

## A16 – Drawing with Vulkan

The application contained in `A16.cpp`, is a version of the slot machine, seen in Example E08. In the `models` folder, there is an extra model, called `Room.obj`. In this assignment, you have to modify the initial version of the application, to show also this new mesh. This model contains a room that will recreate the environment where the slot machine is located. This model has a special vertex format which includes:

- Position (vec3)
- Normal vector direction (vec3)
- Vertex color (vec3)

It is rendered with the vertex and fragment shaders `VColor.vert` and `VColor.frag` contained in the `shader` folder. It uses the same global uniform block (and its corresponding descriptor set and descriptor set layout) as the other meshes for the definition of the lights. The data set with the projection matrices and other object dependent information, uses the same structure as the conventional meshes, but requires a different Descriptor Set Layout and Descriptor Set, since in this case the model has no texture. File `Project checklist - slot machine with room.docx` shows in red the new part that must be added to the project. Search file for the string:

```
/* A16 */
```

... and read the related comment, to make all the steps to show this extra mesh. If everything goes well, you should see something similar to the picture below.

