

# random story in a dungeon - randomStory - Group 25

Group: randomStory

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Git: <https://github.com/Vulrik/ezg17-randomStory.git>

## Short story:

A mystical creature (camera) is wandering through a dungeon and experiences some strange behavior in it.

## Scene description:

An ordinary dungeon like many fantasy games does have it. Dark stone or brick walls are used for the floors, walls and ceiling. Barrels, torches and other props are going to be used for the environment.

## Controls:

C – Switch between automatic camera and debug camera

## Constrols for „Debug Mode“:

Debug - (FPS - Camera)

W – Move foward

A – Move left

S – Move backward

D – Move right

Mouse – Camera rotation

Space – Turn bloom off/on

Q – Exposure turning down

E – Exposure turning up

## Implemented:

- Camera controls
- Automatic camera
- Model loading
- Texture loading
- Phong shading
- **Effects**
  - Normal Mapping
    - Can be seen on every surface.
  - Omnidirectional Shadow Mapping for one point light source
    - Can be seen everywhere in the scene.
  - Bloom
    - The light source flying around has bloom and everthing else also but less.
  - Particle System
    - Can be seen at the end of the demo at the metal gate. Blue particles flying away.

## Submission 1 Issues:

- Starting the demo took really long.
  - More or less fixed. It now takes around 5 seconds.

## Testet on PC with:

NVIDIA

**Libraries, Resources, Tutorials:**

VO, VO Slides, Lecture cast, <https://www.cg.tuwien.ac.at/courses/Realtime/VU.html>

Real Time Rendering Third Edition, <http://www.realtimerendering.com/>

Learn OpenGL Homepage: <https://learnopengl.com/>

OpenGL Tutorial Homepage: <http://www.opengl-tutorial.org/>

Particles: <http://www.mbsoftworks.sk/index.php?page=tutorials&series=1&tutorial=26>

Debug Tutorial: <https://learnopengl.com/#!In-Practice/Debugging>

Web service for Multi-Language GL/GLES/EGL/GLX/WGL Loader-Generator: <http://glad.dav1d.de/>

Model loading, Assimp: <http://assimp.sourceforge.net/>

Image loading, Soil: <http://www.lonesock.net/soil.html>

GLFW: <http://www.glfw.org/>

Music/Sound: Irrklang - <https://www.ambiera.com/irrklang/>

**Models, Textures:**

Dungeon: <https://www.cgtrader.com/3d-models/interior/other/medieval-dungeon-00424a01-4d71-4d87-b9fe-b684bf3cda00>

Particle effect: <https://www.roblox.com/library/242378377/Purple-Particle>

**Creation of dungeon layout with:**

Blender: <https://www.blender.org/>

**Music/Sound:**

Background ambience/music: <https://tabletopaudio.com/>