

Video Game Design Foundations ©2014

Chapter 5: Collision Theory and Logic—Glossary

Action-reaction relationship. How an action causes something to change or react.

Actions. How an object reacts to input or interacts with other objects.

Algorithm. A computer script that performs the steps needed to solve a problem.

Array. A look up table that holds variable data.

Attributes. Characteristics associated with an object.

Casual gamers. Players that play infrequently when they have free time.

Cause and effect. Relationship between what has happened and something changing or reacting.

Colliding. Action command describing how objects that touch react.

Collision. Condition that occurs when an object touches another object.

Collision statement. Logic statement with a condition of two or more objects colliding.

Collision theory. Idea that when objects collide, the movements, animations, and events must provide an illusion of reality.

Compatibility. When programs or languages are able to work together.

Condition. Term for the IF side of a programming line for a video game.

Data structure. A way of storing and organizing data.

Declared. An item is given a name and used in the program.

Elegant. The term for an algorithm that is the simplest, smallest, and most efficient computer code to perform all the functions needed.

Event. Term for the THEN side of a programming line for a video game.

Floats. Numbers with decimals.

Flowchart. Graphic organizer that displays instructions to be programmed for the game interactions.

Global. A sub routine or variable that works everywhere in the program.

Integers. Positive and negative real whole numbers.

Interactivity. How one object behaves in relation to the objects around it.

Iteration. A single run through a programming loop.

Library. Where game objects preloaded into The Games Factory 2 are stored.

Listener. Programming that directs the computer to check or listen for a mouse click, key press, or other input from the user.

Local. A subroutine or variable that does not have persistence outside of the module in which it was declared.

Machine code. A binary language that consists of only two characters, 0 and 1.

Methods. The actions or verbs used in syntax; sub routines.

Modules. Separate units of programming that perform one function and contain all the information needed to execute that function.

Objects. Definition sub routines that are defined by their attributes and properties.

Persistence. Something that continues to exist after the event that caused it has ended.

Properties. Attributes assigned to an object, such as visibility, interactivity, and movement.

Pseudo code. Logic statements not written in computer code that allow programmers to break down program interactions into logical steps prior to converting the code into a computer language.

Relative. In relation to the position of an object.

Sequence. The predetermined order of steps the computer program will follow.

Steps. How many iterations occur per second.

String. A series of letters, numbers, or punctuation.

Structure. The syntax and logic structure of the programming language.

Syntax. Words and symbols and their arrangement.

Trigger. Programming for when a condition is met that a series of actions will begin.

Variable. Small information storage containers.

Vector. A physics term that means direction.