Making a Simple Ball Game

These tutorials show how to make a simple ball game using the Blender game engine.

The game consists of a ball resting on a board, by pressing the arrow keys the board rotates and the ball rolls. The object of the game is to score points by rolling the ball into holes made in the board.

**Making the Board**

Finished file, game board – [boardTut15.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/boardTut15.blend)

**Using Logic Bricks**

* Starting file – [logicTut1.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/logicTut1.blend)
* End file – [logicTut14.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/logicTut14.blend)

The key points of this tutorial are –

* how to change to the game logic layout
* how to change to the game engine render
* how to create logic bricks – sensors, controllers and actuators
* how to set physics properties for the objects used in the game

In detail –

* The movement of plane is set up in the logic editor window, setting up keyboard sensors and linking them to motion actuators (sensing events and linking to event handling routines).
* The sphere is added to the scene and its physics property is set to rigid body.

**Developing a Simple Ball Game by Adding a Score**

* Starting file – [logicTut14.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/logicTut14.blend)
* End file – [scoreTut12.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/scoreTut12.blend)

This tutorial shows how to develop the simple ball game by adding a score

Key Points –

* How to make an object behave as a proximity sensor to detect if the ball goes through a hole.
* How to make an object broadcast a message.
* How to make an object listen for a message.
* How to create a property for an object.
* How to create an actuator to update a property.
* How to create an actuator to restart a scene.

In Detail –

* An object is created (cylinder) and a ‘near’ sensor logic brick is added to it. When any object (the ball) gets within a specified distance to the object a signal is sent. The signal causes a message actuator to send a message and a scene actuator to restart.
* Another object is added (an empty) to listen for the message and when received, it sends a signal to a property actuator that updates the score.

[**Using Python Script and the Global Dictionary**](http://www.youtube.com/watch?v=zdJ-6af1QSM)

* Starting file – [scoreTut12.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/scoreTut12.blend)
* Script file – [update.py](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/update.py)
* End file – [dictTut8.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/dictTut8.blend)

[**Adding a Timer and Win Scene**](http://www.youtube.com/watch?v=7_XfBYwdDjw)

* Starting file – [dictTut8.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/dictTut8.blend)
* End file – [timeTut11.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/timeTut11.blend)

[**Using Dynamic Text to Display the Score and the Time**](http://www.youtube.com/watch?v=jBW_eJ_x72Y)

* Starting file – [timeTut11.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/timeTut11.blend)
* End file – [dynTut14.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/dynTut14.blend)

[**Creating and Loading a Second Level**](http://www.youtube.com/watch?v=wv2wuHB2YyQ)

* Starting file – [dynTut14.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/dynTut14.blend)
* New game board file – [boardLevel2a.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/boardLevel2a.blend)
* End files – [level1.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/level1.blend), [level2.blend](http://blender.freemovies.co.uk/blenderfiles/game/rotatingPlaneNew/level2.blend)