3D Rendering

The rendering system document describes the rendering system. This document will discuss how specifically 3D rendering works and how to create new vertex attribute formats.

The 3D renderer works mostly the same way the 2D rendering works except indirect buffers are used and thus a batch commands queue is also created.

**New Vertex/Instance Format**

1. Create the new vertex buffer in JSON which uses correct size and capacity. If a new capacity or size is used, update the resource loader to convert string literal to class types.
2. Create new vertex array which holds the new buffers
3. Create new shader GLSL code which is compatible with the new vertex attribute format
4. Create new shader entry in shader json
5. Update render instance submission function to edit the instance vertex buffers.