1 Report

Our blocks are represented in an array of vertices, with groups of 4 vertices for each block. The initial amount of block is coded as an X and Y amount in the javascript code, and the layout of these is made in proportion. Blocks are drawn as two triangles using triangle fan, creating triangle of v1,v2,v3 and v2,v3,v4.

Each blocktype has a predefined color used when rendering each block. Color gradient is calculated in the fragment shader, dependant on the position of the fragment (fPosition), and the center point of its parent block, which is calculated in the vertex shader, and passed on to the fragment shader.

Variables given to the shaders by javavscript code are uniform, as these are not meant to be changed during rendering. Varying variables can be changed during GPU rendering and are used to pass information between the vertex shader and fragment shader.

The fragment shader decides the color of individual pixels, and uses the centerpos to create a circular gradient.

Our solution runs on Firefox (and Nightly), Internet Explorer (and Edge), and Chrome. Chrome runs very slowly, while the others do not.