

README DOCUMENT

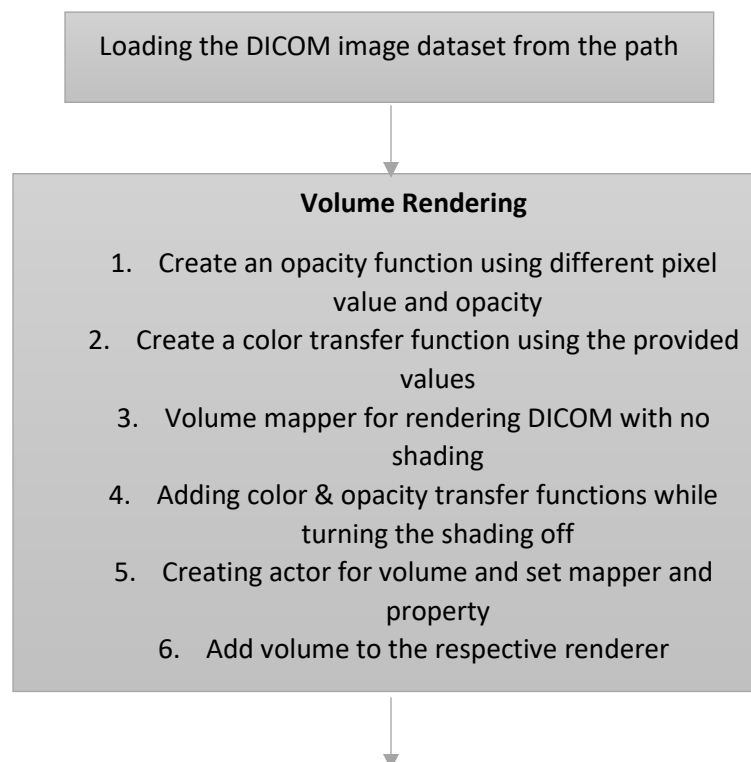
Objective of the Assignment:

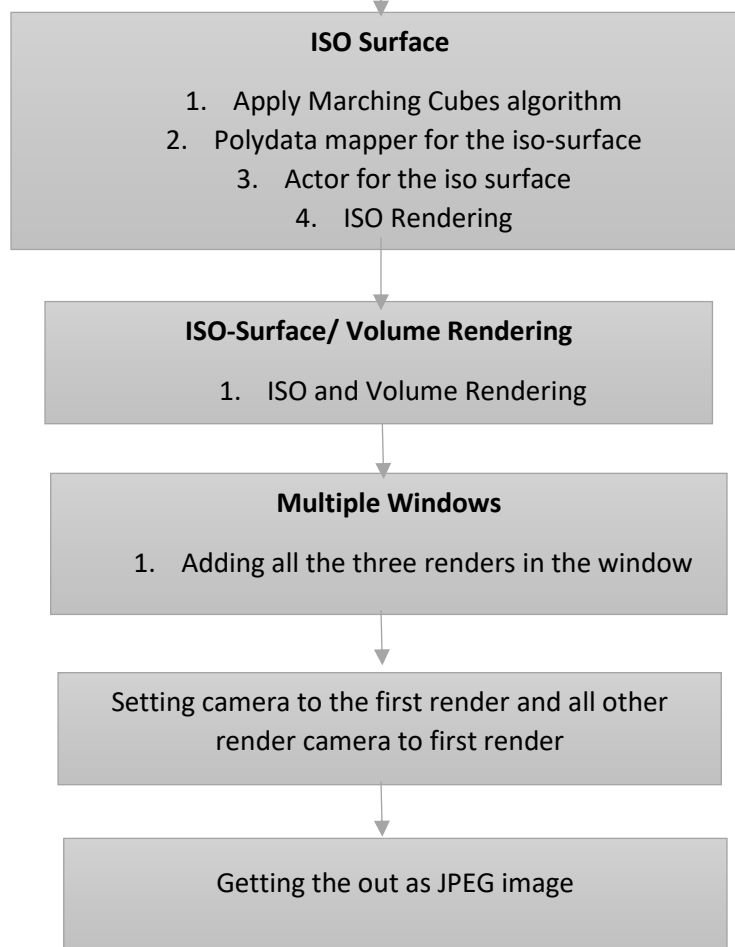
Displaying a Computed Tomography (CT) images using volume rendering as well as iso-surface representation using three view ports. The values for colour transfer and opacity transfer in given below. After rendering the three objects, exporting the render scene to a JPG file.

Pixel value	Red	Green	Blue
-3024	0.0	0.0	0.0
-77	0.5	0.2	0.1
94	0.9	0.6	0.3
179	1.0	0.9	0.9
260	0.6	0.0	0.0
3071	0.8	0.7	1.0

Pixel Valued	opacity
-3024 0.0	-3024 0.0
-77 0.0	-77 0.0
180 0.2	180 0.2
260 0.4	260 0.4
3071 0.8	3071 0.8

FlowChart of the Code:





How to run:

Put the **CT** folder where the data is and the python code **Assignment02.py** in the same path. Then run the code. For better visualization use system with better GTX version.

Tools:

- ✓ VTK (Version 8.1.1)
- ✓ Python (Version 2.7)
- ✓ Scipy (Version 1.1.0)
- ✓ Numpy (Version 1.15.4)

Software:

- ✓ Any IDE that support above tools. It is recommended to use Anaconda (64 bits Python version 2.7)