Video Game Design Composition © 2014
Chapter 13: Simulation Composition—Glossary

application framework. Structure of the software.

automated simulation. Requires no input once the simulation has started.

capture suit. Worn by the user and contains sensors to read movements.

closed system. All material and energy of the system are contained.

collision avoidance. Entity tries not to hit items or stop.

computer simulation. Uses a computer to imitate a physical system.

discrete-event simulation. Tests a system by changing variable parameters at instantaneous points.

ecosystem. Community of organisms and their environment that function as a single unit.

engine control unit (ECU). Computer found in production vehicles that controls many of the functions of the vehicle.

entities. "Thinking" components of a system.

event exploration. User interacts with an event and tries to return the system back to a static state.

extensible framework. Allows programmers to add to custom classes and subroutines that extend the use of the basic software framework.

haptic. Based on the sense of touch.

heuristics. Process of making predictions based on past events, or learning by trial and error.

human-in-the-loop (HITL) simulation. Any simulation that has a real human user as part of the event model.

iconic logic. Critical thinking and learning from outside of the system.

incentives. Ways of encouraging a specific action or path.

inductive logic. Critical thinking and learning from inside the system.

interactive simulation. Allows a user to actively control some part of the system.

iterative design process. Program improves with each run through the design cycle.

map making. Simulation system is rendered in realistic form.

parameters. Variables that could alter the situation.

physical simulation. Contains devices that are substitutes for real devices; takes the place of a real object or system.

prototyping. Iterative step in the design process that tests the system to discover errors.

queuing. Lining up or waiting in line.

reconstructive simulation. Attempt to duplicate a situation by reverse engineering the end result.

regeneration. System is reset to its original state.

Copyright Goodheart-Willcox Co., Inc.

scientific method. Systematic approach involving defining a problem, collecting data through experimentation, and formulating and testing a hypothesis.

simulation. Attempts to replicate a real-world situation.

system. Controls all of the parameters and constraints to make a simulation work.

system-shall command. Rule to guide the design of the application framework.

use case. Details the path an entity takes in a simulation.

vestibular. Acting like a vestibule.

virtual reality. A user's body motions are read by a user interface and displayed in a game or simulation world.

weighted. Increased or decreased statistical likelihood.

Copyright Goodheart-Willcox Co., Inc.