GLOSSARY OF GAME DESIGNING TERMS

Learning game designing concepts and skills starts with an understanding of words and their meanings. As you progress through turorials, you will be introduced to new vocabulary. You will be responsible for recording the definitions of new words in your turorial guides. Use this glossary to access those definitions.

actions	The things that happen, or changes occurring with an object in a game as a result of events.
animation	The process of creating a continuous, lifelike, or realistic motion or shape change by creating properties that display a rapid sequence of frames or sub-images, each in a slightly different pose.
anticipation	Prepares the position of an object for the action that is about to happen.
assets	Graphic images, text, sound, or video that is formatted into a computer file format that you have the right to use.
asset development	The process of creating of raw files for graphics, sounds, music, and backgrounds, that are digitally formatted (gif, png, mp3, jpeg, etc.) for use as sprites, sounds, and other basic elements of a game.
audio assets	Recorded or computer generated sounds saved in a raw file format used for adding music or sound effects to a game.
background	Artwork that sets the mood and the story for the gaming environment, but does not interact with object properties.
blocks	Actions grouped together as part of a conditional action, that performs all actions or tasks contained within it.
bugs	Errors in programming that prevent the game programming from running properly.
cause and effect	The relationship between actions or events so that one or more are the result of the other or others.
check collision	A conditional action that will test for object collisions and not allow the next action to occur unless it checks as "true".

check empty	A conditional action that will test for empty spaces in coordinates, and not allow the next action to occur unless it checks as "true". If the object <u>does not collide</u> with another object at a specified coordinate (if the space is "empty"), it will check "true".
concept development	Any part of the game designing process that involves putting an idea into a form that can be communicated, including concept writing, sketching, storyboarding.
concept document	A written document or report that details an idea for a game that might be developed. Details include gameplay, strategy, art, sounds, music, etc. It is often used to "pitch" or sell an idea to producers.
conditional actions	Game action that is programmed with cause and effect properties
conditional statements.	A written expression that details a cause and effect with an IF/THENstatement. May also include AND, OR, ELSE, NOT, and NOR.
control (controlled)	Programming properties that are created so that the events and actions of objects can be changed during gameplay. The player makes decisions and *controls* an o bject through an inerface such as a keyboard, mouse, game controller, joystick, etc.
controller object	An object that is usually <u>not visible</u> and its purpose is to perform actions that help initiate, manage, and terminate game play.
coordinate systems	Assigning sets of numbers, labeled as x and y, for the purpose of locating reference points for locating objects. Graphically, it can be represented by a grid of horizontal and vertical lines.
credits	A listing of people who contribute their time and talent to a game project, along with their job title or tasks.
drag and drop	The practice of using a mouse pointer to "grab" an icon or object, along with its programming contents, and place it in a different location or application.
events	The things that happen in a game based on programming which are the cause of other actions.
exaggeration	The enhancement or enlargement of a character, or object features beyond what they would be in reality.

file extension	A group of letters occurring after a period in a file name, indicating the format of the file.
file formats (file types)	Bytes of data are organized, coded, and stored so that they can be recognized by programs.
flowchart (flowcharting)	A method of planning steps in computer programming using graphic organizers, including standardized symbols for common types of computer programming steps.
form	The window area of Game Maker that is used for creating game properties for all parts of a game build including sprites, objects, sounds, backgrounds, rooms, and more. They appear in the main form window.
front end	The title screen at the game start that includes text, graphics, and music to get the player excited about the game. It can include playing links, instructions, and options for the player to make decisions about the game, set levels or modes, number of players, selection of player objects, etc.
game design	The overall process of seeing the creation of a game idea from concept all the way through to finished product.
game development	The processes of using computer tools to create assets, programming, prototyping, and testing of the game.
game engine	A software system designed for the creation and development of video games. It contains features a game developer may need such as tools for graphics, sound, physics, programming, and presentation.
game information	A special page of the game that explains the controls and basic idea of the game along with credit lists.
Game Maker	A popular game engine which can be used for game creation, using drag and drop properties for events and actions or a scripting language to develop more advanced games.
gameplay	The experience of playing a game, including the action and strategy that a player must perform in order to interact with the game.

global user interface	This allows the Game Maker game designer to find all aspects of the game maker features, and use them to create game programming. It consists of the menu bar, tool bar, resource explorer, main form, and tutorial window.
graphic assets	Artwork in a raw file format used for building game sprites and objects. Typical formats for graphics include GIF, JPEG, PNG, and BMP.
gravity	In game design, it is the creation of properties that simulate the forces that bring objects down to earth.
image	A single graphic or picture that has its own unique appearance. Can be used in graphic assets, sprites, objects, and animations.
instance	The appearance of an object at a specific location based on an event that occurs in a game, or the way it is placed in a room.
level	A change in the game properties, appearance, and playability that increases the challenge as the player progresses through the game.
logic system	Assembling conditional action properties so that they work together for an outcome.
loops	A short section or piece of music which is programmed to repeat, or play, over and over again during game play.
main form window	The area of the global user interface which displays the form windows for creating graphic and sound resources, along with their action properties.
mass	The weight or density of an object, as simulated in animation.
object	The parts or pieces of a game that are programmed with properties or scripts to perform events and actions. They are usually associated with a sprite.
origin	The point in a coordinate system where the counting for x and y begins. It is always identified as x = 0 and y = 0.

penalties	Game actions that result in point reductions, restarts or lowering of level settings, or abrupt endings to gameplay due to player error.
physics	Science that deals with matter and energy and the way they act on each other in heat, light, electricity, and sound, and motion. The application of these properties in game animation.
plausible	Having the appearance of being believable, or true.
playability	The degree to which the player understands the story, goals, controls, scoring system, and levels so they can engage in successful gameplay.
probability	In game design, creating programming that will allow action to occur based on a given number of chances.
program (programming)	Providing a computer, or other machine, with instructions for the automatic performance of a particular task.
properties	Settings that define the "rules" for an object and how it will behave in a computer game.
prototyping	The building of a playable game product that can be tested for gameplay, playability, and marketability (to see if it can be sold).
random	A math concept used in numerous gamemaker properties that reduces probability to an outcome, or effect that is unpredictable.
relative	The creation of a setting or property so it is related to an existing setting or property. Eg. adding more speed to the existing speed. Setting a location as it relates to the current location of an object.
resource explorer	Contains a "tree-like" view of all folders used to organize, name, and open all graphic and sound resources that you create for your game.
respawning	The recreation of an entity after its death or destruction.

rewards	The experiences that give a player a sense of satisfaction, usually by scoring or meeting a challenge in the game. It motivates them to continue playing.
room	The area or space where you place game objects and backgrounds to create a scene.
Scratch	A tool or engine developed at MIT (Mass. Institute of Technology) for making variety of projects including simulations, animated presentations, and simple games. Scripts are created in drag and drop blocks which are used to control sprites, sounds, and other types of assets.
score	A tally or record of points which can increase or decrease due to player performance. Score can be named based on game being played (eg. "runs" if it is a baseball game).
sound effect	The use of short sound assets used in programming properties that are associated with an event. Eg. A ball object is assigned a "boing" sound when it bounces.
spawn (spawning)	Live creation of a character or item.
sprite	A two-dimensional image or animation that is used to create an object or larger scene.
squash and stretch	An animation technique which "squashes" (distorts or flattens) and "stretches" (elongates) objects to show motion and the effects of other natural forces like gravity.
staging	Putting the focus on the main character and preparing it for action.
storyboard (storyboarding)	In concept development, it is a set of drawings that illustrate the game concept, gameplay, and look of the game in various stages.
sub-images	Images that are part of a larger image or file. When placed next to each other in a strip, they can be used for creating animation
troubleshoot (debug)	Finding programming errors discovered in testing and fixing them.

user friendly	A software application that is easy to learn and use.
tutorial window	A window in Game Maker providing two game builds for learning how to use the game engine.
variable	Letters or other symbols that represent unknown numbers or values within a set of values.
wrap	The programming action that allows an object that leaves one side of the room to appear on the other side.