IS F311
Computer Graphics
BITS Pilani, Hyderabad Campus
Project
Due Date : 30th November 2023 (by Midnight)
Total Marks: 10 (weightage : 10%)

Objective: Objective of the project is to learn and implement a concept not explicitly taught in the classroom by reading a research paper. Here are three ideas of the project.

Idea 1: Implementing Procedural Texture/ Terrain Modeling using Perlin Noise.
[1] https://dl.acm.org/doi/10.1145/325165.325247
[2] https://dl.acm.org/doi/pdf/10.1145/566654.566636

Idea 2: Implementing worm motion.
[3]
https://dl.acm.org/doi/pdf/10.1145/54852.378508#:~:text=The%20worm%20tends%20to%20bounce,its%20tail%20as%20it%20moves.

Idea 3: Implementing Marching Cubes Algorithm.
[4] https://dl.acm.org/doi/pdf/10.1145/37402.37422

- Choose any one of the ideas and implement.
- The project has to be coded completely in C/C++ and OpenGL.
- Design the coded properly.
- Develop HTML pages to document the results produced by your code, issues in coding, general discussion on the algorithm, references, and any other remarks.
- Work towards producing aesthetically pleasing outputs. Credits will be given for creative outputs.

General Instructions:

1. This project can be done in groups of no more than three students.
2. **Try to maintain the same group as of Assignments.**
3. The code should be well indented, well commented and easily readable. Points will be deducted for an unorganized and uncommented code.
4. You need to upload your working code, and HTML documentation in zip file on CMS by the deadline.
5. The name of the file should be Project_CG_A2.zip, where id1 refers to the ID of only one member of the group.
6. You can discuss with your friends but refrain from copying the code and submitting. Copied codes will receive no credits for the entire assignment.
7. You have to demo the code to the instructor on a scheduled date and timing after submission. Absence during demo would mean no marks.