



Vasinev Gaming Solutions Pvt. Ltd.

Common Gaming terminologies- A quick glance

Following terminologies are as per unity.com

AAA (Triple-A): Games that are created and released typically by mid-size or major publishers; usually anything that cannot be classified as “indie.”

Agent: An in-game character or object that uses [AI to interact with other objects](#) in its environment.

AI: Artificial intelligence; an in-game entity whose functionality is dependent on computer code rather than human input. **NPCs** are common AI entities.

Alpha: A game version that contains all major features and most assets. This version of a game is usually circulated internally to test for quality and bugs.

AR / VR / MR / XR: [Augmented](#) / [virtual](#) / mixed / extended reality. See our [What is XR? glossary](#) for details.

Asset: Shorthand for anything that goes into a video game – characters, objects, sound effects, maps, environments, etc.

Baking: A method of pre-processing performed on game assets and data to ensure they load and perform well in real-time and do not slow down gameplay due to requiring a lot of processor or GPU capacity.

Balance: Creating a stable and predictable gaming experience. For example, by making sure weapons deal appropriate damage and armor absorbs the damage adequately, as opposed to giving one weapon considerably more power than others, or by making levels too difficult to enjoyably complete. However, imbalanced gameplay is sometimes done on purpose.

Beta: A game version that contains all major features and assets. This version of a game contains no major bugs and is on its way to code release. Beta releases are occasionally given a limited release to the public for bug reporting and critical feedback.

Bug: Any development issue that makes a game unenjoyable, unstable, or unplayable in its current state.

Build: Game development lingo for the “version” of a game. Also known as a “release” or “release candidate.”

Cert: Certification. The process whereby console manufacturers test a game for compatibility with their hardware and distribution platforms. This does not include **playtesting** or **quality assurance**.

Cinematics/cutscenes: Segments of a game that are not controlled by the player. These are usually used to draw attention to major story points.

Clipping: The process of predefining certain areas in a game in which rendering occurs, which optimizes game performance in those selected areas.

Clipping region: An area of a game that is optimized for rendering GameObjects and terrain.

Code: Computer languages used for creating and defining functionality in software. Unity uses C# (C Sharp) for coding games.

Code release: The version of a game that is ready to be sent to console manufacturers for certification.

Collision: The action of two objects coming together and touching/striking one another in-game. The simple act of your playable character standing on a floor in a house requires collision parameters on both the character’s feet and the floor, otherwise, that character would simply fall through the floor.

Collision detection: A process that determines when and where an object will “collide” with another object in-game. This is typically done using an object called a hitbox that will either prevent a collision or decide what area needs to be reached to create a collision.

Console: A type of personal computer specifically built for gaming. Sony PlayStation, Microsoft Xbox, and Nintendo Switch are all examples of consoles.

Content: Everything that makes up your game, such as assets, components, GameObjects, and scripts.

Cross-platform: Something that can work or be used on different platforms.

Culling: The detection, isolation, and rejection of any unnecessary data in game design.

Debug: Finding and removing bugs in a game. Sometimes referred to as “bug-bashing.”

Demo: A proof-of-concept version of a game, typically released to the public for promotional and/or feedback purposes.

Dev: Slang for “developer” or “development.”

Development: See **game development**.

Edge: The connection between two vertices of an angle.

Engine: See **game engine**.

Event: A game action that is completed through user input. When a player presses a button on their controller and the on-screen character jumps, this is considered an event.

Feature: Any aspect of a game that creates its value and purpose. Mechanics, story, and level design are all considered features.

Game design document (GDD): A professional document created by game developers to fully define and justify the game they've created or plan to create, usually as part of their pitch to a publisher. The story, gameplay, characters, level design, and other integral pieces of a game are laid out and described in a game design document.

Game designer: One who designs the aesthetic and structure of a game. NOTE: The terms "game designer" and "game developer" are often used interchangeably, though the two roles technically vary.

Game developer: One who turns a game design into a playable game through coding and in-engine asset creation. NOTE: The terms "game designer" and "game developer" are often used interchangeably, though the two roles technically vary.

Game development: The act of creating a game; sometimes referred to as "gamedev." The game development process typically requires input from one or more game designers, artists, programmers, animators, testers, project managers, etc., though some games have been created by just one or two game developers.

Game engine: Software that offers a [suite of tools](#) and features to game developers in order to build their games professionally and efficiently.

Gold master: A game that has met all publisher and platform requirements, includes all assets and features, and is considered ready for launch.

Hitbox: An invisible object created around another GameObject that determines the area where collisions with other objects will occur.

Keyframing: In game development, the act of putting an asset into a standalone frame of action and capturing that moment, to be followed by others, until there is a series of these frames to effectively convey animation of the asset.

Lightmap: A pre-rendered lighting system that is stored for continual use in a game.

Localization: Translating a game into multiple languages.

Mechanics: The essential functions, rules, and outcomes that create gameplay. Mechanics are what make a game rewarding, entertaining, and interactive.

Mesh: A collection of vertices, edges, and faces that act as the foundation of a model in a video game.

Mobile: A handheld device with the computing power of a personal computer and features for real-time voice and data communications.

Mobile gaming: Because you can play a mobile game almost anywhere, mobile gaming is one of the most popular forms of gaming in the world.

Model: A fully 3D asset in a video game that is created by adding textures and other features to a mesh.

Multiplatform: Compatible with more than one kind of hardware or operating system.

Parallax: A technique used in 2D game development where background images move at a different speed relative to their foreground counterparts during player/scene movement, creating depth and scale.

PC: Abbreviation for personal computer, typically referring to a desktop or laptop computer. Many gaming enthusiasts prefer PC gaming over console or mobile gaming due to its increased performance abilities and customization options.

Physics: Utilizing real-life laws of [physics](#) in games to make movement and environmental behaviors more realistic.

Pixel: The smallest building-block of a screen image; a single point of light or color that, when combined with other pixels, forms a picture or larger graphical element.

Pixel art: A design style that is typically limited to 8 and 16-bit graphics in order to closely match classic arcade and console graphics.

Playtesting: Playing through each new build of a game in order to find bugs, ensure gameplay flow, and explore potential opportunities for improvement.

Polygon: A computer-programmed series of lines that form a three-dimensional (3D) object.

Prop: Interactive objects in a game.

Prototyping: Creating different early versions of a game to explore different mechanics and features to decide which will be best for the full game.

Quality assurance (QA): Testing a game for its overall quality, which normally includes finding and eliminating bugs.

Ray tracing: A light-rendering technique that simulates the interaction of light with objects in a game in such a way that it looks ultra-realistic.

Render: The act of continuously generating and refreshing a 2D or 3D image through computer processing.

Scripting: Another word for coding or programming; the act of writing code.

Shaders: Small programs within larger game development processes typically used to control lighting and shadow effects.

Skeletal animation: A type of computer animation that puts a set of “bones” inside a mesh, allowing the otherwise static mesh to be articulated and posed for animation keyframing.

Sprite: Bitmap images, often used as 2D GameObjects. In 3D, sprites generally function as textures.

Terrain: Anything that creates the environment in a video game.

Texture: A visual wrapping placed around GameObjects, such as the skin on a character.

Texture mapping: The process of applying textures to GameObjects.

Tile: An image that is used to create other, bigger images (such as a platform) in a 2D game.

Tilemap: A system that stores and handles tile assets for creating 2D levels.

UI/GUI: User interface / graphical user interface. Menus, inventories, and other non-game interactive systems on-screen.

UX (for game development): User experience. Ensuring that the design and implementation of a game is pleasing and user-friendly.

Vector graphic: A type of graphic image that uses two-dimensional points to connect lines and curves, allowing it to be scaled and customized.

Vertex: A point in 2D or 3D space. Joining two vertices together forms an **edge**.

Vertical slice: A proof-of-concept portion of a game, typically given to investors or publishers for a chance at receiving funding and partnerships.

Visual scripting: A method of organizing and generating code visually, where developers can create and connect graphical nodes to organize different GameObjects, events, programs, etc.

COMMON UNITY TERMS

Asset Store: A Unity website that lets you download premade assets for use in your game development projects. Unity developers can also publish their own premade assets to the Asset Store for other developers to download and use.

C Sharp (C#): The coding language used to create scripts within Unity. C Sharp is primarily responsible for the functionality of a game, going beyond the limitations of general game development tools to help developers tailor and perfect gameplay.

Component: Something that is attached to a GameObject to alter its functionality.

Editor: The dashboard on which all of Unity's functionality is made available to its users.

Entity: A GameObject that receives components for functionality.

GameObject: Characters, props, and scenery in Unity.

Hierarchy window: A window in the Unity Editor that displays all GameObjects currently being used in your Scene.

Inspector window: The window in which you can view and edit the properties and settings of almost everything that appears in the Unity Editor, including assets, GameObjects, and the Editor itself.

Instance: A specific version of a GameObject created from a template and modified to carry specific traits and behaviors that differentiate it from its original form.

Instantiation: The creation of an instance.

Materials: Editor objects that store the properties of surfaces in Unity, such as texture, shader, and color tint settings.

Orthographic camera: A camera view that makes objects appear fixed on the screen, regardless of their actual distance from one another or their relative positions. This is commonly used for retro-style 2D games, as it can make GameObjects look flat, or 2.5D games (2D games that utilize 3D elements), specifically because they allow for touches of 3D depth and definition while maintaining an otherwise 2D appearance.

Package: A container that holds any combination of Assets, Shaders, Textures, plug-ins, icons, and scripts that enhance various parts of your project.

Package Manager: A feature within the Unity Editor that allows you to download and install add-ons and enhancements (packages) for the Unity Editor.

Perspective camera: A camera view that projects objects according to their actual placement and distance on screen, giving viewers a sense of their real-world positions. This is commonly used for fully 3D titles.

Prefab: A typically customized, reusable version of a GameObject.

ProBuilder: A Unity feature that enables designers to build, edit, and texture custom 3D geometry for in-scene level design.

Project window: Effectively the file finder in Unity. This is where you will be able to dive into your Scene, Asset, Prefab, and other folders.

Rigidbody: A component in Unity that lends a GameObject the ability to react to its environment through physics, for instance, giving a GameObject mass.

Runtime: The rendered, platform-specific output (e.g., for iOS, Android, Oculus or PlayStation 4) from a Unity project.

Scene: The entire editable area in which a game can be built. Environments, props, obstacles, NPCs, menu functions and more can be a part of each Scene in Unity.

Shader Graph: A visual Shader editing tool in Unity that lets developers create Shaders without having to write code.

Timeline: A feature in Unity for creating cinematic content, game-play sequences, audio sequences, and complex particle effects.

UIElements: A unified UI editing tool in Unity. As of Unity 2020.1, this is known as the UI Toolkit.

Visual Effect Graph: A node-based visual effect editor that lets developers author visual effects that Unity simulates directly on the GPU.

Game genres and in-game terms

Action-adventure: A game where players overcome a series of small and large obstacles while progressing through multiple levels or scenarios.

Augmented reality (AR): An experience that combines gameplay with augmented reality features overlaid on a physical location. Examples of mobile AR games include *Pokémon Go* and *Jurassic World Alive*.

Battle royale: An online game in which the game map serves as an arena for many combatants to find and fight one another, with a typical goal of being the last player standing.

Bullet hell: Games that rely on shooting weapons and dodging return fire as their primary mechanics, often on an exaggerated and grandiose level.

Casual: Games that offer quick entry into gameplay through minimal mechanics.

Cooperative: A game or style of gameplay that rewards collaboration rather than pitting players against each other.

Couch co-op: A cooperative multiplayer game that can only be played by having two or more players in the same physical location.

Downloadable content (DLC): Additions or expansions to a game that can be downloaded and added through a typically simple in-app installation process.

Educational: A game whose purpose is to educate players in a particular skill or subject matter.

Esports: Professional competitive gaming events.

Fantasy: See **role-playing game (RPG)**.

Fighting: A game whose primary mechanic is hand-to-hand combat in a **player(s) versus player(s)** (PvP) setting.

First-person shooter (FPS): A game from the shooter's perspective, as they point the gun at different targets.

Free-to-play (F2P): A game that is free to download and play, though the studio/publisher may monetize it through **microtransactions** (such as **IAPs**), rewarded videos, ads, or other means.

Horror: A game whose design and mechanics are built around inducing fear and dread in players.

Hyper-casual: A game that usually offers a single, easy-to-understand mechanic that leads to instant gameplay gratification.

In-app purchases (IAPs): Additional or replenishable items you can buy from within a game.

Massively multiplayer online role-playing game (MMORPG): A role-playing game that typically allows hundreds or thousands of online players to play and interact in the same gaming world.

Match 3, or match-three: See **tile-matching**.

Metroidvania: A subgenre of action-adventure games whose design and mechanics are heavily inspired by the games *Metroid* and *Castlevania*.

Microtransaction: A small transaction completed online, usually for an in-app purchase.

MOBA: See **multiplayer online battle arena**.

Multiplayer: A game that allows more than one player to play at any given time.

Multiplayer online battle arena (MOBA): A type of strategy game that has teams of players pitted against one another, with each team's members coordinating their attacks and defenses to achieve victory.

Non-playable character, or non-player character (NPC): An in-game character controlled by artificial intelligence (AI).

Open-world: A game where the player is given an extremely large world in which to explore and play.

Party: Typically 4- to 8-player multiplayer games that allow friends to compete against one another for rewards and victory.

Platformer: A game that is typically two-dimensional, in which players run, climb, and jump on platforms in order to make progress.

Player(s) versus player(s) (PvP): A game where one or more players compete against one or more players.

Point-and-click: A game that relies on mouse clicks in order to advance characters, solve puzzles, and make choices.

Puzzle: A game that requires players to solve visual or logic problems, find matching items/patterns, etc., to accumulate points or move to a new level. Games like *Monument Valley* fall in this genre.

Racing: Any game whose primary mechanic is competitive racing against AI or other players.

Real-time strategy (RTS): A game in which players typically control a squadron of characters and try to dominate a computer or player-controlled opposing army. Games like *Civilization*, *Age of Empires*, and the original *Warcraft/Warcraft II* fall in this genre.

Rhythm: A game that relies on controller inputs that correspond with rhythmic prompting, usually through music or sound effects combined with visual cues.

Roguelike: A type of role-playing action-adventure game in which players typically have one life to make it to the end of the game, or at least very limited opportunities for resurrection.

Role-playing game (RPG): An immersive play style that typically encourages immersion and interaction, as well as the ability to heavily customize and personalize your playable characters. Sci-Fi and Fantasy are popular types of RPG.

Sandbox: A game that allows players to build their playable world around them.

Shooter: A genre of game based on gunplay. There are **first-person shooters**, **third-person shooters**, and other subgenres.

Simulation (Sim): A game that imitates real-life activities and functions, usually in a very accurate way.

Souls-like: A type of action-adventure game that typically relies on “dodge or die” mechanics à la *Dark Souls*.

Sports: A game where a team or individual sport such as football, soccer, tennis, or cycling has been simulated.

Stealth: A game that relies on players remaining hidden and covertly making their way past or through obstacles to succeed.

Strategy: A game that requires planning and organization to advance (and to avoid setbacks) towards achieving an end goal.

Survival: A game in which it is necessary for players to keep their characters safe and healthy, usually by outrunning enemies while seeking food, water, and shelter.

Text-based: A largely obsolete style of gameplay in which players are presented with scenarios in text form, and they must respond with text commands to advance the game.

Third-person shooter: A shooter game where the perspective is from an “objective” camera, showing the shooter and their environment.

Tile-matching: A game where players must identify or match a number of similar tiles. A common type is a match 3 (match-three) game. *Tetris* falls into this genre.

Virtual reality (VR): A game that requires players to wear a virtual reality headset and use input devices such as a keyboard or hand controllers to experience gameplay in a virtual 3D environment. Examples include *Beat Saber* and *Rock Band VR*.

Visual novel: A game style that relies on static sprites or art pieces that correspond with text-based storytelling, typically played by choosing predetermined responses to the story being told. Often uses an anime style.

Should you have any questions, please reach us out at ssrividhya@vasinevgaming.com