

AGA ASSIGNMENT 3(OPENGL)

1. (a). Write a program to display a 2D object with options to support zooming, panning, and moving operations (by redefining viewport).

(b) Write a program to display & view a 3D chair model from different angles and use the shading and lighting (single/ multiple) functions on it. Use different projection transformations for 3D visualization.

2. (a) Write a program to display a rotating sphere/cube and use different textures controlled by mouse or keyboard buttons with lighting function.

(b) Use OpenGL “mipmapping” function to create a simple Levels of Detail visualization application.

3. (a). Write a program to display an earth globe and a moon rotation viewed by mouse or keyboard in different positions with a moving light source and create shadow effect.

(b). Draw Mickey mouse using OpenGL with animation on its subparts and make it more colorful. Hint: As you execute the program, first two ears will come and then the face in slow animation. Finally the eye, nose and mouth will appear.

NOTE:

1. Assignment to be done on groups of 2 members.

2. Assignment to be submitted at the mail id: agaassignment2018@gmail.com.

3. Submission date for the assignment: 15th March, 2018. (Submit the assignment as per the submission date, after that penalty will be considered).

4. Submit your assignment as a zip file named with your roll no. The zip file should contain executable code file and snapshots or avi of your result.