

## Human GPU #0008 – Less memory is good

Goodmorning human, how things are going so far?

Already tired of being a GPU? ahHAhahHAha

As you probably noticed in #0007, when drawing a shape using only triangles, a lot of point in space are overlapping and repeated.

I want to introduce you the "index elements drawing", it's an optimisation that tries to reduce the size of your buffers.

When you see this special buffer called '\_index', means that, before reading from the buffer, you need to use the  `'_index'` as lookup table.

Added some annotation to make you understand, aahh...poor humans.

Give it a try and draw 4 triangles.

## Buffers

```
{
  "buffer1": [
    -0.1, -0.3,
    -0.6, 0.3,
    -0.4, 0.5,
    -0.1, 0.1,
    0.7, 0.8,
    0.9, 0.6
  ],
  "_index": [
    0, 1, 2,
    0, 2, 3,
    0, 3, 4,
    0, 4, 5
  ]
}
```

## Attributes

```
{
  "position": { "buffer": "buffer1", "size": 2 }
}
```

## Vertex shader

```
attribute vec2 position;

void main() {
  gl_Position = vec4(position, 0.0, 1.0);
}
```

