

Project Dimension

Software Rendering Redefined



“A Graphics library applying core graphics algorithms to generate a morphs and shapes in a 3D environment”

Project codename Dimension will be able to perform the following functions:

1. Project multiple shapes in a 3D environment defined by a set of properties and generate the output in a form of a bitmap.
2. Providing wide array of transformations to be done on the shapes in question, including scaling, rotation and translation.
3. Providing the functionality of filling the shapes in question with colors and gradients.
4. A localized partial raster generation allowing for a better performance.
5. Applying light source processing and simulating effect on object shading.
6. Covering initially all the lab works as explained in the syllabus.

Bonus Objectives:

1. Support for graphical anti-aliasing for error ratio removal through image processing algorithms
2. Applying textures to shapes accompanied by image processing to apply transformations.
3. Providing a functionality of producing a code for animation at a usable fps