SOFT 323 Documentation

Student: Tim Garner

Student ID: 10234237

## Software Versions

### Visual Studio Version

The visual studio used to produce the project was “Visual Studio 2010 Service Pack 1”. This is available on all University computers, and also via the MSDNAA website to students free of charge.

### DirectX SDK Version

DirectX 10 has been used to produce this project. It was released in November 2006 and is exclusive to Windows Vista and newer operating systems. It consisted of extensive rewrites to the code base, depreciating many of the functions available in DirectX 9. Most noticeably, the fixed-function pipeline is no longer supported, requiring the use of (potentially) more confusing shaders [1]

## End User’s Guide

From the End User’s perspective the Tiger ‘fly’s’ like an aeroplane. You can apply a “thrust” which will push the Tiger in the direction it is currently pointing. Releasing the thrust will cause the Tiger to slow down, and also be overcome by the effects of gravity, gradually being pulled to the floor. The Tiger can also drop bombs, which will bounce on the floor in a realistically believably way before coming to a resting state.

#### Controls

* W: Thrust forwards
* Left Arrow: Yaw left (Turn left)
* Right Arrow: Yaw right (Turn right)
* Up Arrow: Pitch up
* Down Arrow: Pitch down
* Space: Drop bomb

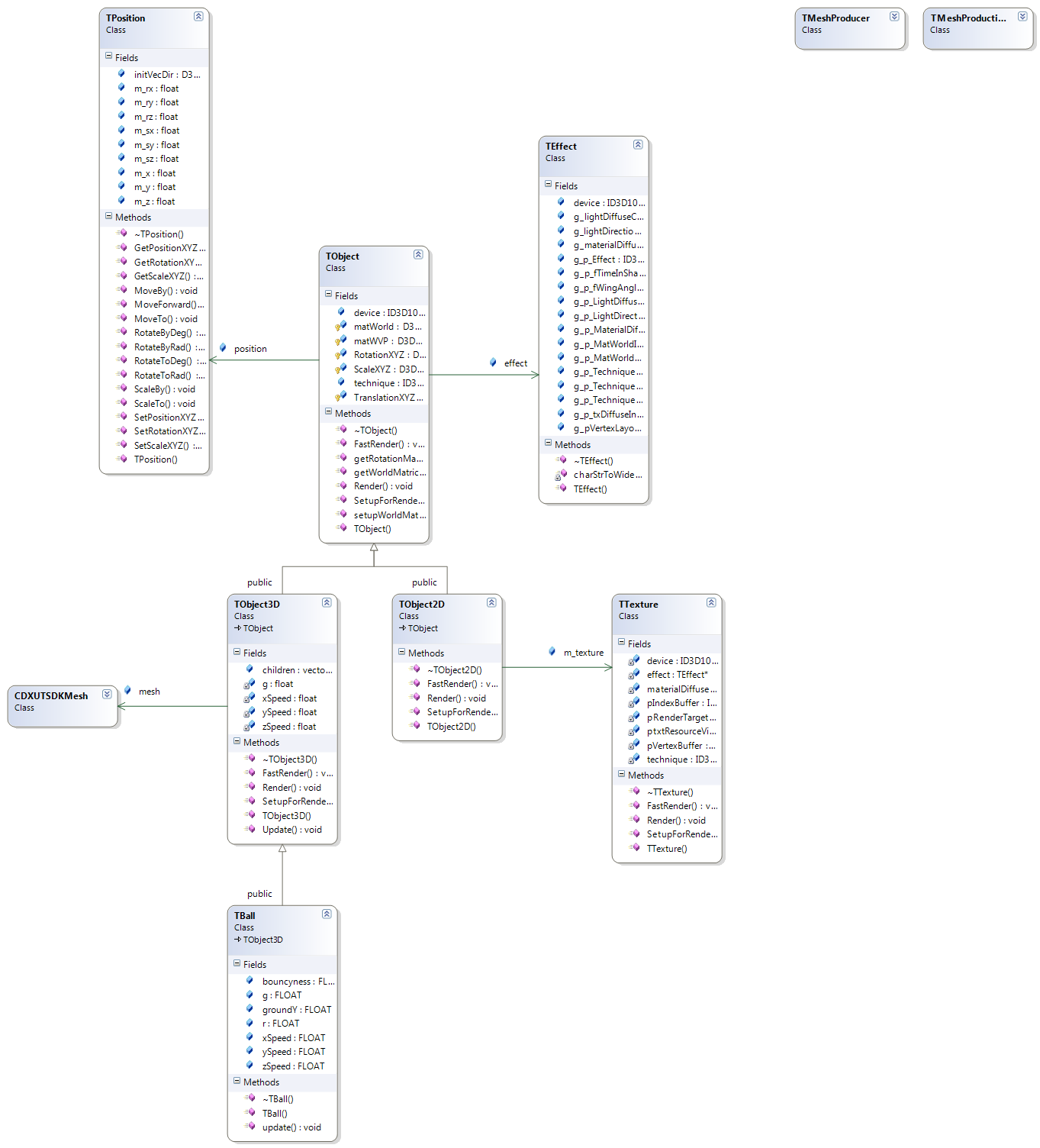
Bombs can only be created twice per second, and will drop ‘metronomic-ally’ if space is held. A sound will be played when they are dropped letting the player know they have released their cargo.

You cannot fly lower than the ground level, even when outside the ‘floating platform’ made up of floor tiles. The tiger is also trapped within an invisible bounding cube, stopping the player from reaching the edges of the map. The pitch can only reach a max/min value of 75 degrees

## Programmer’s Guide

To give a quick representation of the Programs structure, a Class Diagram has been produced:

Figure 1 Class Diagram



Classes produced by myself are prefixed with the letter T. A structure has been created that allows common features shared between 2D and 3D objects to be shared. The base class TObject ‘has-a’ TPosition and a T

## Evaluation

## References

|  |  |
| --- | --- |
| [1] | Microsoft, “Deprecated Features (Direct3D 10) (Windows),” 28 11 2012. [Online]. Available: http://msdn.microsoft.com/en-gb/library/windows/desktop/cc308047(v=vs.85).aspx. [Accessed 14 01 2013]. |