

COMP 4302

GROUP 1: APURBA SINHA & TANJID BHUIYAN FINAL PROJECT

Project: *A museum of Graphics methods and algorithms, where each room presents a technique related to graphics, such as texture mapping, ray tracing, animation of characters, use of A.I., etc.*

1. We have chosen the above project where we tried to display texture mapping, animated robots and light control.
2. We have used webgl and three.js for the project.
3. From the technical features you have mentioned on the assignment we attempted to do all of them. Adding one or two light sources controllable by keyboard keys using “l” and “c”.respectively.
4. The robot could be moved around using the arrow buttons and jump upon pressing the space key.
5. Mouse and keyboards could be used to rotate the camera angle using the lookAt() function.
6. Use of textures has been added, when controlling light using l key the background changes to dark as well.
7. We have also added an obstacle and collision detection system. Where the robot won't move when coming up to an obstacle.
8. Also added a moving sphere around the robot which moves with the robot's movement.
9. Novel components added as well.

Sources and references:

1. <https://threejs.org/> (several github links)
2. Chatgpt
3. Youtube tutorials