ECS 277 - Winter 2019 - Project 1

Ahmed Mahmoud

This is the manual for running the ray casting program from the command line. The following command line can be used to run the program `RayCasting.exe -option X`. Below is a list of all available options.

Option	Effect
-h	Display this massage and exits
-input	Input file. Input file should under the **data/** subdirectory
-model	Model name used to name output images
-xn	Number of grid points in the x-direction
-yn	Number of grid points in the y-direction
-zn	Number of grid points in the z-direction
-x_lower	X coordinates of the gird lower corner
-y_lower	Y coordinates of the gird lower corner
-z_lower	Z coordinates of the gird lower corner
-x_upper	X coordinates of the gird upper corner
-y_upper	Y coordinates of the gird upper corner
-z_upper	Z coordinates of the gird upper corner
-bits	bit size of the input .raw file
-bg_r	Red channel for the background color between 0 to 255
-bg_g	Green channel for the background color between 0 to 255
-bg_b	Blue channel for the background color between 0 to 255
-bg_a	Alpha channel for the background color between 0 to 1
-light_r	Red channel for the light color between 0 to 255
-light_g	Green channel for the light color between 0 to 255
-light_b	Blue channel for the light color between 0 to 255
-light_b	Alpha channel for the light color between 0 to 1
-res_x	Image resolution in the x-direction
-res_y	Image resolution in the y-direction
-proj	The projection direction where the value represents the axis of the normal and the sign represents the direction e.g., -1 is projection along x-axis looking at the grid back face. 3 is projection along z-axis pointing to the grid top face
-samples	Number of samples per cell