Renderer.cpp

[Main page](file:///C:\Users\CinKM4D\source\repos\BPUS\Documentation\Main.docx)

# Description

This file consists of many functions used for drawing things on the screen. It also creates the camera object.

# Includes

* Object\_Manager.h
* Object\_behavior.cpp

# Variables

It creates the camera object, with the functions in [Object\_behavior.cpp](../Game/Object_behavior.docx). It’s used in some function, hence the declaration here.

# Functions



Draws the given color on the entire screen. color is in hexadecimal.



Determines whether a square with given coordinate and size is partially of fully outside the window borders.



Determines whether a point is outside the window.



Draws a rectangle on the screen in the given color in hexadecimal. The points are measured in pixels, starting at the lower left-hand corner.



Draws a circle of given color in hexadecimal on the screen. Position and radius are measured in pixels.



Is used by the draw\_oval\_pixel() function, determines whether a point is inside an oval.



Draws an oval on the screen with the given color in hex, is also very slow. Coordinates and radii are measured in pixels.



Is used by draw\_tri\_pixel() and shouldn’t be changed or used.



Draws a triangle on the screen in the given colors in hex, all three points are measured in pixels.



Draws an image on the screen. Offset is the distance to the left and bottom borders in pixels, rotation is the rotation in degrees, and the pivot is the absolute pivot used for rotation.



Converts a vector measured in units to a vectorInt measured in pixels. All necessary camera operations are being applied.



Draws a rectangle in the given color in hex. Coordinates and size are measured in units.



Draws a circle in the given color in hex. Middle point and radius are measured in units.



Draws an oval in the given color in hex. Coordinates and radii are measured in units.



Draws a triangle in the given color in hex. All three points are measured in units.



Draws a white text on the screen. Position in units, text is a string array, and scale is size of single “pixels” in units. Use only for debug purposes.



Draws an image on the screen. Coordinates in Units, scale in Units, rotation in degrees, pivot relative to image.



Draws a sprite from an object to the screen and applies all necessary things to it.



Is called by the [Object\_Manager](../Object/Object_Manager.docx) and draws all objects on the screen.



Is a convenience function to render all things that are always rendered. Can be (and must be) edited for use.