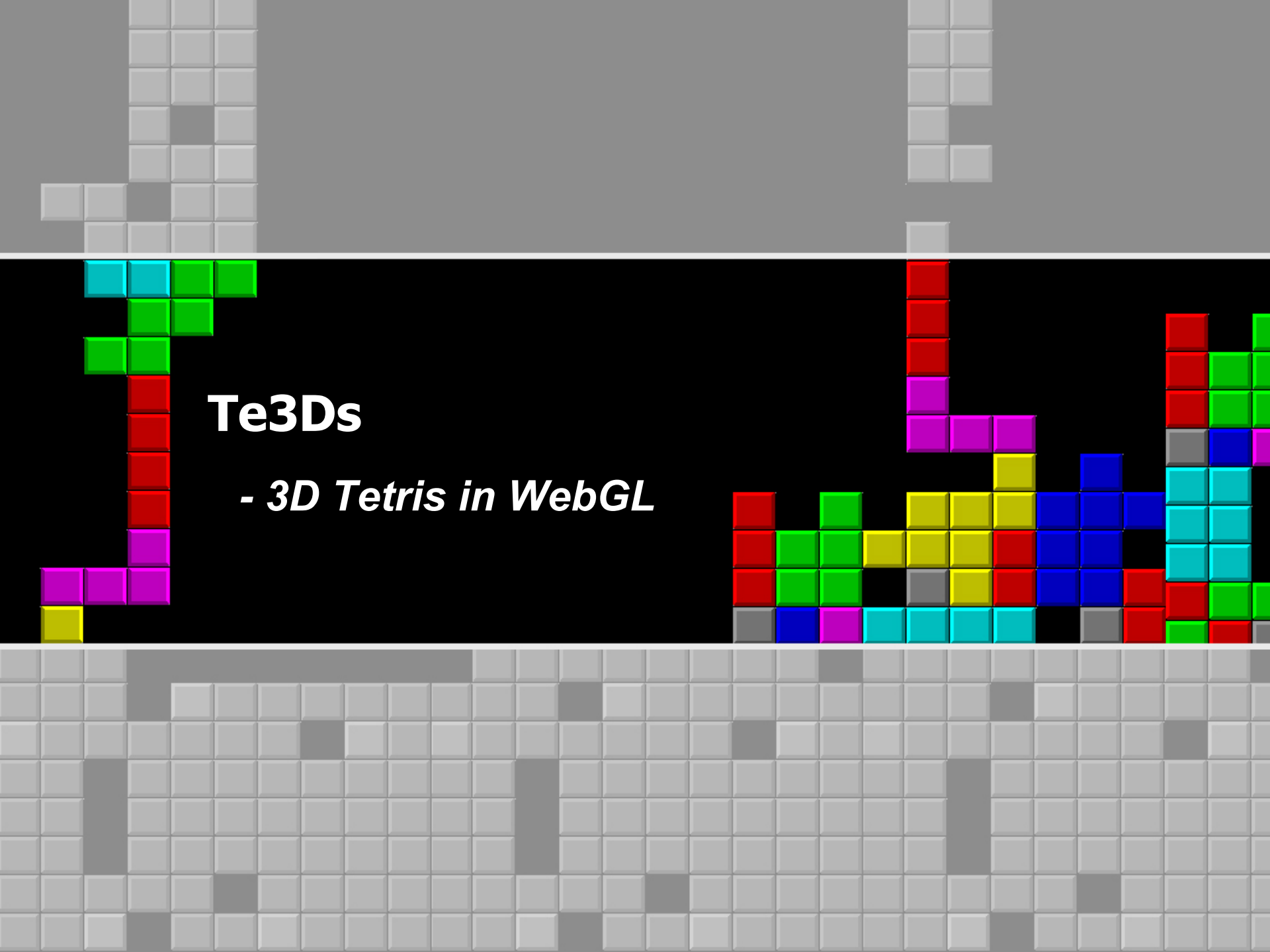
- Designed and programmed by Alexey Pajitnov in the Soviet Union
- First released in 1984
- Tetra + Tennis = Tetris



Tetris^3

Video link: http://youtu.be/_cMNnFFE_8I

Game link: *http://users.csc.calpoly.edu/~zwood/teaching/csc471/finalproj24/gzipkin/*


Te3Ds
- 3D Tetris in WebGL

WebGL (Web Graphics Library)

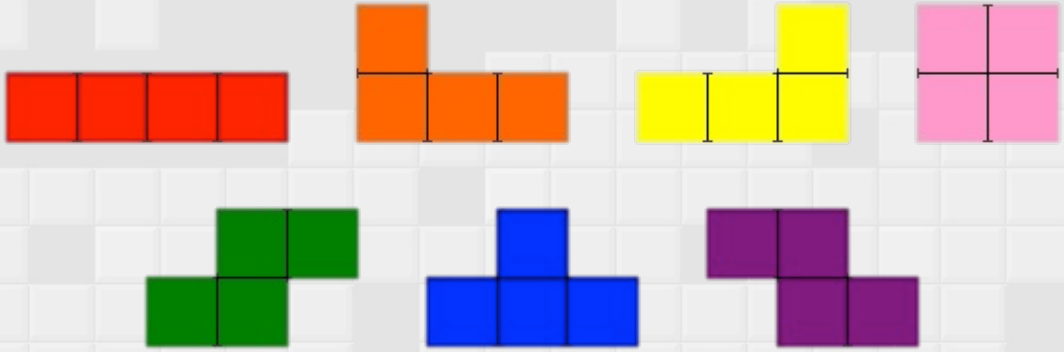
- Javascript API
  - Useful to render interactive 2D and 3D graphics with all modern web browsers.
- Consists of code written in Javascript and shader code that is executed on a computer's Graphics Processing Unit (GPU)

OpenGL to WebGL

- Syntax
  - gl_TRIANGLE -> gl.triangle
  - glBufferData -> gl.bufferData
- Shaders
  - Uses GLESSL instead of GLSL #130
    - » in vec3 N -> varying vec3 N
- Glut
  - No Glut because we're using HTML canvas

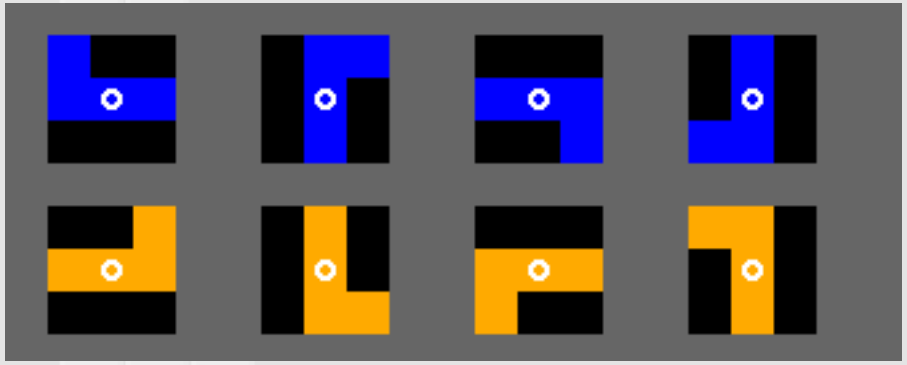
Te3Ds

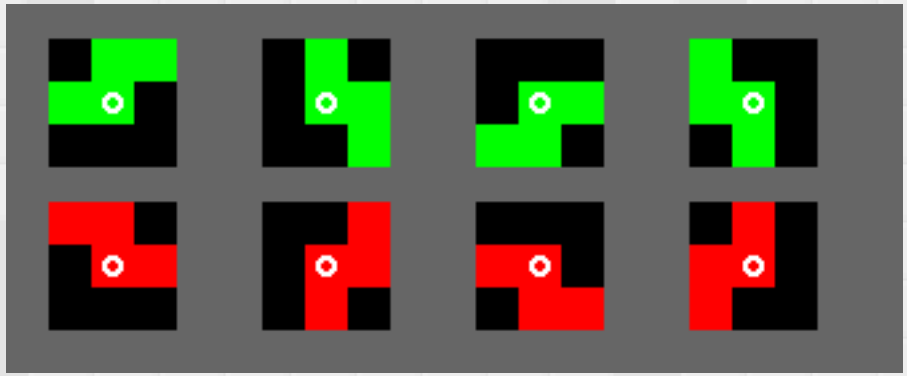
- Starts with an empty container
- One of the *five* different shapes (L, I, T, S, Cube) falling down from the top of the container at a slow pace



L and S Rotations

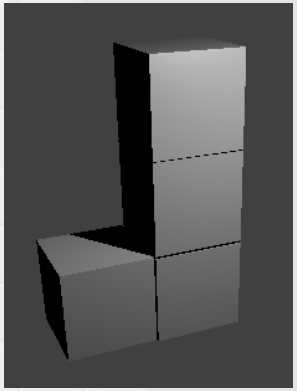
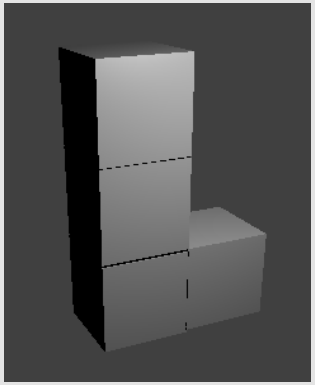
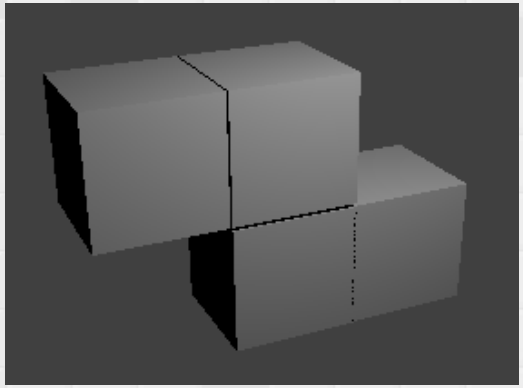
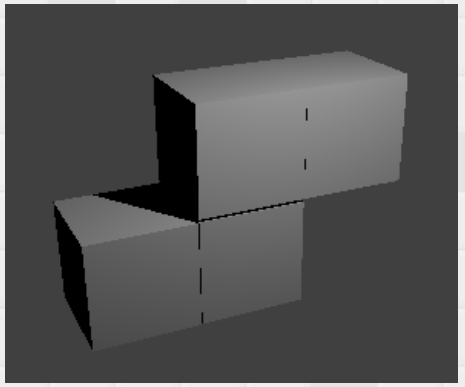
- Classic 2D Tetris





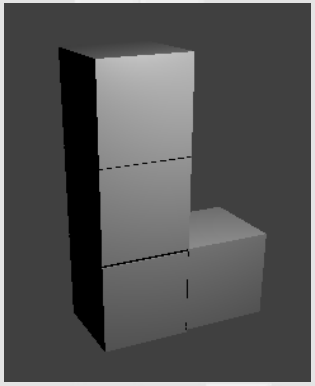
L and S Rotations

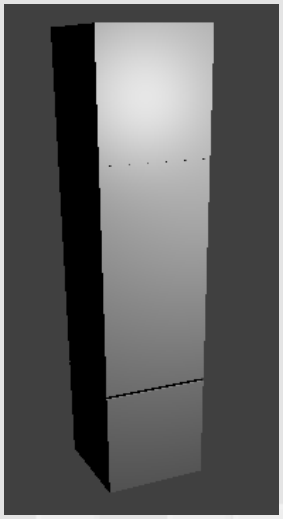
- Te3Ds

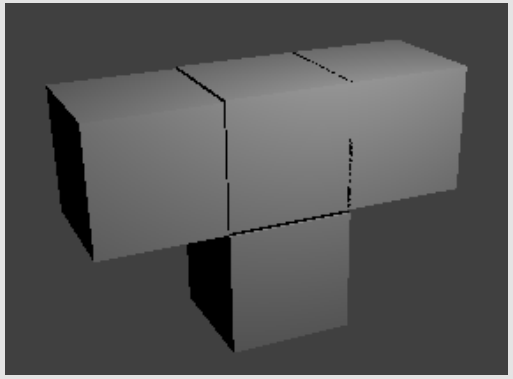





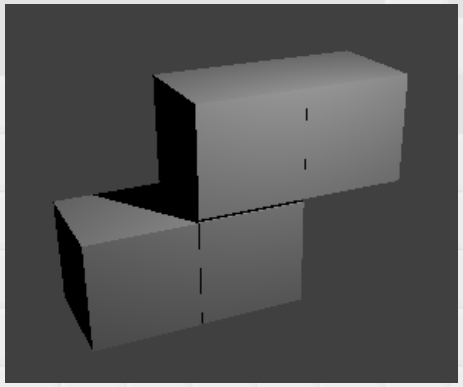
The 5 Shapes

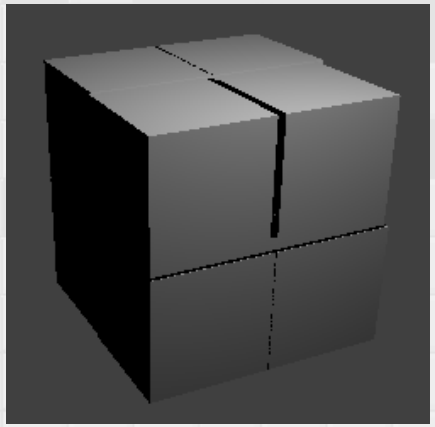
- The L, I, T, S and Cube shapes









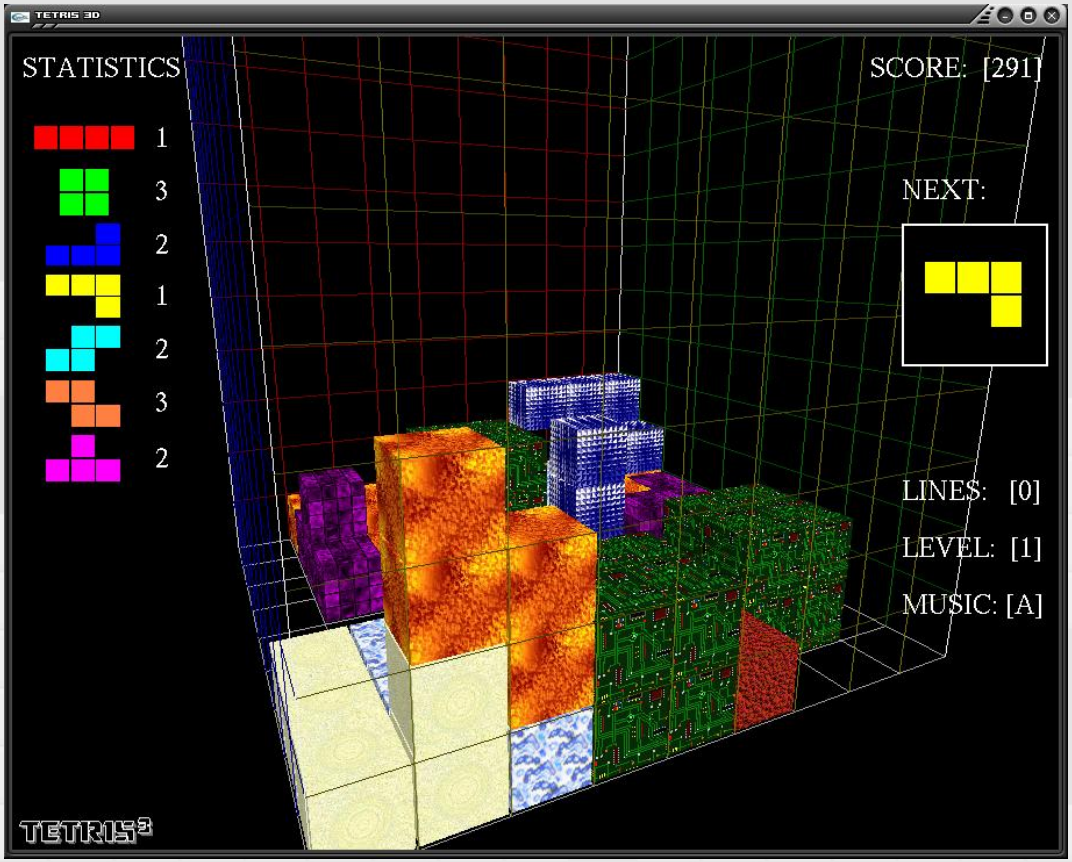


Deliverables

- CAD in WebGL
- Tetris components (The 5 Shapes)
- Tetris controls
    - Shape translation
    - Shape rotation
    - Camera movements

Deliverables Continued…

- Screen layout of the game
- Texture mapping (if time permits)

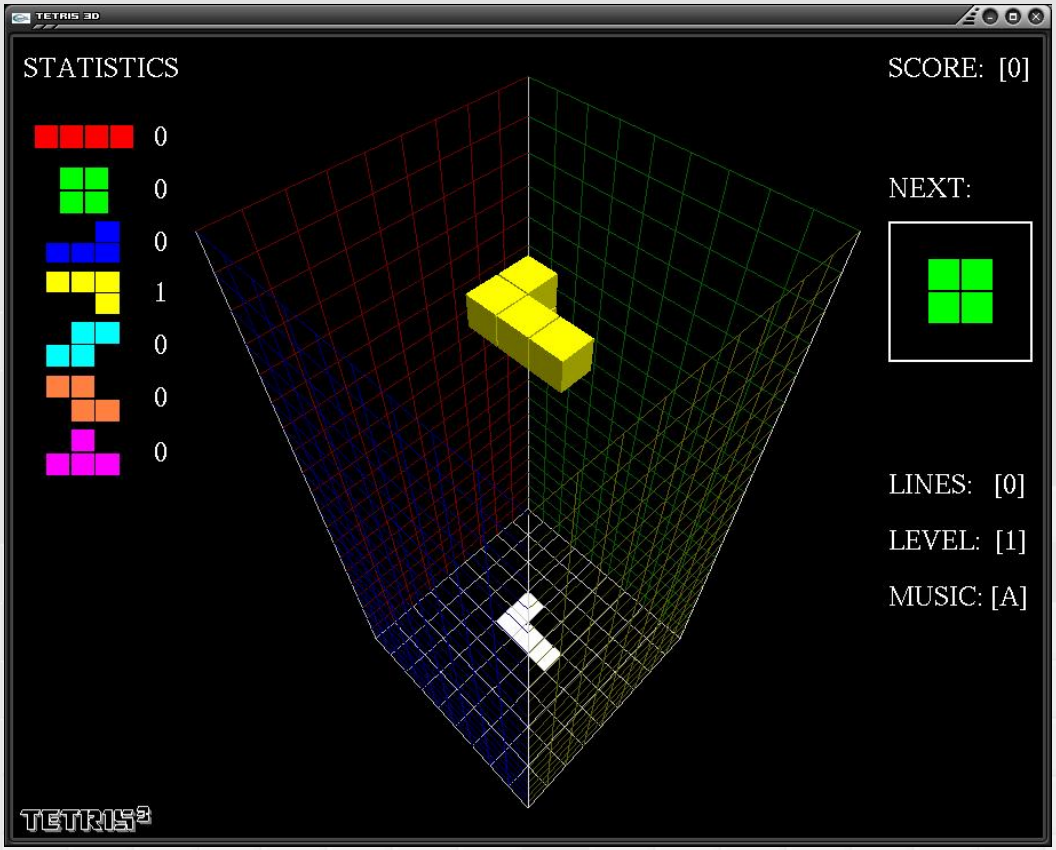


Deliverables Continued…

- Keep track of the states of the game
  - Game statistics
  - Number of components
  - Occupied and free grid space
- Background music and sounds

Deliverables Continued…

- Shading and shadows



Demo

- Demo demo demo demo
  - http://youtu.be/u5kXg4QB3zg