Individual Extension Plan

Camera centered graphics and effects

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Idea summary

This extension will be all about the game visuals centered around the camera itself. Rather than things like meshes, textures and the graphics attached to the game world itself this part will handle things like camera shake, visual indicators of various pieces of the game state etc.

Pre-study mention

I will look at what other people have done already, both in a general sense as well as in Unity specifically. This will mostly be done by searching for resources online, e.g. on forums, reading tutorials and such. I may also consult the book "Real-Time Rendering" if I find it useful. There is also surely a lot of knowledge within the project group whose members I will surely consult regarding different things.

Implementation

The product of my work in this project will be an extension for Unity 3D which handles effects that are centered around the main camera. As mentioned before these will be both ones performing translations and rotations on the camera to achieve effects such as camera shake, as well as visual effects such as dirt temporarily sticking to the camera or tinting the screen to indicate the player being under some effect.

It is also probable that this extension will handle the positioning of the camera in relation to the player's avatar in the game. Things such as zoom, angle and field of view is likely to be controlled by it.

Effort will be put into making the extension as general as possible, with interfaces making it easy to utilize it also for other projects. This should not be too big a problem to achieve, since the camera is quite general for most sort of projects using Unity 3D.

Limitations

This extension will be limited to only be concerned with camera centered effects. Other graphics that are more related to the game environment and models etc. will not be included, to make sure that a loss of generality does not occur. It may happen that I do some work with graphics other than that which has been described in this text, but then it will probably be done as part as the extension of one of the other project members extensions.

Purpose

The purpose is to make an easy to utilize module focused on delivering nice camera centered graphics in a neat package!