Blender Game Engine with Blender 2.6

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Blender has its own **built in Game Engine** that allows you to create **interactive 3D applications**.

The Blender Game Engine (**BGE**) is a powerful **high-level programming tool**. Its main focus is Game Development, but can be used to create any interactive 3d software, such as interactive 3d architectural tours or educational physics research.
Blender Game Engine - Physics
Blender Game Engine - Logic

The GE system uses **Logic Blocks** as a visual way to set up **interactions** within the game. These logic blocks can be connected together visually to allow for complex game actions to take place.

There are three different types of Logic Blocks - **Sensors**, **Controllers** and **Actuators** - each with a number of different sub-types.
Blender Game Engine - Logic

Sensors

A Sensor will detect some form of input. This input could be anything from a keypress, a joystick button, or a timer that triggers every screen update (or frame) of the game. By default, Blender calculates 60 game frames every second. You can change the frame rate, mist settings and the gravity in the world buttons, physics panel (Physics).

Controllers

Controllers are used to link Sensors to Actuators.

They allow for some more complex control over how sensor and actuators interact with each other.

Actuators

An Actuator will actually carry out an action within the game. This can include moving an object within a scene, playing an animation, or playing a sound effect.
BGE - Tutorial
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Now that you have added some actions to your paper ball, you could duplicate it by pressing **SHIFT+D** and “**Esc**” to deselect the duplicated moving ball. Now **hide** the new ball into an hidden layer by pressing **m** and selecting for instance the **layer four** (that is deselected).
Select the **duplicated** ball object into the edit object actuator, **mine** is called **CartaScorta**.
BGE - Tutorial

Great!
As you add sensor and actuators to your paper ball, you need to add the same sensors and actuators also to your **duplicated** ball.
BGE - Tutorial
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Blender – Resources

Blender 2.5 Cheat Sheet
Cineca MDC Blog
My Blog - Discoverylinux
Tips and Tricks

Thanks!
And wish you Happy Blending!